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KATHERINE F. TACHAU

VISION AND CERTITUDE
IN THE AGE OF OCKHAM

OPUS, EPISTEMOLOGY
AND THE FOUNDATIONS OF GRACIANUS
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Vision and Certitude in the Age of Ockham

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HERAUSGEGEBEN VON

Dr. ALBERT ZIMMERMANN
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**VISION AND CERTITUDE
IN THE AGE OF OCKHAM**

OPTICS, EPISTEMOLOGY
AND THE FOUNDATIONS OF SEMANTICS
1250–1345



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By
Katherine H. Tachau



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In memoriam
Joannis Pinborg

*And somme of hem wondred on the mirour,
That born was up into the maister-tour,
Hou men myghte in it swiche thynges se.*

*Another answerde, and seyde it myghte wel be
Naturelly, by composiciouns
Of anglis and of slye reflexiouns,
And seyde that in Rome was swich oon
They speken of Alocen, and Vitulon,
And Aristotle, that writen in hir lyves
Of queynte mirours and of perspectives,
As knowen they that han hir bookes herd.*
—Chaucer, "Squire's Tale," CT[ed.
Robinson p. 130], lin. 225–235.

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PREFACE

This book charts the development of a complex of optical, epistemological, and semantic ideas to which fourteenth-century scholars in Oxford, London, and Paris contributed with an originality and intelligence rarely equalled in the history of western thought; to do so, however, they were required to integrate questions which are today the preserve of the three distinct, if overlapping, communities formed by historians of medieval philosophy, of medieval science, and of medieval intellectual life more generally. Thus, because I hope readers from each will find the present study useful, it may be helpful to record the way in which its strands have come to be woven together here as they were in late medieval discussions of knowledge.

The first knot in the threads was tied in a discussion between the author and Prof. A. Mark Smith over a decade ago, when we both were graduate students. At that time, I was beginning to study the theologians of the generation who could have heard Ockham lecture at Oxford in the early fourteenth century; Mark was editing a volume of the thirteenth-century optical treatise written by the perspectivist Witelo, to whose work Kepler, in the seventeenth century, treated his own as the completion.¹ In those hedgehog-like days, the "Big Thing" that I knew was that William of Ockham, who had opposed the principal explanatory mechanism upon which medieval optical theory rested, was the predominant influence upon fourteenth-century thought. This purported fact was easily acquired; one had only to look in nearly any general treatment of late medieval intellectual life. Perhaps the readiest description of the role Ockham has played for modern scholars is Steven Ozment's:

Like its larger political and social history, Western thought during the fourteenth century has traditionally been interpreted as a steep decline from greatness... scholars have characterized the age generally as a retreat into subjective experience and dogmatism. One modern authority describes the intellectual options of the period as either 'practical skepticism' or 'blind fideism'... Most criticized as responsible for the 'fall' of Western thought is the dominant philosophical and theological school of the late Middle Ages, Ockhamism. To many scholars, Ockham and his followers stand to the intellectual history of the Middle Ages as the Black Death to its social history,

¹ Johannes Kepler, *Ad Vitellionem paralipomena, quibus astronomiae pars optica traditur* (Frankfurt: 1604).

the Hundred Years' War to its political history, and the great Schism to its ecclesiastical history, that is, as its most severe crisis.²

The problem facing us in 1976 was how medieval optical theory had persisted after Ockham's (and, presumably, a general Ockhamist) epistemological critique of it. That medieval optical treatises continued to be studied was hardly in doubt. David Lindberg had already established the continuity of the thirteenth-century "perspectivist" tradition at universities, where optical treatises were part of the statutory curricula into the sixteenth century; in libraries, where numerous works produced in Latin and in vernacular languages during the three centuries after Witelo testified to continued perspectivist labors and audiences; in Renaissance *ateliers*, where Italian artists based their "rediscovery" of linear perspective upon perspectivist learning; and in the thought of such modern contributors to optics as Johannes Kepler, Descartes, and Newton.³

In approaching this question, Mark and I began from intersecting historiographic traditions and distinct genres of medieval sources. Both intellectual historians and historians of science have long stressed Ockham's epistemology as the revolutionary aspect of his thought upon which his impact depended. In this way, for example, an historian of medieval philosophy could appreciate Ockham's theory of knowledge as a key to the "critical" or quasi-positivist ability of fourteenth-century philosophers to dispense with what has been variously termed the "Augustinian" or "neoplatonist" metaphysics of the thirteenth century. Similarly, an historian of science could attribute the willingness to modify Aristotle's physics or to anticipate Copernicus, to a new skeptical or empiricist epistemology derived from Ockham.⁴ Each perception of the centrality of Ockham's epistemology is rooted in the work of nineteenth-century historians of late medieval thought and in the early twentieth-century debate over the nature of the thirteenth-century scholarly achievement. Most directly, though, such views descend from the seminal works of Pierre Duhem, Etienne Gilson, and Konstanty Michalski, whose legacies to later scholars

² Steven Ozment, *The Age of Reform 1250–1550. An Intellectual and Religious History of Late Medieval and Reformation Europe* (New Haven: 1980), pp. 8–9.

³ David C. Lindberg, *Theories of Vision from Al-Kindi to Kepler* (Chicago: 1976); idem, *A Catalogue of Medieval and Renaissance Optical Manuscripts*, in *Subsidia Mediaevalia* 4 (Toronto: 1975); idem, introduction to the reprint of the Risner ed. *Opticae thesaurus* (Basel: 1572; repr. New York and London: 1972), pp. v–xxxiv.

⁴ Perhaps the most influential proponent of the first alternative is E. A. Moody (cited below, chapter I, note 11); for the second, see especially Edward Grant, as, e.g., in his "Science and Theology in the Middle Ages," in David C. Lindberg and Ronald L. Numbers, eds., *God and Nature. Historical Essays on the Encounter Between Christianity and Science* (Berkeley and Los Angeles: 1986), pp. 58–59.

include a canonical list of "Ockhamists" or, in more usual but inexact parlance, "nominalists."⁵ Still, while an historian of philosophy would expect to trace the development of a late-medieval "critical temper" in such sources as theologians produced (especially lectures on the *Sentences* of Peter Lombard), historians of science have more often turned to the works produced for students in the Arts faculties of medieval universities.

As a result, it had long been possible to suppose that Ockham's rejection of the visible mediators required by perspectivist optics was widely disseminated in *Sentences* commentaries, where it was usual to discuss the acquisition of knowledge, but had little impact on authors of commentaries on Aristotle's psychological oeuvre or on perspectivist studies, both within the purview of Arts faculties. Such a supposition, however, faces the difficulty that many of the works written for Arts students were composed by men already studying theology; hence, this hypothesis requires us to suppose that such authors subscribed to Aristotle or Witelo in the mornings and to Ockham in the afternoons.

Thus, the first project to which that distant discussion led me was the exploration of those Oxford-trained theologians usually designated as Ockham's followers, to discover whether they in fact concurred in his rejection of the visible mediators they termed "species." The initial result was a dissertation and articles, here reconsidered, which laid out the explanation of what did *not* happen in the fourteenth century: Ockham did not establish a school of Ockhamists, and he did not succeed in displacing visible species from accounts of cognition even in *Sentences* commentaries. On the contrary, most scholars defended such mediators precisely because they thought the perspectivist account of vision, and of the psychological processes originating in vision, more adequately accounted for the observed phenomena than did the alternative that Ockham posed. This indicated that medieval optics was much more important to late medieval intellectual life than we have generally supposed.

Of course, as David Lindberg has correctly stressed, some medieval scholars studied the mathematical and physical aspects of optics for their own sake (i.e. without concern for the psychological theories they enabled). Surely, in the fourteenth and in the twentieth century alike, some

⁵ Pierre Duhem, *Le système du monde*, 10 vols. (Paris: 1913–59); Etienne Gilson, *History of Christian Philosophy in the Middle Ages* (New York: 1955). For Michalski, see below, chapter III, n. 76. The best survey of twentieth-century efforts to redefine "nominalism" remains William J. Courtenay's, "Nominalism and Late Medieval Religion," in Charles Trinkaus and Heiko A. Oberman, eds., *The Pursuit of Holiness* (Leiden: 1974), pp. 26–59. Inasmuch as to use the term "nominalism" is to invite misunderstanding, and, however defined, it adds nothing to our understanding of the theories discussed below, it will not be employed in this book.

who have inquired into vision have been primarily interested in its physiological conditions; others in such philosophical problems as are posed by perception; yet others in the mathematics of image formation or the physics of light's propagation. In our century, each of these issues is investigated within disciplinary constraints that do not encourage the study of the other questions—and in this, the modern approach to optics differs fundamentally from that of the western philosophical community up to and including George Berkeley. At least as early as Roger Bacon, where our narrative begins, scholars perceived the whole range of optical concerns as lying not at the periphery but at the nexus of natural philosophy and epistemology (all ultimately at the service of theology).⁶ Hence, from the mid-thirteenth century medieval intellectuals sought what might seem a "unified field theory" of light, vision, cognition, and our expression of what we know to be true.

The incorporation of the last of these, the semantic strand of this late medieval endeavor, is at first glance unexpected since, to modern eyes, of those problems we investigate below, optics and semantics are at farthest remove from each other. For medieval scholars, however, the two fields of inquiry overlapped where mental "words," or concepts are found. If the study of vision was crucial to the explanation of the acquisition of concepts, these in turn were the focal point during the thirteenth and fourteenth centuries of increasing precision on truth and falsity. Thus were light and words knotted together, as Jan Pinborg has earlier seen.⁷

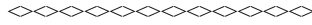
Because perspectivist optics and semantic concerns have remained obscure in the more studied pattern of late medieval theories of knowledge, when these strands are inspected more closely some of what has long seemed most familiar to historians of late medieval thought reveals itself as less clear than we have supposed. In particular, the evolution of what I have characterized as a unified theory of knowledge had sources so various that the habitual terms in which, as modern scholars, we have described thirteenth-century learning are distinctly inadequate. In addition to Augustine and such neoplatonic sources as the pseudo-Dionysius or ibn Gabirol on the one hand, and Aristotle and his Arabic commentators on the other, late medieval scholars drew their views on the acquisition of knowledge from many authors not well described in reference to

⁶ See, e.g., Martin Tamny, "Newton, Creation, and Perception," *Isis* 70 (1979), 48–58; Geoffrey Cantor, *Optics after Newton. Theories of Light in Britain and Ireland, 1704–1840* (Manchester: 1983), pp. 16–21; and his "Light and Enlightenment: An Exploration of Mid-Eighteenth-Century Modes of Discourse," in U.C.L.A., William Andrews Clark Library Seminar, *The Discourse of Light from the Middle Ages to the Enlightenment* (Pasadena: 1985), pp. 69–104.

⁷ See below, chapter IV, n.9.

either. Chief among these were Galen and the medical tradition, the Greek mathematical tradition, and finally the Islamic scholar Alhazen. Thus, in what follows, there will be no attempt to see how an Augustinian tradition somehow managed to absorb an *Aristotelian* one, for to focus on those two will force us to miss the shapes in the tapestry. Moreover, it will be useful to set aside such old markers as the much-noted condemnations of 1277, which have hitherto served to periodize late medieval thought by demarcating the intellectual tenor of the thirteenth from the fourteenth century. The discussions traced in what follows indicate, rather, that late medieval thinkers did not turn away from the more all-encompassing goal pursued already by Roger Bacon, that is, of developing new theories by appropriating as wide a range of sources as could be put to use.

This realization is the starting point of the present study, which therefore aims not to recount what did not occur, but to tell instead what *did*. If this book begins when medieval scholars initially sought to realize the complex, perhaps impossible, task that they had set themselves, it concludes with the generation of John of Mirecourt and Gregory of Rimini, whose accounts of knowledge exemplify the eventual confluence of the theoretical insights of England and Paris. By ending this work with the Parisian ferment of the 1340s, we merely reach an important watershed in the creation of the rich noetic legacy that medieval scholastics bequeathed to subsequent generations of intellectuals and to culture more generally, as Chaucer's remarks (quoted above, p. VII) signal. For us to reach the real end of the story would require an examination of how this legacy was transmitted to early modern philosophers and scientists; nevertheless, it is my hope that the present work will provide the historical framework and conceptual precision for that further investigation.



Since the fall of 1979, when research which resulted initially in my dissertation and thereafter in this book first took me to Europe, the librarians at the many collections listed in the index have permitted the access to the manuscripts and microfilms on which the present work is based. It is, therefore, a pleasure to remember here their assistance. Several funds made possible study in such libraries, as well as two extremely fruitful years in Copenhagen at the Institut for Graesk og Latinsk Middelalderfilologi and another year at the Villa I Tatti in Florence: the George C. Marshall Memorial Fund in Denmark; a La Fetra Summer Fellowship from Pomona College; Fellowships from the Harvard University Center for Italian Renaissance Studies at the Villa I Tatti and the Leopold Schepp Foundation; and a Summer Stipend from the National Endow-

ment for the Humanities. In addition, a University of Iowa Old Gold Summer Fellowship made possible a summer devoted to writing. The editors of Ockham and Wodeham at the Franciscan Institute of St. Bonaventure University have been unfailingly helpful as well, and my work would not have been conceivable without theirs.

For permission to absorb portions of my own previous work into this one, I thank the editors of *Cahiers de l'Institut du Moyen Age Grec et Latin*, *English Logic in Italy in the Fourteenth and Fifteenth Centuries*, *History of Universities*, *Mediaeval Studies*, *Rivista critica di storia della filosofia*, and of the *Subsidia* of the Ecclesiastical History Society.

Hannah Krogh Hansen assisted many early stages of this research in Copenhagen; in Florence, Judith Steinhoff saved me much labor by typing; and in Iowa, the administrative assistant to the History Department, Mary Strottman, has graciously stretched her own energies to bring the final version of this work to press.

A home was provided for this book by my editor at Brill, Julian Deahl, to whom I am especially grateful for his encouragement of this project over many years. Its early stages were nurtured in Copenhagen, where Jan Pinborg, Sten Ebbesen, K. Margareta Fredborg, Lauge Nielsen, Niels Jørgen Green-Pedersen awakened my interest in medieval semantics and logic while Fritz Saaby Pedersen increased my appreciation for thirteenth-century authors. I have also learned much philosophy over the years from Hester Gelber, Calvin Normore, and Paul Streveler, who have patiently seen other mutual projects slowed as my energies were absorbed in this; from Marilyn M. Adams, Jim Allard, Morton Beckner, and Gordon Brittan; and recently from my philosophy colleagues at Iowa, especially Scott MacDonald, who read early versions of several chapters. I thank, too, Marcia Colish, Sheila and Gerhardt Heinrich, Francesco Del Punta, Concetta Luna, Jürgen Miethke, Amos Funkenstein, and John Murdoch for generally aiding and abetting this project, as, in their varied ways, have each of my incomparable colleagues in the Department of History at Iowa. Here my students' interest in this work has helped me, often unknown to them, and I cannot envision how the proofreading and indexing could have been accomplished without the careful labors of Kathleen Kamerick and James Halverson.

The completion of this book has been speeded by the enthusiastic support of many friends and family: my parents, Mary K. Bonsteel Tachau and Eric S. Tachau, my sister Susan M. Tachau and brother David B. Tachau, and my grandmothers Ruth M. Neitzel and the late Jean B. Tachau. As is suggested above and will be evident from what follows, my debts of gratitude to David Lindberg and Mark Smith range wide, for their research, friendship, and interest have made the present work pos-

sible. To them and to William J. Courtenay, who opened to me the world of thirteenth- and fourteenth-century thought; who at every stage of this project shared his microfilms, cognac, and time; and who criticized its arguments, I hope the present work is some recompense for a debt that runs beyond acknowledgment. To the late Jan Pinborg, whose encouragement and learning have influenced many stages of my studies, this book is finally dedicated.

ABBREVIATIONS

AHDLMA	<i>Archives d'histoire doctrinale et littéraire du moyen âge</i>
AUP	<i>Auctarium Universitatis Parisiensis</i> (see bibliography).
BGPTM	<i>Beiträge zur Geschichte der Philosophie des Mittelalters; more recently, —der Philosophie und Theologie des Mittelalters</i>
CHLMP	N. Kretzmann, A. Kenny, and J. Pinborg, eds., <i>Cambridge History of Later Medieval Philosophy</i> (see bibliography).
CIMAGL	<i>Cahiers de l'Institut du Moyen Âge Grec et Latin</i>
Courtenay, Wodeham	W.J. Courtenay, <i>Adam Wodeham: An Introduction to His Life and Writings</i> (Leiden: 1978).
CUP	<i>Chartularium Universitatis Parisiensis</i> (see bibliography).
FrSt	<i>Franciscan Studies</i>
In Sent.	<i>In libros Sententiarum Petri Lombardi</i>
Jour. Hist. Phil.	<i>Journal of the History of Philosophy</i>
Lectura	<i>Lectura in libros Sententiarum</i>
Lindberg, Vision	D. Lindberg, <i>Theories of Vision from Al-Kindi to Kepler</i> (Chicago: 1976).
Logique, Ontologie	Z. Kaluza and P. Vignaux, eds. <i>Logique, Ontologie, Théologie au XIV^e Siècle</i> (see bibliography).
Medioevo	<i>Medioevo: Rivista di storia della filosofia medievale</i>
MedSt	<i>Mediaeval Studies</i>
Oph	Ockham, <i>Opera Philosophica</i> (see bibliography).
Ord.	<i>Ordinatio</i>
OTh	Ockham, <i>Opera Theologica</i> (see bibliography).
Oxf. Hist.	J.I. Catto, ed. <i>The Early Oxford Schools</i> (see bibliography).
RCSF	<i>Rivista critica di storia della filosofia; recently, Rivista di storia della filosofia.</i>
Rep.	<i>Reportatio</i>
RTAM	<i>Recherches de Théologie ancienne et médiévale</i>
[]	Although in the manuscript, word(s) must be deleted for sense
< >	Word(s) to be inserted for sense
<< >>	In texts edited by others, my emendation
<i>marg.</i>	Word(s) written in the margin
<i>ms.</i>	Indicates a divergent manuscript reading

Technical Vocabulary

[Note: in a work such as the present one, the proportion of terms which have a restricted technical scope is perforce high; moreover, their employment varies from one medieval author to another, so that their meanings are to be discovered only in context. Here I propose merely to signal the most important terms which, despite their looser, more ambiguous uses in modern English, I have attempted to restrict consistently. Most of these are words taken directly from medieval Latin, to which I have generally chosen to remain close, in the hope of enabling medieval scholars to speak with their own voices, rather than through those shaped by particular modern philosophical viewpoints.]

concept	<i>conceptus</i>
essentially the same	<i>idem in essentia; eiusdem naturae</i>

intention	<i>intentio</i>
intuition	<i>notitia</i> or <i>cognitio intuitiva</i>
meaning	<i>significatio</i>
necessary	<i>necesse; necessarius</i> , etc.; not <i>oportet</i>
objective	<i>obiective</i> ; roughly the reverse of the post-Kantian term
proposition	<i>propositio, complexum, compositio</i>
subjective	<i>subiective</i> ; roughly the reverse of the post-Kantian term
true, truth, veridical, verisimilitude	see chapter I, n. 48; not synonymous with "real"

**PART ONE—
FROM PERSPECTIVIST OPTICS TO INTUITIVE COGNITION:
THE BACKGROUND TO FOURTEENTH – CENTURY EPISTEMOLOGY**

**Chapter One—
The Multiplication of Species:
The Legacy of Roger Bacon**

When William of Ockham lectured on Peter Lombard's *Sentences* between 1317–1319, he articulated a new theory of knowledge. To delineate the reception of Ockham's theory and to assess its role in fourteenth-century epistemological discussions it is, however, necessary first to appreciate those he attempted to replace. The starting point for such an appreciation must be his efforts to eliminate from cognition mediators he construed as unwarranted. It has often been argued or assumed that Ockham's critique of mediating *species* was directed at the position of Thomas Aquinas;¹ yet the latter had inherited rather than originated the account of cognition at issue, and the focus on his views has hidden both the source and hegemony of the theory that Ockham disputed. The *species in medio* to which Ockham objected had seemed necessary to most late thirteenth- and early fourteenth-century thinkers, who understood cognition to involve a process of abstraction from sense experience. The prototypical sense was vision, and the prototypical formulation of this process was achieved by thinkers concerned specifically with explaining vision, the perspectivists.² So Durand of St. Pourçain, who preceded Ockham in the effort

¹ For example: Sebastian J. Day, O.F.M., *Intuitive Cognition. A Key to the Significance of the Later Scholastics* (St. Bonaventure, N.Y.: 1947), pp. 6–36; Gordon Leff, *The Dissolution of the Medieval Outlook: An Essay on the Intellectual and Spiritual Change in the Fourteenth Century* (New York: 1976), p. 60; Steven Ozment, *The Age of Reform 1250–1550. An Intellectual and Religious History of Late Medieval and Reformation Europe* (New Haven and London: 1980), pp. 52–53, 55–58. But see also Anneliese Maier, "Das Problem der *species sensibiles in medio* und die neue Naturphilosophie des 14. Jahrhunderts," in idem., *Ausgehendes Mittelalter II* (Rome: 1967), pp. 419–51; and, most recently, Francesco Corvino, "La Nozione di 'specie intelligibile' da Duns Scoto ai Maestri Agostiniani del secolo XIV (Gregorio da Rimini e Ugolino da Orvieto)" *Rivista di filosofia neo-scolastica* 70 (1978), p. 157.

² The "perspectivists," or practitioners of *perspectiva* (the science of optics) included in the thirteenth century Roger Bacon, John Pecham, and Witelo, all of whom were indebted to Alhazen; see David C. Lindberg, *Theories of Vision from Al-Kindi to Kepler* (Chicago: 1976), especially pp. 116–46.

On the overwhelming concentration upon vision to the exclusion of other senses see: A. Maier, "Das Problem;" Graziella Federici Vescovini, *Studi sulla prospettiva medievale* (Torino: 1965), particularly p. 85, on Avicenna's emphasis upon vision; D.C. Lindberg and N.H. Steneck, "The Sense of Vision and the Origins of Modern Science," in A.G. Debus, ed., *Science, Medicine, and Society in the Renaissance. Essays to Honor Walter Pagel* (New York: 1972), pp. 29–45. The preponderance of attention to vision is reinforced by Aristotle's concentration upon it in the *De anima*, as well as by Augustine's conviction that light was active in all five external senses; see James McEvoy, "The Sun as 'res' and 'signum'"

(footnote continued on next page)

to remove sensible species from accounts of cognition, decided:

These species, however, seem to have been introduced originally on account of the sense of sight and the sensibles of that sense. For color seems to effect its species in the medium and the [sense] organ, just as it appears sensibly [to do] when reflected in a mirror. And if it were not for this, perhaps mention would never have been made of species required for cognition. But because some believe that the species of color in the eye represents to sight the color of which it is the species, they therefore posit, both in our and in angelic intellects, certain species for the purpose of representing things, that they may be known both by us and by angels. This, however, I do not consider true, neither in our senses nor in our intellect ...³

Among the "perspectivists," as they were known to their late medieval readers, Roger Bacon (ca. 1220–1292) was most responsible for elaborating the doctrine of the "multiplication of species" that was at the core of what became the standard explanation of perception and cognition based on perception.⁴ This English Franciscan was evidently the first scholar in the Latin west to master Alhazen's *De Aspectibus*, and his incorporation of Alhazen's programme within the newly Aristotelianized neoplatonism of his age possibly sparked, and certainly influenced the optical *summae* of Bacon's fellow thirteenth-century "perspectivists," notably John Pecham and Witelo.⁵ Little reliable information remains concerning Bacon's life, but his oeuvre and occasional autobiographical remarks burn with his nearly single-minded commitment during at least the last thirty-five years of his life to working out his deeply systematic

(footnote continued from previous page)

Grosseteste's Commentary on *Ecclesiasticus* ch. 43, vv. 1–5," RTAM 41 (1974), 38–91. (For Grosseteste's influence upon perspectivists, see below, n. 12ff.)

³ Durandus de Sancto Porciano, *In Sent.* L[iber] II, d[ist.] 3, q[uest.] 6 in Vatican MS. Vat. lat. 1072 fols. 135vb–136ra: "Iste autem species originaliter videntur introducte fuisse propter sensum visus, et sensibilia illius sensus. Color enim videtur facere speciem suam in medio, et in organo sicut sensibiliter apparet in refractione que est in [ms: a] speculo. Nisi enim istud fuisset, forsitan numquam fuisset facta mentio de speciebus requisitis ad cognitionem. Sed quia quidam credunt quod species coloris in oculo representat visui colorem, cuius est species, ideo ponunt tam in intellectu nostro quam angelico quasdam species ad representandum res, ut cognoscantur tam a nobis quam ab angelis. Hoc autem non puto verum esse, nec in sensu, nec in intellectu nostro, nec in angelico ..." The text is quoted from the more fallible Venice edition of 1571 by Maier, "Das Problem," 429 n. 14.

⁴ Bacon was of course not solely responsible, insofar as he made more coherent notions already current in the work of, e.g., Grosseteste, Alexander of Hales, and Robert Kilwardby. The last two were to some extent indebted to Grosseteste, as was Bacon (see below, n. 12). For the medieval sources of their light-metaphysics and epistemology, see Klaus Hedwig, *Sphaera Lucis. Studien zur Intelligibilität des Seienden im Kontext der mittelalterlichen Lichtspekulation*, BGPTM, n. f. 18 (1980).

⁵ See D. Lindberg, "Alhazen's Theory of Vision and Its Reception in the West," *Isis* 58 (1967), 321–41; idem, "Lines of Influence in Thirteenth-Century Optics: Bacon, Witelo, and Pecham," *Speculum* 46 (1971), 66–83; idem, *Vision*, pp. 104–21; Maier, "Das Problem," p. 420.

views. These had clearly begun to coalesce during his lectures as a master of Arts at Paris from 1240–47, to judge from Bacon's surviving Aristotle commentaries. By 1260, he had begun to produce a series of philosophically significant but uneven treatises elaborating his theory: the *Communia naturalium*, *Opus maius* (including the newly recovered "De signis"), *Opus minus*, *Opus tertium*, *De multiplicatione specierum*, *De speculis comburentibus* and, in 1272, the *Compendium studii philosophie*. He returned finally to this effort—if, that is, he ever left it—with his final work, the incomplete *Compendium studii theologiae* of 1292.⁶

Bacon's dedication fueled much of the scorn that, on his own admission, he frequently directed at many of the prominent scholars of his age, including Richard Rufus of Cornwall and Albertus Magnus.⁷ These vitriolic attacks, colored as they were with his own self-esteem, must have provoked hostility in some academic circles. Moreover, while Bacon was in many respects an innovative and even brilliant thinker, who read widely in the Greek, Muslim and Jewish sources still reaching the Latin west for the first time in his lifetime,⁸ his adherence in the 1250s–70s to ideals first elaborated by Grosseteste in the 1230s discloses a profoundly conservative side to his thought. Viewed against late thirteenth- and fourteenth-

⁶ For Bacon's biography and the chronology of his œuvre, see Lindberg, *Roger Bacon's Philosophy of Nature. A Critical Edition, Introduction, and Notes, of De multiplicatione specierum and De speculis comburentibus* (Oxford: 1983), pp. xv–xxxv. Bacon lectured on Aristotle at Paris where he was magister artium from 1240–47, and his *Metaphysics* and *De sensu et sensato* commentaries from those years already contain parts of the doctrine of the multiplication of species; cf. also Z. Kuksewicz, "The Potential and Agent Intellect," CHLMP, pp. 598–600.

The present discussion is based upon the following editions in addition to Lindberg's: *Communia naturalia* and *Quaestiones super IV Metaphysicae* in Robert Steele, ed., *Opera hactenus inedita Rogeri Baconi*, 16 vols. (Oxford: 1905–40), vol. 2–3, 11; John Bridges, ed., *The Opus maius of Roger Bacon*, 3 vols. (London: 1900); "De signis" in K.M. Fredborg, Lauge Nielsen, and Jan Pinborg, "An Unedited Part of Roger Bacon's 'Opus Maius': *De Signis*," *Traditio* 34 (1978), 75–136; A.G. Little, ed., *Part of the Opus Tertium of Roger Bacon, including a fragment now printed for the first time* (Aberdeen: 1912); *Compendium studii philosophie* in J.S. Brewer, ed., *Opera quaedam hactenus inedita* (London: 1859); and H. Rashdall, ed., *Fratris Rogeri Bacon, Compendium studii theologiae* (Aberdeen: 1911).

⁷ As, e.g., in *Comp. studii theol.* II, iv (pp. 52–53): "Et optime novi pessimum et stultissimum istorum errorum [autorem], qui vocatus est Ricardus Cornubiensis, famosissimus apud stultam multitudinem ..." Cf. Sten Ebbesen, "Roger Bacon and the Fools of his Time," *CIMAGL* 3 (1970), 40–44; Jeremiah M.G. Hackett, "The Attitude of Roger Bacon to the *Scientia* of Albertus Magnus," in J.A. Weisheipl, ed., *Albertus Magnus and the Sciences: Commemorative Essays 1980* (Toronto: 1980), pp. 53–72; Catto, "Theology and Theologians 1220–1320," *Oxf. Hist.* I, pp. 476, 490–95.

⁸ Bacon's complaints as late as the *Comp. studii theol.* undoubtedly understate the availability of Aristotle's works, but a number of mathematical and optical works find their first western citation in Bacon or later in Witelo. See Smith, *Witelonis V* pp. 56–58; Lindberg, *Bacon's Natural Philosophy* xlviii–xlix; idem, *Vision* pp. 209–13; idem, "The Transmission of Greek and Arabic Learning to the West," in idem, ed., *Science in the Middle Ages* (Chicago: 1978), pp. 52–90.

century curricula and ideas at Oxford and Paris, Bacon appears as reactionary as he was unsuccessful in his opposition, for example, to the introduction of Lombard's *Sentences* into theological teaching, or to the new Parisian "Modistic" logic.⁹

The antipathies provoked by Bacon's combined arrogance and attacks on new ideas may lie at the core of his reputation among subsequent generations who came eventually to label him a troublesome, possibly heretical, experimenting magician. This reputation has, in turn, militated in the twentieth century against recognizing Bacon's central, albeit sometimes indirect importance for philosophy in the fourteenth as well as thirteenth century.¹⁰ Recently, however, historians of optics and historians of medieval semantics have separately begun to assert the magnitude of Bacon's influence in each of these disciplines, but have had to assume that his decidedly non-positivistic cast of mind precluded influence beyond the onset of the purportedly "critical," or "analytical" fourteenth century.¹¹ Yet, whatever Bacon's personal reputation among his medieval readers, their distaste (if any) did not extend to his attempt to unite optics, psychology, epistemology, and logic within his doctrine of the multiplication of species. This Baconian synthesis provided a compelling account: one in which particular aspects may have seemed flawed to his readers, but in which the whole was, in explanatory power, greater than the sum of its parts.

The Causal Chain of Light

Bacon himself believed that the investigation of vision exposed the inseverable ties binding psychology, epistemology, and semantics (as effects) to the natural causal processes, chiefly the propagation of light.

⁹ Cf. *Comp. studii theol.* II, i (p. 34) "Quamvis autem principalis occupacio studii theologorum deberet esse circa textum sacrum, sciendum est ... tamen a quinquaginta annis theologi principaliter occupati sunt circa 'questiones.'" On his attitude towards the proper study of theology, see the articles of Catto and Hackett cited in n. 7, above; for his disputes with the proponents of "modi significandi," see Alain de Libera, "The Oxford and Paris Traditions in Logic," CHLMP, pp. 174–87.

¹⁰ See Lindberg's judicious remarks in *Bacon's Philosophy*, pp. liii–liv and idem, "On the Applicability of Mathematics to Nature: Roger Bacon and His Predecessors," *British Journal for the History of Science* 15 (1982), 3–25. Given Bacon's intellectual debts to Grosseteste, it is to some extent their combined influence that requires re-examination.

¹¹ In addition to Lindberg, see Jan Pinborg, "The English Contribution to Logic Before Ockham," *Synthese* 40 (1979), 19–42; and de Libera (n. 9 above). This approving characterization of the fourteenth century stems from E.A. Moody's persuasive "Empiricism and Metaphysics in Medieval Philosophy" (1958), repr. in idem, *Studies in Medieval Philosophy, Science, and Logic. Collected Papers, 1933–1969* (Berkeley and Los Angeles: 1975), pp. 287–304; see also John E. Murdoch, "The Development of a Critical Temper: New Approaches and Modes of Analysis in Fourteenth-Century Philosophy, Science, and Theology," *Medieval and Renaissance Studies: Proceedings of the Southeastern Institute of Medieval and Renaissance Studies* 7 (1975), 51–79.

His debt was greatest to Avicenna and Alhazen for the technical details of his own account of visual perception, as of the apperceptual processes with their logical and semantic operations. But for the causal processes underlying those operations, Bacon's theory had strong roots in Augustine and the pseudo-Dionysius, and in the whole emanationist neoplatonic tradition, especially as they pervaded Grosseteste's thought. His treatises in fact were both the model for Bacon's efforts to integrate Aristotelian and neoplatonic philosophy, and the direct source for the notion of multiplication of species in a medium.¹² For Bacon as for Grosseteste, the visible species are only one instance of a general multiplication of species by all objects and powers in the universe:

Every efficient cause acts through its own power, which it exercises on the adjacent matter, as the light (*lux*) of the sun exercises its power on the air (which power is light [*lumen*] diffused through the whole world from the solar

¹² Lindberg, *Roger Bacon's Philosophy* pp. xix–xx, xxxiii–lxxi; *Vision* pp. 94–116; McEvoy "Sun as 'res'", pp. 57–61. Bacon explains the centrality of *perspectiva* among the mathematical sciences frequently, as in *Communia naturalium* I, ii [II: p. 5]; *Opus tertium* (p. 20). This is among the aspects of Bacon's thought considered in N.W. Fisher and Sabetai Unguru, "Experimental Science and Mathematics in Roger Bacon's Thought," *Traditio* 27 (1971), 353–78.

On Grosseteste, whose thought Bacon probably knew primarily from reading rather than from personal contact (cf. Lindberg, *Bacon's Philosophy* pp. xviii–xx) see: James McEvoy, *The Philosophy of Robert Grosseteste* (Oxford: 1982), particularly ch. 1, "Creation and the Cosmology of Aristotle;" Part IV, "The Light of Intelligence;" idem, "Questions of authenticity and chronology concerning works of Robert Grosseteste edited 1940–1980," *Bulletin de philosophie médiévale* 23 (1981), 64–90; 24 (1982), 69–89; and, more recently, R.W. Southern, *Robert Grosseteste: The Growth of an English Mind in Medieval Europe* (Oxford: 1986). In his important and revisionary study, Southern not only offers new arguments for redating Grosseteste's works, but also confirms (pp. 13–19) that Bacon knew Grosseteste's works and not the man. For the role in Grosseteste's thought of Augustinian and pseudo-Dionysian philosophy see also: Ludwig Baur, introduction to *Die philosophischen Werke des Robert Grosseteste, Bischofs von Lincoln*, BGPTM 9, 1912; Vescovini, *Studi*, ch. 1–2; Giuseppa Battisti Saccaro, "Il Grossatesta e la luce," *Medioevo* 2 (1976), 21–75; Hedwig, *Sphaera Lucis*, pp. 119–50.

For an understanding of Grosseteste's influence more generally, in addition to Southern, *Grosseteste*, see A.C. Crombie's controversial *Robert Grosseteste and the Origins of Experimental Science 1100–1700* (Oxford: 1953, 1971); and S. Marrone, *William of Auvergne and Robert Grosseteste: New Ideas of Truth in the Early Thirteenth Century* (Princeton: 1983), whose remarks (pp. 168, 182, 185n, 265) on Grosseteste's rejection of neoplatonist metaphysics (based on a study of his *Posterior Analytics* commentary) are incautious. More persuasive is: C. Bérubé, S. Gieben, "Guibert de Tournai et Robert Grosseteste, sources inconnues de la doctrine de l'illumination," in *S. Bonaventure, 1274–1974*, II (Grotta-ferrata: 1973), pp. 627–54, which supplements Jean Rohmer, "La théorie de l'abstraction dans l'école franciscaine de Alexandre de Halès à Jean Peckam," *AHDLMA* 3 (1928), 105–84. Also valuable are Richard C. Dales, "The Influence of Grosseteste's 'Hexaemeron' on the 'Sentences' Commentaries of Richard Fishacre, O.P. and Richard Rufus of Cornwall, O.F.M.," *Viator* 2 (1971), 271–300; J.I. Catto, "Theology and Theologians," pp. 488–504.

light [*lux*]). And this power is called 'likeness,' 'image,' and 'species,' and is designed by many other names, and it is produced both by substance and by accident, spiritual and corporeal ... This species produces every action in the world, for it acts on sense, on the intellect, and on all matter of the world for the generation of things.¹³

According to this theory, then, a visible object generates, or "multiplies" species of light and color in the adjacent, transparent medium. These species, which Bacon also calls "virtues" or powers, "forms," "images," "similitudes," "phantasms," and "intentions,"¹⁴ generate further species in the medium contiguous to them, which results in a continuous multiplication of species along rays proceeding in all unobstructed directions from all points on the object's surface. These visible species convey the object's accidents through the intervening medium, which serves as their substance, to the eye of the viewer, upon which they are, loosely speaking, "impressed." Strictly speaking, Bacon insists, the propagation of species is really not a transmission of impressions but a process of successive actualization of the potentials of the various media (including sense organs) involved. Once received in the sense organ, each species continues to be multiplied along the optic nerves into the cavities of the brain housing the internal senses. As all objects in the universe multiply species, clearly the processes of the other external senses (with the arguable exception of hearing) can, *mutatis mutandis*, be understood in the same way.¹⁵

¹³ *Opus maius*, pt.4, d.2, c.1 [I: 111]; the translation is Lindberg's, *Vision*, p. 113; cf. also *De mult. specierum* II, i; *Communia naturalium* I, iv [II: p. 14] and I, d.2, c.1 [II: pp. 16–17].

A comparison of these declarations and *De mult. specierum* I, i, lin. 71–98 to Grosseteste, *De lineis, angulis, et figuris*, ed. Baur, *Die philosophischen Werke*, p. 60 rapidly reveals Bacon's indebtedness to him. In works composed both before and after the *Posterior Analytics* commentary (ca. 1225–32), Grosseteste (like Bacon quoting him) is completely explicit in arguing that light is an efficient cause. See Grosseteste's *Hexaemeron* (ca. 1234–37), discussed in McEvoy's "La Connaissance intellectuelle selon Robert Grosseteste," *Revue philosophique de Louvain* 75 (1977), 5–48; Lindberg, "Applicability of Mathematics," Southern, *Grosseteste*, 134–69.

¹⁴ *De mult. specierum*, II, i, lin. 3–24. Among the synonyms Bacon claims [in *De mult. specierum*, I, i, lin. 23–29] for the species are: *virtus*, *similitudo*, *ymago*, *ydolum*, *simulacrum*, *fantasma*, *forma*, *intentio*, *passio*, *impressio*, and *umbra philosophorum*; see also *Communia naturalium* I, d.2, c.1 [II: pp. 16–17].

¹⁵ *De mult. specierum* I, i–iii (pp. 2–49); II, i–ii (pp. 90–105); see also *Communia naturalium* I, d.2, c.3–4 [II: pp. 24–26]; *Opus maius* pt.5.1, d.9, c.4 (vol. ii); and *Opus tertium* (pp. 21–24). On the strict and loose use of the term "impression," cf. *De mult. specierum* I, iii, lin. 30–49 (pp. 44–47); for explicit reference to the species before (rather than only after) it enters the sense as a *species sensibilis* cf. *Communia naturalium* I, d.2, c.3 [II: p. 25]. Bacon is not consistent in his view of whether sound is propagated by species as can be noted from *De mult. specierum* I, i, lin. 140–46; I, ii, lin. 3–29 (and p. 367 n.2).

This entire process is brilliantly analysed in detail both by Lindberg, *Bacon's Natural*

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By tracing the multiplication of species into the realm of the internal senses, thus extending his causal, physical analysis into the psychological processes derived from perception, Bacon expanded on an outline already available from Grosseteste's treatment of sensation. Like him, Bacon adopted primarily an Avicennian framework,¹⁶ but he also endeavored to graft onto this frame Alhazen's sketchy account of apperception, which focused upon the incompleteness of external perception in the absence of mental operations located in what he termed the *ultimum sentiens*. There, at the forefront of the brain, a faculty of judgment (*virtus distinctiva*) carried out various operations by which it examined and sorted the information received in the external sense. Beyond this, Alhazen's view of what happened physiologically after the initial reception of the *species* in the external sense was, unlike Avicenna's, vague.¹⁷ The latter's physiological psychology, grounded in Aristotle's elaboration of a tripartite vegetative, sensitive, and intellectual soul, nevertheless departed from strict Aristotelian teaching both by distinguishing more faculties or "powers" (*virtutes*) within each part of the soul and by placing these faculties within a modified Galenic anatomical framework.¹⁸ Bacon's appropriation of this last aspect of Avicenna's psychology together with Alhazen's views on the operations of the *ultimum sentiens*, guaranteed that delineation of the

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Philosophy, pp. liii–lxxi who focuses especially upon the physics and mathematics of Bacon's account; and A. Mark Smith, "Getting the Big Picture in Perspectivist Optics," *Isis* 72 (1981), 568–589. Although their discussions rely principally on the *De mult. specierum* and *Opus maius*, I am greatly indebted to both for the present treatment of Bacon's optics.

¹⁶ Bacon himself says that "auctores perspectivae dant nobis viam ad hoc ... sed nullus explicat omnia necessaria in hac parte (*Opus maius*, pt.5.1, c.2)," and again, "Et hec omnia nomino et certifico secundum auctores perspective, cum adiutorio naturalis philosophie et medicine (*Opus tertium*, p. 21)." On Grosseteste's assimilation of Avicenna's psychology to his earlier Augustinian framework, see McEvoy, *Grosseteste*, pp. 267–68 and ch. 4, esp. pp. 295–96.

¹⁷ What follows is restricted to considering medieval Latin understanding of Arabic philosophy known to medieval western scholars only in translation; see also Smith, "Big Picture;" and idem, ed. *Witelonis Perspectivae Liber Quintus*, *Studia Copernicana XXIII* (Wroclaw: 1983), pp. 38–44. For Alhazen's views, see especially A.I. Sabra, "Sensation and Inference in Alhazen's Theory of Visual Perception," in Peter Machamer and Robert G. Turnbull, eds., *Studies in Perception: Interrelations in the History of Philosophy and Science* (Columbus, Ohio: 1978), pp. 166–85.

¹⁸ In addition to McEvoy, *Grosseteste*; cf. Smith, "Big Picture" pp. 572–73 and *Witelonis V* pp. 36–38 for the relation of Avicenna's psychology to Galen's physiology; N. Steneck, "The Problem of the Internal Senses in the Fourteenth Century," Ph.D. dissertation, University of Wisconsin 1970, pp. 1–18; and H.A. Wolfson's classic study, "The Internal Senses in Latin, Arabic, and Hebrew Philosophical Texts," *Harvard Theological Review* 28 (1935), 69–133. Bacon offers a justification for Avicenna's enumeration of faculties not discussed by Aristotle *De mult. specierum* I, ii, lin. 100–05; *Opus maius* pt.5.1, d.1, c.5.

various mental operations amounted to consideration of the functioning of precise regions of the brain.

Crucial to Aristotle's theory and to Avicenna's reformulation is the location of essentially cognitive functions in *both* the sensitive and intellectual realms of the soul.¹⁹ Thus, the five internal senses that Bacon accepts from Avicenna have cognitive functions, beginning with the common sense which is located with the imagination in the "anterior ventricle" or chamber at the front of the brain. Each exterior sense multiplies those *sensibilia* proper to it as, e.g., sound is for the sense of hearing, or light and color are for vision. Once the species have been multiplied to the first internal sense common to all (whence its name), they can there be combined and separated from each other to produce a compound image of the external sensible. From the common sense, on Bacon's account, the species next multiply to the posterior portion of the same anterior chamber, which contains the second internal sense, "imagination," so named for the *images* that it stores.²⁰

The two senses occupying the middle ventricle of the brain, the "estimative" sense and the "discriminative" sense are capable of adjudicative operations, or "sense judgment." Bacon considers the former adjudicative because (as we shall see below) it sorts—i.e. perceives the relations of—sensible information, or *intentiones*, perceptible to it but not to the external and common senses. This sense also apprehends the substantial species, thus enabling the mind to perceive an object's *substance* as well as its accidents.²¹ The discriminative power (*virtus distinctiva*), also known as the "cogitative" sense or "phantasy," is positioned in the anterior portion of the ventricle. By its operations the sensitive soul "imagines," or "phantasizes," that is, creates new images from those stored in the nearby adjacent imagination.²² Finally, the posterior cham

¹⁹ This point requires stress because modern philosophers, from Descartes onward, have frequently confused or conflated the two, usually without regard to the merits of theories assigning specific cognitive—but not rational—operations to the senses. The legacy of this confusion for the historiography of medieval philosophy has been the tendency (as we shall see frequently in the following chapters) to forget that when one has described a late medieval scholar's views on either sensitive cognition or intellectual cognition, one has not yet treated that scholar's entire account of natural cognition.

²⁰ Bacon *Opus maius* pt. 5.1, d.1, c.2; *De mult. specierum* I, ii, lin. 85–89. Avicenna, *Liber sextus de naturalibus* (ed. S. Van Riet and G. Verbeke, *Avicenna latinus: Liber de Anima seu Sextus de Naturalibus*, 2 vol. [Leiden: 1968, 1972]) pars I, c.5; pars IV, c.2. On Bacon's reading of Avicenna, see Wolfson, "Internal Senses," pp. 122–126.

²¹ Bacon, *Communia naturalium* I, d.2, c.1 [II: p. 17]; *Opus maius*, pt.5.1, d.1, c.4; *De mult. specierum* I, ii, lin. 86–88, 100–05, 283–87, 344; Avicenna, see below, n.34.

²² Bacon, *Opus maius*, pt.5.1, d.1, c.4; *De mult. specierum*, I, ii, lin. 86–88. The term "phantasia" came to be more usual for this sense; cf. Steneck, "Internal Senses" p. 31; Smith, *Witelonis V* p. 37n. Nevertheless, Bacon states in *Opus maius* pt.5.1, d.1, c.2 that

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ber houses sense-memory (as distinct from *intellectual* memory), the final internal sense to receive the "species."²³

These faculties of the sensitive part of the soul collectively complete the process of apprehension with respect to sensible objects (i.e. just those objects as can by their nature be perceived by sense), but do not account for rational or discursive operations upon the apprehended *information*, for which the faculties of the intellectual soul are required. Bacon's remarks concerning the powers of the intellectual soul are considerably more abbreviated than his discussion of the sensitive powers,²⁴ but he evidently believed that the process of multiplication continued through the intellectual powers as well. Such was at any rate the interpretation of those who accepted the doctrine of the multiplication of species; and hence for those who considered the sensible species (or its derivative, the phantasm) in the senses an inadequate object for the intellect, it became usual to hypothesize the abstraction of an intelligible species, to be impressed upon an intellectual faculty.²⁵

The Species as Intentio

Imbedded in Bacon's description of *species* as a likeness or image caused by an object of which it is a "first effect,"²⁶ is the assertion of its mind-

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the imagination and common sense together constitute the sense of phantasy. Bacon also gives to the two senses in the middle ventricle—particularly to the *virtus distinctiva*—those functions that Alhazen had assigned to the *virtus distinctiva* in the *ultimum sentiens*, which conflates the latter's account of apperception with Avicenna's; see *De mult. specierum* I, ii, lin. 220–48, 276–349; *Opus tertium* (pp. 27–28); "De signis" para. 19 (pp. 87–88). See also at nn. 39, 62 below.

²³ Bacon, *Opus maius* pt.5.1, d.1, c.4; *De mult. specierum* I, ii, lin. 287–88; but see also *Communia naturalium* IV, c.7 [III: pp. 300–01] where Bacon holds that the memory and estimative faculty are one substance with diverse operations.

²⁴ Bacon mentions the intellect in *De mult. specierum* I, ii, lin. 350–77; "De signis" para. 25–26, pp. 90–91. His lengthiest discussion is *Communia naturalium* II, d.4, c.1 [II: pp. 108–11]; II, d.4, c.4 [III: pp. 291–94]; c.7 [III: pp. 298–301]. See also n. 38, below.

²⁵ Bacon seems to posit intelligible species in *Communia naturalium* II, d.3, c.10 [II: pp. 103–04]; d.4, c.7 [III: p. 301]; *Opus mains*, pt.5.1, d.1, c.4, "et ab ea fiunt species in anima rationali;" and *De mult. specierum* I, ii, lin. 350. It is less clear whether the "De signis" reference to species remaining before the intellect (n. 68, below) is to sensible or intelligible species. The latter are likely given Bacon's doctrine elsewhere and the fact that the notion of a *species intelligibilis* can already be found in Kilwardby's semantical writings by 1240. See Osmund Lewry, "Robert Kilwardby on Meaning: A Parisian Course on the *Logica vetus*," *Miscellanea Mediaevalia* 13/1 (Berlin/New York: 1981), p. 381.

²⁶ *De mult. specierum* I, i, lin. 19–29: "Aliter sumitur virtus pro effectu primo virtutis iam dicte propter similitudinem eius ad hanc virtutem, et in essentia et in operatione, quia similis est ei diffinitione et in essentia specifica ... et hec virtus secunda habet multa nomina, vocatur enim similitudo agentis et ymago et species <n. 14 supra>." Cf. also I, i, lin. 42–46, and Lindberg's discussion, pp. liv–lv.

independent status; that is, these *species* are not essentially *products* of the mind's operation and would exist even if there were no percipient creatures. Yet Bacon's arguments for the species' independent extramental reality were potentially compromised by one of the more problematic synonyms he accepted for "species." A species, he remarked, "is, in the common usage of those concerned with nature, sometimes called 'intention' on account of the debility of its being with respect to that of the thing itself, to say that it is not truly a thing (*res*), but rather the intention (*intentio*) of the thing; that is, its similitude."²⁷ This identification of the *intentio* with the species, while almost certainly not original where thirteenth-century thought was concerned,²⁸ seems in Bacon's case to have stemmed from his ever-present purpose of effecting the reconciliation of his sources – here principally Avicenna, Alhazen, and Averroes. Superficially, this purpose was easily satisfied, for all three authors seemed to be employing "intention" for the same notion; in fact, however, the ambiguous Latin term translated a complex of equally if not more ambiguous Arabic originals.²⁹

Of the many places in Avicenna's œuvre where the notion of *intentio* is employed, four in particular—from his *Liber de philosophia prima*, or *Metaphysica*, and his *Liber sextus de naturalibus*, or *De anima*—seemed to establish an inseparable link between logic and psychology.³⁰ In the *Philosophia prima*, Avicenna defined the subject of logic as "second intentions in connection with first intentions,"³¹ noting elsewhere that *inten-*

²⁷ *De mult. specierum* I, i, lin. 54–56: "Intentio vocatur in usu vulgi naturalium propter debilitatem sui esse respectu rei, dicentis quod non est vere res sed magis intentio rei, id est similitudo." Bacon's notion of *intentio* has been discussed by Vescovini, *Studi*, pp. 64–69; Maier, "Das Problem," pp. 425–28.

²⁸ The history of the notion of *intentio* in the second half of the thirteenth century remains to be written, but either Grosseteste or Robert Kilwardby may be Bacon's source here. On the relation of the epistemological theories of Bacon and Kilwardby, see O. Lewry, O.P., "Grammar, Logic, and Rhetoric, 1220–1320," in *Oxf. Hist.* I, pp. 401–34.

²⁹ For the several meanings of *mana* * and *maqul** which were translated as *intentio*, see: Christian Knudsen, "Intentions and Impositions," CHLMP pp. 479–95; Sabra, "Sensation and Inference," pp. 171, 177–78, 183 n. 38.

³⁰ Vescovini, *Studi*, pp. 64–69; Knudsen, "Intentions;" and Pinborg, "Zum Begriff der *intentio* secunda: Radulphus Brito, Hervaeus Natalis, und Petrus Aureoli in Diskussion," CIMAGL 13 (1974), 45–59 [repr. in idem, *Medieval Semantics* discuss the background to Avicenna's use of the terminology. As they point out, the late medieval Latin logical treatments of *intentio* are strongly indebted to Avicenna's. References to Avicenna's *Philosophia prima* are to S. Van Riet, ed., *Avicenna latinus: liber de Philosophia prima sive Scientia divina*, 2 vol. (Leiden: 1977, 1980).

³¹ The wording, "Loyca est de secundis intentionibus adiunctis primis," the usual Latin paraphrase of Avicenna, is also Bacon's; cf. his *Quaestiones super IV Metaphysicae* IV, i, p. 89. For Avicenna see *Philosophia prima* I, ii [I: p. 10, lin. 73–74]: "Subiectum vero logicae, sicut scisti, sunt intentiones intellectae secundo, quae apponuntur intentionibus intellectis primo."

*tion*es have less being (*esse*) than the objects from which they "intend."³² Second intentions have as their objects first intentions; thus, second intentions are generated within the soul.

For Bacon and his contemporaries, Avicenna's meaning was still opaque,³³ but Bacon assumed that Avicenna referred here to the entities he described in the *Sextus de naturalibus*, where he claimed that objects impart *intentiones*, in addition to their forms, and that these intentions are received by the powers of apprehension, though not by the external senses. Later, in discussing the internal senses, Avicenna expanded his discussion, specifying the estimative sense as the recipient of intentions:

Thus we sometimes distinguish between sensibles by means of *intentiones* which we do not sense—we do not sense them either because, of their own nature, they are in no way sensible or because, while they are sensible, we do not sense them at the time of judgment. Those *intentiones* which are by their nature insensible include, for example, enmity and malice—which are why a sheep flees when it apprehends the form of a wolf ... Hence the faculty (*virtus*) by which these are apprehended is a different one [from the external sense] and is called 'estimative.' Or there are sensible *intentiones* such that, for example, when we see something waxy, we judge it to be honey and sweet.³⁴

³² *Philosophia prima* IX, iii [II: p. 466, lin. 31–32]: "Omnis enim intentio est propter id quod intenditur et est minoris esse quam id quod intenditur." This, presumably, is the source for Bacon's statement to the same effect, n. 27 above.

³³ Thus, for example, Bacon and Kilwardby disagree over what Avicenna understood by the *intentiones primae*, with Kilwardby deciding that "res enim ipse sunt prime intentiones; et nomina eas significantia ... sunt nomina primarum intentionum" (quoted by Knudsen, "Intentions," p. 484); cf. also: Jan Pinborg, *Logik und Semantik im Mittelalter: ein Überblick* (Stuttgart: 1972), pp. 90–92; idem, "Zum Begriff."

³⁴ *Liber Sextus de naturalibus*, pars I, c.5 [I: 85–86, 89]: "Sed virium ab intus apprehendentium, quaedam apprehendunt formas sensibles, quaedam vero apprehendunt intentiones sensibilium ... Differentiam autem inter apprehendere formam et apprehendere intentionem est haec: quod forma est illa quam apprehendit sensus interior et sensus exterior simul, sed sensus exterior primo apprehendit eam et postea reddit eam sensui interiori, sicut cum ovis apprehendit formam lupi, scilicet figuram eius et affectionem et colorem, sed sensus exterior ovis primo apprehendit eam et deinde sensus interior; intentio autem est id quod apprehendit anima de sensibili, quamvis non prius apprehendat illud sensus exterior, sicut ovis apprehendit intentionem quam habet de lupo, quae scilicet est quare debeat eum timere et fugere, quamvis non hoc apprehendat sensus ullo modo. Id autem quod de lupo primo apprehendit sensus exterior et postea interior, vocatur hic proprie nomine formae; quod autem apprehendunt vires occultae absque sensu, vocatur in hoc loco proprie nomine intentionis ... (p. 89) Deinde est vis aestimationis; quae est vis ordinata in summo mediae concavitatis cerebri, apprehendens intentiones non sensatas quae sunt in singulis sensibilibus, sicut vis quae est in ove diiudicans quod ab hoc lupo est fugiendum, et quod huius agni est miserendum ..." The explanation of *intentiones* in the interior senses is in *ibid.*, pars IV, c.1 [II: 6–8]: "Deinde aliquando diiudicamus de sensibilibus per intentiones quas non sentimus, aut ideo quod in natura sua non sunt sensibles ullo modo, aut quia sunt sensibles ex natura sua, sunt sicut inimicitiae et malitia et quae a se diffugiunt quam apprehendit ovis de forma lupi et omnino intentio quae facit

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Avicenna's use of "intentions," which he never defines, has a built-in ontological ambivalence. On the one hand an "intention"—particularly a "second intention" (*intentio secunda*)—is very nearly a concept. On the other, the "intention" is some thing (*res*) given off by the object; thus it is the foundation of the concept's content, and has an extramental existence, albeit an existence qualified as having "less being than that from which it intends."³⁵

Alhazen's use of the term "intention" is only in appearance less equivocal. According to Alhazen, visible objects send their forms to the percipient; but unlike Avicenna, who distinguished between forms (*formae*) and intentions, Alhazen held forms to be *composed* of the object's *intentiones*. He enumerated twenty-two "visible intentions" (*intentiones visibiles*) in a discussion Bacon would adopt virtually verbatim: light (*lux*), color, distance, position, solidity, shape, magnitude, discreteness, continuity, number, motion, rest, roughness, smoothness, transparency, opacity, shadow, darkness, beauty, ugliness, and the similarity or dissimilarity among any of the other intentions in the same or other objects.³⁶ Two of these intentions, light (*lux*) and color, are *per se* objects of the sense—a view that coincided with Avicenna's position that light (*lux*) and color are the proper objects of vision in-and-of-themselves (*per se*).³⁷ The other intentions, however, are not perceived by the external sense. Rather, to be apprehended, and then only mediately via accidents (*per accidens*), they require the operation of the *virtus distinctiva*, i.e., the faculty of judgment.³⁸

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eam fugere ab illo, et concordia quam apprehendit de sua socia et omnino intentio qua gratulatur cum illa: sunt res quas apprehendit anima sensibilis ita quod sensus non doceat eam aliquid de his; ergo virtus qua haec apprehenditur est alia virtus et vocatur aestimativa. Aut sunt sensibilis sicut, exempli gratia, cum videmus aliquid ceruleum, iudicamus esse mel et dulce: hoc enim non reddit nobis sensus in ipsa hora cum ipsum sit de genere sensorum—quamvis iudicium eius non sentiatur ullo modo et quamvis partes eius sint de genere sensati—non tamen apprehendit in praesenti; sed est iudicium quod iudicat quod fortassis est in eo error et ipsum etiam fit ex illa virtute." For Bacon's quotation of the last of these passages, see n. 39 below.

³⁵ As Pinborg recognized, "Zum Begriff," p. 50.

³⁶ Alhazen, *De aspectibus*, Book II, iv, p. 67: "Et virtus distinctiva distinguet omnes formas venientes ad ipsam, et distinguet colores partium, et diversitatem colorum, et ordinationem partium inter se. Et generaliter distinguet omnes intentiones rei visae, quae apparent per intuitum et formam totius rei visae compositam ex illis intentionibus" [quoted in Sabra, "Sensation and Inference," p. 183, n. 35]. On pp. 177–78 Sabra quotes the list of *intentiones* which he translates as "properties;" the list was also adopted by Pecham and Witelon, for which see Smith, "Big Picture," p. 583n; for Bacon, see n. 39 below.

³⁷ Sabra, "Sensation and Inference," pp. 171–74, 178; Avicenna's theory, set forth in *Liber Sextus de naturalibus* III, c. 1 [I: 171], is discussed by Smith, *Witelonis V*, pp. 26–27.

³⁸ See Sabra, "Alhazen on Inference," pp. 172–73; 180, n. 6; 182, nn. 27–34; and 183–85, nn. 43ff. Bacon repeats Alhazen's three perceptual or inferential processes in his *Opus maius* pt. 5.1, d.10, c.1–3 [II: 74–82]; and *Opus tertium* (p. 27) assigning these discurs-

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Hence, while seemingly claiming without reservation that intentions are *res* imparted by the object, Alhazen in fact suggests at the same time that they are in part the conceptual result of mental operations. Thus, as for Avicenna, Alhazen's concern with describing psychological and epistemological processes resulted in an ambiguous status for the *intentio*. This ambiguity, as well as the differences of their approaches, Bacon over-looked when, at the outset of his *Perspectiva*, and again in the *De multiplicatione specierum*, he fused Alhazen's and Avicenna's accounts under the rubric of *sensibilia* and their perception.³⁹

In the *De anima* commentary of Bacon's third source, Averroes, the terminology of *intentiones primae et secundae* achieved a ubiquity merely foreshadowed in Avicenna, with whose use that of Averroes seemed consonant. Moreover, in elucidating the physical prerequisites of vision, Averroes explicitly contrasted the *intentio* with corporeal existence: "light," Averroes maintained, "is not a body (*corpus*), but the presence of an intention in the diaphanous medium."⁴⁰ This formulation was the nucleus of an incipient contrast between "intentional being" (*esse intentionale*) and "real being" (*esse reale*) in extramental reality. Bacon's own treatment of Averroes' statement heightened the implicit dichotomy, for Bacon rephrased him to claim that light was spiritual rather than "corporeal and material." By "spiritual," Bacon argued, as noted above, that Averroes meant in fact not to deny the corporeality of light, but only to say that light was "insensible."⁴¹ Although this arguably did violence to Averroes' text, the extrapolation from *intentio* to insensibility suggests that

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sive, inferential processes to the sensitive soul. There he also notes that the Latin terminology unfortunately implies that these operations are intellectual: "Tres autem sunt modi cognoscendi ista ... et ut perspectivo utar eloquio, dico quod vocantur 'cognitio per sensum solum,' et 'cognitio per scientia,' et 'cognitio per sillogismum' vel argumentum. Sed hec verba sunt male translata, quia bruta animalia non habent scientiam, nec sillogismum, et tamen cognoscunt his tribus modis secundum quod exprimitur in Perspectiva; sed non est vis de vocabulis, dummodo in sensu non erremus [Punctuation mine]."

³⁹ *Opus maius* pt.5.1, d.1, c.2–4 [II: 4–9]; *De mult. specierum* I, ii, especially lin. 73–92, 220–92. See also *Opus tertium* pp. 26–27; *Communia naturalium* I, d.2, c.1 [II: p. 17]. Although Bacon eschews the use of "intentio" here, opting instead for Ptolemaic "sensibilia" (perhaps in order to reconcile his discussion with Averroes, who refers to "sensibilia" in II *De anima* comm. 162) later scholastics, who continued to read Avicenna and Alhazen for themselves, would surely have recognized the synonymous use of these two terms.

⁴⁰ Averroes, II *De anima* comm. 70 (p. 237): "Lux non est corpus, sed est praesentia intentionis in diaphano, cuius privatio dicitur obscuritas apud praesentiam corporis luminosi. Et hoc quod dicit <Aristoteles> manifestum est, quoniam subiectum obscuritatis et lucis est corpus et est diaphanum, et lux est forma et habitus istius corporis; et si esset corpus, tunc corpus penetraret corpus."

⁴¹ Averroes does provide some justification for the contrast in II *De anima* comm. 69 (pp. 235–36); Bacon, *Opus maius* pt.5.1, d.6, c.3 [II: 40–41]; *De mult. specierum* III, ii, lin. 76–106. Concerning Bacon's discussion, see below, nn. 63–64.

Bacon assumed that Averroes' and Avicenna's views on the manner of apprehension coincided. Averroes himself was, in the event, none too clear. For while the statement that light "is the presence of an intention in the diaphanous medium" can only be read as an affirmation of the extramental existence of *intentiones*, Averroes issued a categorical denial of their extramental existence elsewhere within the same opus.⁴²

Assimilation and Representation in Knowledge

Before considering the ontological and epistemological difficulties inherent in Bacon's identification of *intentiones*, *species*, and *similitudo* within the context of his theory of the multiplication of species, the commitments of the theory and the integration of semantics within its explanatory scope require examination. It should be noted first that this theory carries a commitment to the activity of objects upon passive recipients,⁴³ whereby a lasting impression is left in the senses. This impression is Bacon's "species" and, because the species is identical to the "intention" discussed by his Muslim sources, the impression made first on the senses and transmitted to internal sense and intellectual faculties is a concept.⁴⁴ On this theory, concept formation—at least insofar as "first" rather than "second" intentions are concerned—is a process of assimilation; that is, one in which concepts are not merely linked to perceptual processes, but are deposited by them as residual images like, or *similar* to their object by virtue of a shared nature. Further, precisely insofar as they are *exact* likenesses of their generating objects, these images are able to make their objects present to and within the percipient mind, i.e. to represent external

⁴² Averroes, II *De anima* comm. 121 (p. 317): "... Et opinandum est quod receptio formarum sensibilium ab unoquoque sensu est receptio abstracta a materia. Si enim reciperet eas cum materia, tunc idem esse haberent in anima et extra animam. Et ideo in anima sunt intentiones et comprehensiones, et extra animam non sunt neque intentiones neque comprehensiones, sed res materiales non comprehense omnino."

⁴³ Although Bacon stresses that, as *potentiae*, the soul's faculties are primarily passive where the receipt of species is concerned, his view of the perceptual faculties' passivity is not, however, unmitigated. Not only does he think the receipt of species causes the actualization of their potential enabling such active functions as those of the *virtus distinctiva*; Bacon also preserves a role for the *virtus visiva* required by earlier extramissionist theories of vision. Cf. *De mult. specierum* I, ii, lin. 187–96; iii, lin. 50–69; *Opus maius* pt. 5. 1, d.5, c.1 [II: 31–32]; d.7, c.2 [II: 49]; c.4 [II: 52]; Lindberg, *Vision*, pp. 114–16. See also the critique by Olivi, below, chapter II, at nn. 41–42.

⁴⁴ Although at least once Bacon himself distinguishes between "conceptus" and "species" (*Communia naturalia* II, d.4, c.1 [II: p. 110]) this nevertheless is evidently his understanding of the *intentio*; cf. also "De signis," para. 162–67 (pp. 132–35). It is significant that on this theory, concepts are to be found not only in the intellectual faculties of the soul, but also in the sensitive faculties. As we shall see in the following chapters, medieval scholars gradually rejected this position.

reality. On this theory, then, the identification of concepts with cognitive *acts* is explicitly denied.⁴⁵

The first advantage of a theory holding that concept formation occurs by assimilation of mind to external objects should be to afford a real connection between extramental reality and concepts. Indeed, according to Bacon that connection is not only *real* but, as the world is presently constituted, *necessary*, the necessity residing in the natural causal process he has outlined.⁴⁶ That is, at least with respect to what might be termed "first-order concepts"—in Bacon's language, the "first intentions"—concepts are not created by the mind and therefore are not arbitrary associations or divisions of extramental existents. Moreover, Bacon thinks *perspectiva* demonstrates that we can distinguish the occurrence of cases in which conditions intervene to distort the received image.⁴⁷ It follows that—except in any such anomalous cases—inasmuch as the connection is real between object and species, and the latter are of the same essence and, therefore, the same in nature as the former, then the species of an object is ipso facto *veridical*.⁴⁸

Another way of expressing this causally determined correspondence between objects and these veridical mental images (a way that brings Bacon back to Augustine's and Boethius' semantics) is to state that the

⁴⁵ The distinction is required by the view that, vis-à-vis external objects, the mind is—in Aristotelian terms—passive, i.e. not *in actu*. Many twentieth-century accounts of cognition *do* identify mental acts and their contents; cf. Frank Jackson, *Perception. A Representative Theory* (Cambridge, England: 1977). As a result, late medieval authors and their twentieth-century readers often approach the question of the relation between concepts (or mental terms) and mental acts from opposite directions; cf. Paul Spade, "Semantics of Terms," CHLMP, p. 190. Whether mental acts and their contents are distinct remained controversial after Bacon; see Aureol (below, chapter IV); the dispute between Chatton and Ockham (below, chapters V at nn. 154–58 and VII at nn. 78–91); and Holcot's critique (chapter IX, at nn. 20–27).

⁴⁶ See *De mult. specierum* I, i, lin. 273–95; vi, lin. 98–144; and below, n. 56. Bacon uses the term "necessary" more loosely than would scholastics of the next generation, and seems not to distinguish between logical and physical necessity.

⁴⁷ *De mult. specierum* I, iii, pp. 44–57; II, i, pp. 91–95; see also his various explanations of the importance of the mathematical, natural, and experimental sciences.

⁴⁸ In what follows, it will be useful to keep the terms "veridical," "truth" or verity, and "verisimilitude" clear. That a concept is a "veridical" image entails that it depicts its object as that object "truly" (*vere*) is (*in veritate rei* or *sicut est a parte rei*). To term a concept a "verisimilitude" is weaker, for all that is claimed is that it is *somehow* "like the truth" (*veri similitudo*) but because the degree of similitude or dissimilitude is not discernible, whether it is veridical is not determinable. Finally, neither label should be taken as a synonym for "true," because whether truth (*veritas*) resides (1) in extramental objects, or (2) in mental *intentiones*—singularly or complexly—or (3) somehow in the relation of veridical concepts to reality, were a series of alternatives that late thirteenth- and fourteenth-century scholars began to distinguish, as will be discussed in the following chapters *passim*. Except for authors committed to (2), "truth" and "veridical concept" are not synonymous terms.

species are "natural signs" (*signa naturalia*) of their objects. These signs can be distinguished from conventional ones established or, in Baconian terms, "imposed" (*imposita*) arbitrarily as are the particular significative sounds of particular languages.⁴⁹ The distinction lies in the fact that, in contrast to those that signify conventionally (*ad placitum*), the relation of an *intentio* or species to its generating object is innate, by virtue of their shared nature.⁵⁰ This relation of natural sign to the object that it "signifies" is the nexus of knowing and meaning (*significatio*).⁵¹

Signification, however, also involves the relation of words to concepts, and just as he takes one sense (vision) to be prototypical so, like his contemporaries, Bacon takes nouns (*nomina*, literally names) as the words for which an explication of meaning primarily accounts, largely construing other words derivatively.⁵² Bacon's most extended treatment of semantics, the "De signis," constitutes a section of the comprehensive *Opus maius* which details the multiplication of species. Bacon therefore simply presupposes that discussion as the basis for including *species* among natural signs; he does, however, detail further groups of natural signs on which

⁴⁹ Bacon, "De signis," para. 3 (p. 82); para. 5 (p. 83): "Secundus modus signi naturalis est quando non propter illationem aliquam significatur aliquid, sed propter conformitatem et configurationem unius rei ad aliud in partibus et proprietatibus, ut imagines et picturae et similitudines et similia et species colorum et saporum et sonorum et omnium rerum tam substantiarum quam accidentium ..." cf. *ibid.*, para. 7–8 (pp. 83–84) for signs imposed "ad placitum." For Bacon's semantics see also: Pinborg, "Roger Bacon on Signs: A Newly Recovered Part of the *Opus Maius*," *Miscellanea Mediaevalia* 13/1 (1981), pp. 403–12 [repr. in *idem Medieval Semantics*]; H.A.G. Braakhuis, "The Views of William of Sherwood on Some Semantical Topics and their Relation to Those of Roger Bacon," *Vivarium* 15 (1977), 111–42; K.M. Fredborg, "Roger Bacon on 'Impositio vocis ad significandum'" in Braakhuis, C.H. Kneepkins, and L.M. De Rijk, eds., *English Logic and Semantics from the End of the Twelfth Century to the Time of Ockham and Burleigh* (Nijmegen: 1981) pp. 176–77; Thomas S. Maloney, "The Semiotics of Roger Bacon," *Mediaeval Studies* 45 (1983), 120–54; *idem*, "Roger Bacon on Equivocation," *Vivarium* 22 (1984), 85–112; Irène Rosier, "Grammaire, Logique, Sémantique, Deux positions opposées au XIIIe siècle: Roger Bacon et les Modistes," *Histoire Epistemologie Langage* 6 (1984), 21–34.

⁵⁰ "De signis," para. 3, 6, 18 (pp. 82, 83, 87); and see nn. 13–15, 45 above; Maloney, "Semiotics" pp. 125–26, 129–30; Pinborg, "Bacon on Signs," pp. 406–07.

⁵¹ Spade, "Semantics of Terms," p. 188, argues that "significatio," as a "psychologico-causal property of terms" is not precisely the modern notion of meaning because "unlike meaning, signification is a species of the causal relation." Spade's view is exemplified by the opening words of Bacon's "De signis" (p. 81): "Signum est in praedicamento relationis et dicitur essentialiter ad illud cui significat ..." But see Pinborg's comparison of the aims of medieval semantics with those of Bierwisch in Pinborg, "Some Problems of Semantic Representations in Medieval Logic," in H. Parret, ed. *History of Linguistic Thought and Contemporary Linguistics* (Berlin: 1976), pp. 254–78 [repr. in *idem, Medieval Semantics*].

⁵² Cf. L.M. De Rijk, "Origins of the Theory of the Properties of Terms," CHLMP, p. 163. For Bacon, this follows from his treatment of *species rei in anima* as signs of their generating objects; cf. "De signis," para. 19, 22 (pp. 87, 89).

one grounds the relation of words to the species. These are natural signs of something that they imply either necessarily or with probability because they are found together in habitual or even constant conjunction as Bacon's examples suggest: thus a rooster's spontaneous crowing is such a sign of night, as dawn is a sign of an imminently future sunrise. This is Aristotle's understanding of signs, and by concurring in his classification of the inference from the sign to the thing signified as probable or necessary, Bacon indicates that he considers the inference secure or, at least, unproblematic. It is just this second innate and, hence, *necessary* relation that, he argues, obtains between these species in the soul, i.e., concepts, and the signs, e.g., words imposed to represent the objects known through the *species*.⁵³

Bacon hints at how he thinks this relation works within the psychology he has delineated. Like every other entity, the uttered (or written) word is capable of generating species that, in turn, multiply through the sense of hearing (or sight) into the inner senses. There the same operations of matching and sorting which allow the internal senses to perceive the relations among *intentiones*, allow the perception of the relation between the word (via the *species verbi*), the pre-existing concept (*species rei*), and the thing (*res*) the word was imposed to designate.⁵⁴

Bacon needs some such explanation of how this reliable inference from word to concept is generated, because words cannot be further images multiplied from the *species rei*. If words were such images, then words would be exactly alike in all languages as, on Bacon's theory, in the absence of impeding conditions, species in the soul are exactly alike for all percipients. Words and the objects they name are nevertheless two termini of a relation created by the causal process in which the presence of the *species return* in the soul is, in the words of one scholar, the condition "*sine qua non* of naming just as it is of knowing. It is a pivot on which naming and knowing turn."⁵⁵ Words, then, signify indirectly but natu-

⁵³ "De signis," para. 4 (p. 82): "Et haec dividuntur in tria genera: primum est quando aliquid dicitur signum propter hoc quod <aliud> necessario vel probabiliter infert, et ideo ipsum repraesentare potest naturaliter, et hoc sive sit praesens sive praeteritum sive futurum. Si ergo attendamus rationem signi penes consequentiam et illationem necessariam ... sic scientis est posse docere et cantus galli moti naturaliter ad cantandum est signum horae noctis. Si vero respectu futuri, sic aurora est signum ortus solis;" para. 162–66 (pp. 132–34). Cf. Maloney, "Semiotics," pp. 127–33; Pinborg, "Bacon on Signs," pp. 406–08, on Bacon's source in the doctrine of necessary inference elaborated in Aristotle's *Prior Analytics* (II, c.27).

⁵⁴ "De signis," para. 16–18 (pp. 86–87), 162 (p. 132); *De mult. specierum* I, ii, lin. 197–210; cf. also Maloney, "Semiotics," pp. 135–36.

⁵⁵ Maloney, "Semiotics," p. 130; cf. also Pinborg, "Bacon on Signs," p. 408; "Semantic Representation," pp. 254–55. The claim that words would be identical for all languages is probably best known to philosophers from John Locke's discussion; for his contact with medieval semantics via Martinus Simplificus, cf. E.J. Ashworth, "The

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rally the concepts which are their prerequisite, and directly but by convention objects.⁵⁶

Difficulties in Bacon's Theory

It was as a result of Bacon's study of Alhazen and his sources, that the theory of multiplication of species helped to explain the *physics* of light and visual perception in important ways as, for example, by providing a mechanism for the apparent action of an object at some distance from the observer, or for the rectilinear propagation of light.⁵⁷ Yet where the physics of light and vision were concerned, the presence of species in accounts of vision was not as innocent of complications as perspectivists supposed. How, for example, to explain the apparently instantaneous nature of visual perception? Among the Latin perspectivists, Roger Bacon was the first to point out the problem which he resolved to his own satisfaction by deciding that,

therefore light (*lux*) is multiplied in time, and likewise all species of a visible object and sight [itself]. Yet this time is not sensible and perceptible by sight, but insensible, since everyone experiences that he does not perceive the time in which light is propagated from east to west.⁵⁸

On this issue Bacon's authorities could not be reconciled. Aristotle (and following him, Al-Kindi) had accepted the experiential argument as sufficient empirical grounds for denying that light requires any time for its propagation. For Alhazen, the adduced experiential evidence bore no weight, both because time, not being among the intentions innately per-

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Scholastic Background to Locke's Theory of Language," *Studies in the History of Linguistics* 20 (1980), 59–68, esp. pp. 60–61.

⁵⁶ "De signis," para. 162, 169 (p. 132, 135); para. 163–65 (p. 132–33): "Et certum est inquirenti quod facta impositione soli rei extra animam, impossibile est <quod> vox significet speciem rei tamquam rei signum datum ab anima et significativum ad placitum, quia vox significativa ad placitum non significat nisi per impositionem et institutionem. Sed concessum est vocem soli rei imponi et non speciei ... (165) ergo vox significativa prolata ad placitum significative infert necessario speciem rei et habitum apud animam. Sed signum naturale in primo modo sic accipiebatur, quare vox significativa rei ad placitum est signum naturale speciei ipsius rei apud animam existentis ..."

⁵⁷ For greater elaboration on the physical (and concomitant mathematical) advantages in Bacon's theory, see especially Lindberg, *Bacon's Natural Philosophy*, pp. lxxviii–lxxv; idem, "A Reconsideration of Roger Bacon's Theory of Pinhole Images," *Archive for History of Exact Sciences* 6 (1970), 214–23. See also Peter Olivi, William Ockham, and William Crathorn on action at a distance in chapters II, V, IX below.

⁵⁸ *Opus maius* pt.5.1, d.9, c.3 [II: 71]; Bacon's arguments are analysed in Lindberg, "Medieval Latin Theories of the Speed of Light," in René Taton, *Roemer et la vitesse de la lumière* (Paris: 1978), pp. 45–72 esp. pp. 53–56. Cf. also *Opus tertium*, pp. 25–26. It is important to remember that, as Lindberg demonstrates, medieval discussions of the speed of light were not disentangled from the question of the speed of perception.

ceptible by the exterior sense, required the evaluation of the *ultimum sentiens*, and because the physical requirements of crossing distances in a plenum offered sufficient grounds for reasoning that the propagation of light must occupy time. Thus, Alhazen concluded:

the [visible] form passes from the air to the interior of the hollow common nerve only in time; but sense lacks any means of comprehending this time on account of its smallness and the [tendency to] error of sense and the weakness of sense for comprehending that which is at the extreme of smallness. Therefore that time is as an instant so far as sense can discern.⁵⁹

By following Alhazen, Bacon's own conclusion tacitly opened the epistemological problem of certitude: how can it be acquired with respect to sensibles, if the senses are not adequate instruments for discerning sensibilia? Bacon and Alhazen relied upon the internal senses' inferential operations and upon the intellect's geometrical reasoning to correct the senses. Such a solution, however, implied the further questions of the reliability of inferential operations and of the intellect's independence of the senses.⁶⁰

A second set of difficulties in Bacon's theory, these revolving around the nature of the species, are implicit in his synthesis of disparate discussions of "intentions" by which he wove together at least two concerns. One was ontological: was "intentional being" to be understood within an essentially dualistic universe, i.e. a reality composed exclusively of material and spiritual objects? If so, into which realm did intentional entities fall? Or was the admission of "intentional being" in fact a claim that reality also comprises a third kind of entity intermediate between these? The ontological quandary is also epistemological, because the advantage a theory of cognition as based on assimilation might be deemed to offer in connecting extramental reality and concepts is in fact elusive, once a distinction is admitted between "real" and "intentional or diminished being," (*esse intentionale vel diminutum*) inasmuch as this vitiates the claim that concept and generating object are essentially the same in nature (*sunt eiusdem nature*).⁶¹

The second concern enmeshed in the identification of intentions and species is also epistemological: to what extent are the contents of perceptions independent of mental operation? That they are partially dependent appears to be entailed both in accepting Avicenna's views of the role of

⁵⁹ *De aspectibus* II, 21; quoted in Lindberg, "Speed of Light," p. 52.

⁶⁰ See *Opus tertium* pp. 32–34 and *Communia naturalium* IV, c.3 [III: p. 288] *passim*.

⁶¹ See chapters II, IV below, for Peter Olivi, Henry of Ghent, and Durand of St. Pourçain. This is at the heart of Chatton's critique of Peter Aureol's understanding of concept formation: see below, chapter VII.

internal estimative and discriminative powers in apprehending intentions and by positing inferential operations by these senses on those intentions (e.g., inferring the relations of *intentiones* to each other and their generating objects) as prerequisite to the completion or, in Alhazen's language, "certification" of apprehension. Hence at another reprise, Bacon overlooked the difficulties that the admission of inference into perception posed for the establishment of precisely which resulting concepts were veridical. Thus, Bacon's incorporation of "intention" within his canon of synonyms was ultimately to be the nexus of significant ontological, psychological, and logical difficulties for the theory.⁶²

Even if the distinction between "real" and "intentional" being is not admitted, the nature of visible species, with the phantasms and intelligible species derived from them by abstraction, still poses difficulties. Are such *species* corporeal, as an explanation of light requires, or spiritual, i.e. immaterial entities? Although Bacon had contended that the species conveyed the accidents of an object to the senses via a surrogate substance—the medium—he had also stated that "the species have material and natural being in the medium and in the sense," and that "the species is of the same nature as what actuates it."⁶³ In an apparent effort to avoid the paradoxical consequences of positing material species in the immaterial intellect, Bacon claimed that "because the species are insensible, they

⁶² See above, n. 35. It should also be noted that the very ambiguity noted provided a foundation for the grammatical theories of proponents of *modi significandi*—to the hypothesis of which Bacon was, as noted above (n. 9) strenuously opposed. See Pinborg, "Bezeichnung in der Logik des XIII. Jahrhunderts," *Miscellanea Mediaevalia* 8 (Berlin: 1971), pp. 238–81 [repr. in *Medieval Semantics*]; idem, *Die Entwicklung der Sprachtheorie im Mittelalter*, BGPTM, 42/2 (1967). It was characteristic of the theory of the multiplication of species that, in broad outlines, it was accepted by proponents of opposing logical, grammatical, epistemological theories who, however, identified different incoherencies to be rejected.

⁶³ *Opus maius* pt.5.1, d.6, c.3 [II: 40–41]; d.9, c.4 [II: 71–72]; cf. Lindberg, *Bacon's Natural Philosophy*, p. lxiii, lxvi. Here Bacon departs from Grosseteste, who had argued that, although species in the medium are corporeal, they are immaterial *in sensu*; cf. his *Hexaemeron*, quoted in McEvoy, "Connaissance," p. 32; idem, *Grosseteste* pp. 298, 340–44.

Bacon's insistence on the corporeality of the species raises a host of other problems, chief among them being the difficulty of reconciling his punctiform analysis of light's propagation with its holistic propagation, along rays conceived physically (rather than mathematical lines), in an infinitely divisible continuum. Concomitant was Bacon's inconsistency concerning whether species, as *virtutes*, operate as wholes or part-by-part upon parts/wholes of recipients. There is no modern analysis of these inconsistencies in Bacon's thought or the extent to which subsequent late-medieval discussions of "intension and remission" of light and the continuum may have stemmed from the aim of resolving them; but for descriptions of his exposition, cf. Lindberg, *Bacon's Philosophy*, pp. lviii–lxv; Smith, "Big Picture," p. 579–80. J.M.M.H. Thijssen has recently made a similar suggestion in "Roger Bacon (1214–1292/1297): A Neglected Source in the Medieval Continuum Debate," *Archives internationales d'histoire des sciences* 34 (1984), 25–34.

are *called* spiritual; but this spirituality is not a contradiction of their corporeality or materiality when they are in corporeal or material things.⁶⁴ This qualifier, "when they are in corporeal or material things," was to be too rarely remembered by subsequent thinkers, perhaps because Bacon failed to persuade that no contradiction existed.⁶⁵ This solution, moreover, again stresses the species' insensibility, thus underlining the problem of insensibility for an account of sense perception.

At yet another level Bacon's account intrinsically posed the major epistemological difficulty of endangering existential certainty. His conviction that sensation left an enduring image in the cognitive subject was hardly idiosyncratic: numerous examples could be culled from Aristotle's *De anima* and *Parva naturalia*, Avicenna's and Averroes' psychological opera, Augustine's *De trinitate*, and Alhazen's *Perspectiva*—in short, the major sources for late medieval psychological theory—of experiences such as afterimages, dreams, delusions, and optical illusions. As evidence that in the course of sensation some lasting impression was made on the senses these experiences were generally persuasive.⁶⁶ Yet given the existence of such enduring impressions, how was one to know infallibly that one was seeing a present, existing extramental object, and not an impression remaining in the object's absence?

This was, as we shall see, among the most central issues motivating those who, after Bacon, objected to the theory of cognition via species precisely because of its epistemological commitment to representation.⁶⁷ Bacon himself mentioned the problem in the "De signis:"

Therefore, when Aristotle says that we do not intellectually know (*intelligimus*) singular things when they recede from our sense, this is to be understood [as speaking] of the intellect's pure, principal act which simply occurs third (namely after opinion). This [act] is a *true intuition* of things before (*apud*) the intellect by means of which the intellect is at once made certain whether the thing itself exists. This cannot be done when the singular recedes from the sense. For even though the species of the thing remains before the intellect, the intellect nevertheless does not know whether the [species'] subject that [existed] before has been corrupted, such that [for example] for a whole day we will retain in our estimative power the species of singular

⁶⁴ *Opus maius* pt.5.1, d.6, c.4 [II: 44–45]; n.b. his explication of the non-rectilinear propagation of species in the "twisting nerves" *De mult. specierum* II, ii, lin. 101–04; *Opus tertium*, p. 23. See Peter Olivi's critique, chapter II, below.

⁶⁵ See below, chapter IX, for the dispute between Holcot and Crathorn.

⁶⁶ *Opus tertium*, p. 30; see Peter Aureol, below chapter IV.

⁶⁷ See Olivi, Gerard of Bologna, and Ockham in chapters II, IV, and V. This is at the heart of critiques levelled at any theory of cognition by representation (in modern philosophy, "representative realism"); cf. Jackson, *Perception*, esp. pp. 138–53; R.J. Hirst, "Realism," *Encyclopedia of Philosophy*.

things that we think exist, just as when we sensed them, even though they have since been corrupted ... Still, either by believing or opining, or by an understanding formed from imagination and estimation, we can intellectually know (*intelligere*) singulars after they have receded from sense, and we can name them and use their names ...⁶⁸

Bacon clearly grants that except when the object is directly present, the intellect cannot be certain whether the object continues to exist. Still, it is historically interesting that Bacon names a perceptual act by means of which the mind does become certain of existence, for he seems to draw upon Alhazen's hypothesized perceptual act of *intuitio*, that is, the internal scrutiny of the received visible intentions by the *ultimum sentiens*.⁶⁹ Here lies the faint germ of a notion that, from Duns Scotus onward, would become central to the effort to resolve the dilemma of existential certitude raised by this admission.

Yet if the ability of the species in the soul (*in anima*) to endure in the absence of their causative objects is potentially problematic in epistemology, that very capacity is an advantage in semantics, for by serving as a referent, on the species of objects no longer extant can be constructed an account of the meaning (and truth conditions) of statements concerning objects once cognized, but no longer existing.⁷⁰ By the end of the thirteenth century, this consideration was among those buttressing efforts to resolve the epistemological concerns raised by the presence of species in cognition, and standing against their rejection.

Many of the elements of Bacon's theory can be found in the thought of his contemporaries and, indeed, in the thought of the generation of

⁶⁸ "De signis," para. 25 (pp. 90–91): "Quod ergo dicit Aristoteles quod non intelligimus singularia cum recedunt a sensu, hoc est intelligendum de actu puro intellectivo et principali, qui simpliciter ponebatur tertius (videlicet post opinionem) qui est verus intuitus rerum apud (230vA) intellectum quo saltem fit certus de se ipso an sit. Quod fieri non potest quando singulare recedit a sensu. Quamvis enim species eius remaneat apud intellectum, tamen nescit intellectus utrum subiectum sit corruptum et non ens quod prius, et sic tota die retinemus species rerum in aestimatione nostra de singularibus quae putavimus esse, sicut quando sentiebamus ea, cum tamen iam corrupta sint. Et habemus imaginationem non de eis consimilem quam <prius> sed iam transit secundum veritatem imaginatio in rem praeteritam et non in rem praesentem sive existentem in rerum natura. Et sic aut credendo aut opinando aut per intellectum formatum ex imaginatione et aestimatione possumus intelligere singularia, postquam recesserunt a sensu, et nominare ea et uti nominibus eorum et ipsis sub forma nominandi et constituere sermones de eis et ea de aliis enuntiare quamvis actus intellectivus propriissimus et principalissimus non cadit super ipsa singularia sensibilia, quando a sensu recedunt." Cf. also *Communia naturalium* IV, d.3, c.3 [III: 288].

⁶⁹ Smith, "Big Picture," p. 584–85. Bacon elsewhere calls this "cognitio per scientiam," as in the passage cited, n. 38 above.

⁷⁰ As Kilwardby recognized. See Lewry, "Kilwardby on Meaning," p. 382; de Libera, "Paris and Oxford," pp. 180–83.

scholars more nearly contemporary with Grosseteste, whose own teaching infuses Bacon's at so many junctures. Some of these scholars as, e.g., Bartholomaeus Anglicanus and Robert Kilwardby, might well have noted the unattributed appearance of their own views in Bacon's treatises.⁷¹ To disentangle the influence in his generation of such authors' views from that of Bacon himself presents considerable difficulties, as he had already begun by about 1240 to develop his account when lecturing on Aristotle at Paris. If, however, the 1231 Parisian statute proscribing the teaching of Aristotle was lifted in 1237, as Bacon implies, then his own lectures in the Faculty of Arts were among the first at Paris in over a decade. In this light, it is less surprising to find elements of his synthesis in the works of other scholars, beginning as early as the 1250s.⁷²

By the 1260s, at any rate, it was clear that what *was* both new and compelling in Bacon's exposition was the great, synthetic explanatory scope of the theory he elaborated. In it, the science of *perspectiva*—especially as explicated by Alhazen—was the bridge that spanned the semantic, epistemological, and psychological concern with concepts on the one shore and, on the other, the metaphysical and physical concern with the reality

⁷¹ Lindberg speculates that Bacon may have known Bartholomaeus' ideas or even the *De proprietatibus rerum* at Paris, where Bartholomaeus had lectured at the Franciscan convent until 1231; cf. Lindberg, *Vision*, p. 108. On the *De propr. rerum* and its circulation, see R. James Long, ed., *Bartholomaeus Anglicus On the Properties of Soul and Body, De proprietatibus rerum libri III et IV* (Toronto: 1979). On Kilwardby's influence upon Bacon's thought see Lewry, "Grammar, Logic, and Rhetoric;" and idem, "Rhetoric at Paris and Oxford in the Mid-Thirteenth Century," *Rhetorica: Journal of the History of Rhetoric* 1 (1983), pp. 45–63. There Lewry notes (p. 58) that Kilwardby brought to Oxford his earlier Parisian teaching on logic and grammar. As he studied theology at Oxford, he composed his *De ortu scientiarum* ca. 1250.

⁷² Scholarly focus on Bacon's Oxford career and imprecision in dating Bacon's *teaching* career vis-à-vis such contemporaries as Albertus Magnus have helped to obscure Baconian influences upon their thought. In contrast to Bacon, Albertus Magnus was probably sent to Paris ca. 1243–44, where he arrived *without* formal study of the Aristotelian corpus, as Weisheipl notes, "Life and Works of St. Albert," in *Albertus Magnus and Sciences*, p. 19, and as Roger Bacon frequently remarked. Only after taking up his duties as bachelor of the *Sentences* did Albertus begin working through the Aristotelian corpus, probably beginning ca. 1250 and continuing through the 1260s; see Weisheipl, "Appendix I. Albert's Works on Natural Science (*libri naturales*) in Probable Chronological Order," in *Albertus Magnus and Sciences*, pp. 565–77. For recent summaries of Albertus' views on cognition, see: Edward P. Mahoney, "Sense, Intellect, and Imagination in Albert, Thomas, and Siger," CHLMP, particularly pp. 602–03; N. Steneck, "Internal Senses," ch.3; and Katharine Park, "Albert's Influence on Late Medieval Psychology," in *Albertus Magnus and Sciences*, pp. 501–35.

Although in his bitterness, Bacon undoubtedly exaggerates Albert's incompetence, Bacon's claim to priority in the teaching of natural philosophy fits with the external evidence, from which it follows that Albert's psychology may be less original than hitherto assumed. Specifically, the extent to which Albert's understanding of the soul's faculties and of the roles of the *species* or *intentio* in cognition, incorporates the broad outlines of Grosseteste's and Bacon's thought (if not details) awaits investigation.

those concepts, on Bacon's account, mirror. Yet Bacon's propensity for glossing over ambiguity and for outright contradiction resulted in a theory riddled with difficulties as well as advantages. Thus, the attendant complications of the theory of cognition by abstraction ensured attempts to refine and replace it. Ensuing hard upon its definitive formulation, these efforts proceeded along interdependent fronts until they were brought together (but not resolved) in the work of the Franciscan John Duns Scotus, who provided a new beginning point for the investigation of cognition.

Chapter Two— From the Baconian Synthesis to the Epistemology of John Duns Scotus

Within a decade of the writing of the *Opus maius*, several scholars at the University of Paris had begun to rework and refine aspects of the account it epitomized. Their efforts can be envisioned as having proceeded along several fronts.¹ One of these, the effort to simplify the psychological process adumbrated by the theory, was effectively initiated by the secular master of Theology, Henry of Ghent, who denied the existence of intelligible species. A second was opened by a member of Bacon's own order, Peter Olivi, who attempted to refute the hypothesis of sensible species in the medium because of the causal process they embodied.²

These steps presaged more thorough attacks on species, both sensible and intelligible, and Ockham's earliest fourteenth-century critics linked his rejection of all species to the critiques presented by Henry of Ghent and by the latter's possible student and eventual colleague at Paris, Godfrey of Fontaines.³ Because these same fourteenth-century readers did

¹ The same ten or fifteen years witnessed the composition of perspectivist treatises by John Pecham and Witelon (see nn. 38, 40 below), and probably the *De oculo moralis* of the Parisian master Pierre de Limoges (d. 1306); all were composed by a theologian for theologians or theological students. Similarly, the first attacks on the details of the account came from theologians familiar with perspectivist treatises. This is not so surprising given Bacon's own projected audience (beyond his papal sponsor).

Among the most important of those who were early conversant with perspectivist treatises was Matthew of Aquasparta, O.F.M. whose *Quaestiones disputatae de anima separata* [ed. in *Bibliotheca Franciscana Scholastica* v. 18 (Quaracchi: 1959)] were delivered between March 1277 – Sept. 1279 (cf. pp. 13*–14*). For his discussion of *perspectivi*, see e.g. q.3 (pp. 49–50); q.14 (pp. 69, 75).

² The labels "first" and "second" indicate only the order of our discussion, not that Henry's theory was temporally prior. It should, however, be noted that on the basis of their surviving Parisian œuvre, modern scholars usually date Henry's contribution to Parisian thought by his years as *master* of Theology, and Olivi's by his *bachelor* years. Thus, although Henry's baccalaureate may have begun a few years before Olivi's, their views probably became known to their Parisian colleagues at roughly the same time, i.e. during their first public teaching in theology. See below, nn. 6, 38.

³ Godfrey of Fontaines had become master of Theology at Paris by 1285, and taught until at least 1304, so he should properly be considered as a member of Duns Scotus's scholarly generation. During Godfrey's time at Paris there was continuing tension between mendicant and secular theologians, a situation which has encouraged scholars to suppose that his relationship to his compatriot and fellow secular Henry of Ghent may have been that of student to teacher. See: J.F. Wippel, *The Metaphysical Thought of Godfrey of Fontaines. A Study in Late Thirteenth-Century Philosophy* (Washington, D.C.: 1981).

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not mention Peter Olivi by name, it is unclear whether they recognized that his views, too, lay behind Ockham's arguments.⁴ Nevertheless, before Olivi's posthumous condemnation rendered overt reliance upon his theological teaching a risk, his discussion of human knowledge, together with those of Henry and Godfrey, had exposed the difficulties of the Baconian account to a generation of Parisian theologians, among whom the most seminal was John Duns Scotus.⁵

Henry of Ghent

Henry of Ghent's career as a master of Theology actively regent at Paris lasted nearly two decades, from 1276–1292, during which time the development of an account of human knowledge must have been one of his major preoccupations, to judge from his magisterial *Quodlibetal Questions* and *Summa Quaestionum Ordinarium*.⁶ The very extent of his remarks

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Whatever the case, Godfrey was the other major opponent of intelligible species in the years before Scotus began to lecture on Lombard's *Sentences*. Although Godfrey rejected Henry's intentional distinction and, as Scotus recognized, added further grounds to Henry's for opposing intelligible species, their points of disagreement were blurred by most fourteenth-century readers. Here we note Godfrey's discussions rather than undertake a detailed analysis; references are to his *Quodlibeta* as edited by J. Hoffmans and M. de Wulf in *Les philosophes belges. Textes et Etudes* (Louvain: 1914–24).

⁴ For example, John of Reading (see below, chapter VI) attributes the elimination of intelligible species to Henry of Ghent; Peter of Aquila, O.F.M. also names Godfrey of Fontaines (I *Sent.*, d.3, q.4; delivered Paris ca. 1333–35). Among modern students of Ockham who noted the influence of Henry of Ghent and Olivi (conflating their views) are P. Boehner, "The Notitia Intuitiva of Non-Existentis According to William Ockham," *Traditio* 1 (1943), p. 233; and Gedeon Gál, O.F.M., "Quaestio Ioannis de Reading de necessitate specierum intelligibilium Defensio doctrinae Scoti," *FrSt* 29 (1969), pp. 68–75.

⁵ In what follows, limitations of space and clarity prevent comprehensive treatment of all Parisian and Oxford scholars who contributed to the discussion. Nevertheless, while those we omit, as Thomas Aquinas, Giles of Rome, and Thomas Sutton, offered modifications (e.g. the notion of innate species, or the identification of cognitive acts and received species), their critique was, by comparison to those of Henry of Ghent and Peter Olivi, limited in focus and largely eclipsed by Duns Scotus, as it is our intention to show in this and following chapters. By mentioning their modifications *passim* when considered by their medieval readers, particularly Scotus, it is hoped to indicate points where further examination of their theories of knowledge vis-à-vis the Baconian tradition should prove fruitful.

⁶ References are to Henry of Ghent's *Summa Quaestionum Ordinarium* (SQO), Paris ed. of 1520, two vols. (repr. in facsimile St. Bonaventure, N.Y.: 1953); and *Quodlibeta Magistri Henrici Goethals a Gandavo Doctoris Solemnis*, Paris ed. of 1518, two vols. (repr. in facsimile Louvain: 1961). The latter is being superseded by the new critical edition, R. Macken, O.F.M. and R. Wielockx, eds., *Henrici de Gandavo Opera Omnia* (Leuven/Leiden: 1979ff.), to which I refer for Quodlibeta I (*Opera omnia*, vol. V), II (vol. VI), and X (vol. XIV). Cited below are works from the years 1277–87: *Quodl.* II (Christmas, 1277); III (Easter, 1278); IV (Christmas, 1279); V (1280 or 1281); VIII (Christmas, 1284); and XI (Christmas, 1287). The SQO may have been begun before the first Quodlibet, but was

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in these two compendia has discouraged modern scholars from exploring the evolution of Henry's theory of knowledge; thus, the definitive study remains to be written, but it will doubtless reveal areas in which Henry helped to shape subsequent discussion beyond those we can at present trace.⁷

In the scholarly generation that separated the mature work of Henry of Ghent from Roger Bacon's formulation of his psychological account, which principally detailed sensation, Parisian scholars in the Theological and Arts Faculties had endeavored to achieve as systematic an elaboration of the number, structure, and operations of the soul's intellectual faculties as had been undertaken for the senses. Among the spurs to doing so were the difficulties that arose in interpreting the role and location of the agent intellect in human cognition, a controversy in which Bacon had himself become embroiled.⁸ When Henry wrote, there was as yet no unanimity concerning either sensitive or intellectual cognitive processes, but the greater attention to distinguishing the two had made explicit two intertwined questions implicit in Bacon's psychology. The first, whether the process of the multiplication of species continued into the intellectual

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largely composed and revised side by side with the others. For the dating of Henry's œuvre and critical studies of it, see in addition R. Macken's introduction to *Quodlibet I* (1979), pp. vii–xiv, his "Les Quodlibets d'Henri de Gand et leur exemplar parisien," *RTAM* 36 (1970).

⁷ The epistemological and psychological views of Henry of Ghent (d.1293) have been explored in a series of articles by Jerome V. Brown which, however, require the reader's caution: "Sensation in Henry of Ghent: A Late Medieval Aristotelian-Augustinian Synthesis," *Archiv für Geschichte der Philosophie* 53 (1971), 238–66; "Henry of Ghent on Internal Sensation," *J. Hist. Phil.* 10 (1972), 15–28; "Abstraction and the Object of the Human Intellect According to Henry of Ghent," *Vivarium* 11 (1973), 80–104; "Divine Illumination in Henry of Ghent," *RTAM* 41 (1974), 177–99; and "John Duns Scotus on Henry of Ghent's Arguments for Divine Illumination: the Statement of the Case," *Vivarium* 14 (1976), 94–113; "Duns Scotus on the Possibility of Knowing Genuine Truth: The Reply to Henry of Ghent in the 'Lectura Prima' and in the 'Ordinatio,'" *RTAM* 51 (1984), 136–82. See also: Charles B. Schmitt, "Henry of Ghent, Duns Scotus, and Gianfrancesco Pico on Illumination," *MedSt* 25 (1963), 231–58. In addition, there are several studies that touch on Henry's "intentional distinction," including A. Maurer, "Henry of Ghent and the Unity of Man," *MedSt* 10 (1948), 1–20; J.F. Wippel, "Godfrey of Fontaines and Henry of Ghent's Theory of Intentional Distinction Between Essence and Existence," in T.W. Kohler, ed., *Sapientiae Procerum Amore. Mélanges Médiévistes offerts à Dom Jean-Pierre Müller O.S.B.*, Studia Anselmiana 63 (1974), pp. 289–321.

⁸ At least since Gilson and Van Steenberghen, in delineating the absorption of Aristotelian psychology at Paris and Oxford in the thirteenth century modern scholars have generally focused on this controversy and the related debate over the unity or plurality of forms in the soul; see, most recently, Z. Kuksewicz, "The Potential and Agent Intellect," *CHLMP*, pp. 595–601 and, for useful introductions to the state of the research on these questions, Wippel, *Godfrey of Fontaines*, pp. 314–47; Edward Mahoney, "Sense, Intellect, and Imagination," *CHLMP*, although we take issue with some details of the latter's delineation of the perceptual theories under consideration. Bacon's role in both debates is discussed in McEvoy, *Robert Grosseteste*, pp. 314–19, 346–51.

faculties, raised the second, namely the degree to which the intellect was independent of the senses for knowledge of sensible reality.

Where sense perception was concerned, Henry of Ghent—unlike Ockham later—accepted the entire process of the multiplication of sensible species: first in the medium, then in the external senses, and finally through the array of internal senses, terminating in the production of phantasms.⁹ Like Bacon, Henry held that cognition occurred by the assimilation of cognitive faculties to the extramental object, for which the *species* was required as a means of presenting that object within the mind:

For there is a certain alteration of the sense [faculty], principally in the sense organ itself, which [alteration] is [achieved] by a sensible species received in [the sense], through the medium, from an external sensible ... because the sensible [object] cannot be present in itself within [the sense].¹⁰

These species, preserved as "intentions," or as "imaginative species," or "phantasms," are required to bring forth cognitive acts from the poten-

⁹ Henry of Ghent, *SQO*, a.58, q.2 [II: 130r-v, G-H]: "... ibi aliud est re color et species coloris, et quod ipsa species coloris abstrahitur a colore per quasi quamdam separationem realem et generationem sive multiplicationem ipsius in toto medio quod est inter rem visam et id oculi in quo viget vis anime visiva ipsum informando, sive medium fuerit exterius extra oculum, sive interius in oculo. A quo medio sic informato non vidente sed deferente speciem visibilis punctus nervi interioris est in quo concurrunt duo nervi duorum oculorum et in quo vis visiva est recipiens immutationem secundum actum qui est in visio<ne> ... Est igitur progressus in actu visionis talis: primo, lux materialis super colorem particularem materialem existentem extra irradiat. Secundo, coloris speciem abstrahendo sine materia in medium agit, et ipsum informat illa specie. Tertio, medium specie illa actu visionis elicit." Again, *Quodl.* IV, q.21 [I: 136v G]: "... notandum circa progressum hunc notitiae quod sensibile, puta color, primo esse naturale habet in obiecta sua, et est in potentia activa ut intentionaliter sibi simile generet in medio et a medio in organo visus, secundum tamen actum luminis—quod requiritur propter duo: et propter medium, ut fiat materia que est necessitas ad susceptionem intentionis, quam nisi mediante luminis informatione non est natum recipere, et propter ipsum colorem qui non agit sese generando in medio nisi cum virtute luminis quo presente color facit speciem impressam in medio sibi contiguo, que continue generatur et diffunditur in directum [radium] per totum medium usque ad organum visus in quo species recipitur ab aere sibi contiguo. Et formatur per ipsam visio, idest actio videndi, que percipit virtus visiva sensibile particulare obiectum extra presens, et abhinc generatur in vi memorativa que est specierum retentiva, et ab illa in vi imaginativa ... post hanc apprehensionem sequitur apprehensio intellectiva ... Et ideo anima rationalis, quia nihil sibi habet de rebus per sensus impressum, cum indigeat adminiculo sensuum intelligere, debet considerare intentiones que sunt in virtute imaginativa, sicut sensus inspicere sensibilia extra." Cf. also *Quodlibet* V, q.14 [I: 176v M; 177r R]; and *Quodl.* IV, q.7 [I: 93r–95r].

Godfrey of Fontaines paraphrases and elaborates Henry's arguments in *Quodl.* V, q.9 [III: 33–34]; again, q.10 [III: 37]; *Quodl.* VIII, q.3 [IV: 40, 47–48].

¹⁰ Henry of Ghent *Quodl.* XI, q.5 [II: 451 S]: "Est enim quaedam alteratio sensitivi principaliter in ipso organo sentiendi quae est per speciem *sensibilem* [Brown reads: *sensibilis*] receptam in illo per medium a sensibili extra ... quia sensibile in seipso non potest esse presens intra ut inclinando sensum ducat ipsum in actum." Quoted in Brown, "Sensation in Henry of Ghent," p. 252n.

tial of the various internal senses.¹¹ The delineation of their perceptual processes departs from Bacon's at various junctures, but Henry's position among his heirs is revealed by the steady reliance upon Alhazen, Avicenna, and Averroes for the details of perceptual psychology.¹²

The problem with the Baconian model arose for Henry with the hypothesis that the chain of multiplication continued from the material realm of the senses into the immaterial intellect—an issue upon which Bacon himself had been vague.¹³ By the time Henry entered the discussion, most Parisian scholars held that the process of multiplication did indeed continue into the intellect, via the conversion of phantasms into intelligible species.¹⁴ This conversion had been posited in part to account for the abstraction of a more generalized form, or universal, from material representations of individual objects. In other words, the production of an intelligible species from phantasms satisfied the Aristotelian criterion differentiating intellectual from sense knowledge as being of the universal rather than of the particular, while it explained the Aristotelian dictum that "nothing is in the intellect which was not first in the senses."¹⁵

¹¹ By parity of reasoning, for the imagination, as for the external senses (n. 10, above), an "intentio imaginaria" is required; cf. e.g., Henry *Quodl.* IV, q.21, epilogus [I: 137v N]: "Dico ergo quasi dicta recolligendo: quod illud quod comprehendit visus ut hoc singulare presens extra hoc idem comprehendit imaginatio ut absens re, sed ut presens intra in sua imaginaria intentione. Et hoc idem apprehendit intellectiva directo aspectu sicut imaginativa preterquam quod non comprehendit ut hoc, sed ut simpliciter concipiendi preter conditiones que sunt huius ut est hoc." Quoted in Brown, "Internal Sensation," p. 26n. Godfrey of Fontaines concurs, *Quodl.* V, q.8 [III: 31–32]; q.10 [III: 37–38].

¹² Henry clearly knew perspectivist theory in general, and Alhazen in particular; see, e.g. *SQO*, a.1, q.3 [I: 8v A]: "et ut dicitur I *Perspective*, lux non videtur nisi admixta colori, ergo etc.," his conviction [*ibid.*, 11r A] that the innate ability to syllogize "probat in perspectiva," and his adoption, *SQO*, a.24, q.2 [I: 138r I] of Alhazen's three modes of sense cognition. The passage quoted in n. 9 above suggests considerable familiarity with Bacon.

Attempting to demonstrate Henry's fundamental Augustinianism, Brown instead documents Henry's fusing of Avicenna, Averroes, and Augustine. Brown does so without reference to the perspectivist tradition and not always correctly as, e.g. "Internal Sensation," pp. 19–20 n. 22, asserting that Henry departed from Avicenna's model of the five senses, by rejecting *aestimatio*. Instead, for Scotus's rebuttal of Henry's *defense* of a distinct estimative sense, cf. Steneck, "Internal Senses," pp. 129–30.

¹³ For Bacon, see above, chapter I, nn. 24–25.

¹⁴ Among the paradigmatic elaborations of the process are those of Albertus Magnus and Thomas Aquinas (see the discussion in Mahoney, "Sense, Intellect, and Imagination," pp. 604, 608–09); but cf. also Matthew of Aquasparta, recently examined in S. Marrone, "Matthew of Aquasparta, Henry of Ghent and Augustinian Epistemology after Bonaventure," *Franziskanische Studien* 65 (1983), 252–90.

¹⁵ Henry of Ghent, *SQO*, a.58 [II: 130r-v, G-H, continued from n.9 above]: "Et similiter, in phantasia actu phantasiandi qui terminatur quasi quodam circulo in colorem predictum, licet differunt, quoniam visio non terminatur ad illum, nisi cum presens fuerit sensui; phantasiato vero terminatur ad illum ad absentiam eius a sensu. Quarto vero supra

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Convinced, however, that *intelligible* species had been posited only in order to evade difficulties arising from the theory that intellection was achieved by the action of the agent intellect upon the passive intellect, and not from any evidence that such a *species intelligibilis* existed, Henry declared the latter redundant. Instead, Henry argued, the phenomena could be adequately explained without a conversion of phantasms into intelligible species, by positing phantasms, together with a scientific "habit" distilled from them. Applying the Aristotelian principle of economy later associated irrevocably with the Venerable Inceptor, Henry of Ghent insisted that plurality should not be posited without necessity.¹⁶

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phantasma particulare quo sic phantasia existit in actu, irradiat lumen intellectus agentis. Et praedicto modo phantasma universale a particulare abstrahit, et intellectui possibili preponit, ut obiectum proprium illius immutativum per quod actu immutatur intellectione sive actu intelligendi ad cognitionem non sui, sed rei universalis cuius est species, licet non ab illa abstrahitur, sed a phantasmate particulari abstracto a re extra particulari, in qua potentia existit universale ..." Also *Quodl.* V, q.14 [I: 175v].

Medieval scholars cited diverse works in Aristotle's corpus as the locus of this dictum, including remarks in II *Posterior Analytics* (II, 19, 99b35–100a13) and I *Metaphysics* (I,1, 980a22–b24) as e.g. "Omnis humana cognitio intellectiva ortum habet a sensu" quoted in Brown, "Sensation in Henry," p. 242 n. 12; cf. also his "Abstraction and the Object," pp. 85–91; "Internal Sensation," p. 27n. To take another example, Ockham referred rather to the *De sensu et sensato* (as, e.g. in I *Ord. prol.* q.1 [OTh I: p. 54] for which, see below, chapter V).

¹⁶ Henry of Ghent *Quodl.* V, q.14 [I: 174r V]: "In dissolutione huius questionis non est difficultas alia quam illa que tacta est in argumento quo, scilicet, agente intellectus de potentia intelligente fiat actu intelligens. Et propter fugam huius difficultatis, non propter notitiam alicuius causalitatis quam species sive similitudo rei intellectui impressa operaretur in intellectu ad actum intelligendi, introducta est opinio de ipsis speciebus intelligibilibus impressivis. Unde ostendendum est quod huiusmodi species, si ponantur, non operantur ad eliciendum actum intelligendi, ut propter ipsum non oporteat eas ponere, immo etiam ipsis positus oportet ponere aliud motivum ad eliciendum actum intelligendi, quod etiam sine ipsis equaliter natum est ipsum elicere et cum ipsis. Quo investigato, patebit quod omnino frustra et otiosum sit ponere illas et esse similiter si sunt. Quare cum non sit ponere aliquod esse frustra in fundamento nature et creature, nullo igitur modo ponendum est in virtute intellectiva esse aliquas huiusmodi species;" *ibid.* [I: 175v]: "Cum igitur ad actum intelligendi oportet intelligibile presens esse intelligenti, et per presentiam suam intellectivum deduci in actum intelligendi de potentia—presens autem non potest esse in sua essentia per se—non ergo restat modus quo aliter possit esse presens nisi per aliquid aliud existens apud intellectum quod est aliquod eius. Et ut ostensum est, hoc non potest esse species intelligibilis. Aliquod ergo aliud existens apud intellectum oportet ponere ... Planum est igitur quod *neesse* habemus ponere quod illud sit habitus scientialis ..."

Henry of Ghent is willing to call this *habitus scientialis* a species [I: 176r]: "... Habitum scientie, que est species impressa *alterius generis* [emphasis mine] ab illa quam negamus ..." For the legacy of this maneuver, see Ockham (below, chapter V at nn. 83, 86) and Holcot (chapter IX, n. 30). In *Quodl.* IV, q.7 [I: 95r A] Henry uses "notitiam habitualementem" to explain intellectual memory. There he again uses against intelligible species the principle of economy, attributing it to Aristotle [I: 93r–v S]: "Unde ad evellenda fundamentum opinionis illius maxime circa Dei visionem per essentiam nudam, primo supponendum est quod semper dignius est et melius ponere per pauciora et minorata que possi-

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In so doing, Henry did not dispute the process of progressive abstraction of the universal concept (*phantasma universale*) from the particular concept (*phantasma particulare*). What he did dispute was the real distinction of particular and universal, and, concomitantly, that the universal concept really (*in re*) differs from the particular concepts from which it derives. Rather, universal and particular concepts are, he claims, only *virtually* distinct, such that:

The particular phantasm is not something other than the species which is the universal phantasm, just as the universal is not a thing other than the particular. Nor is this species, which is the universal phantasm, abstracted from the particular phantasm by means of a real separation or generation or multiplication in the intellect (so as to inform it in order to elicit the act of intellection in the intellect), but [it is abstracted] only by a virtual separation from its material and particular conditions, and from all that follow from this, such that [the phantasm] shall have the power (*virtus*) to alter the intellect for the purpose of understanding, not (according to particular conditions) primarily and principally the particular thing ... but for understanding the universal thing.¹⁷

Although Henry's argument here may owe something to Bacon's frequent reference to species as virtues (or powers), the clue to understanding Henry's point lies in the fact that he considers the terms "particular and universal phantasms," to be synonymous with the Avicennian "first and second intentions."¹⁸ By claiming that the latter are *virtually* contained within the former, Henry attempts to explain how

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bile est poni per illa quam per plura. Superfluum enim est fieri per plura quod potest fieri per unum aut per pauciora, sicut dicit Philosophus in I *Physicorum* ..."

¹⁷ Henry of Ghent *SQO*, a.58, q.2 [II: 130r G]: "Hic vero non est aliud re phantasma particulare et species quae est phantasma universale sicut nec res universalis est alia a re particulare. Nec ipsa species quae est phantasma universale abstrahitur a phantasmate particulari per modum separationis realis aut generationis aut multiplicationis in intellectum (ut quem informat ad eliciendum in intellectu actum intellectionis), sed solum per quamdam separationem virtuales conditionum materialium et particularium et illarum sequestrationum ab ipso. Qua scilicet habet virtutem immutandi intellectum non secundum conditiones particulares ad intelligendum primo et principaliter ipsam particularem rem ... (quod est impossibile) sed secundum rationem phantasmatis simpliciter et quasi abstracti et separati a materia, et conditionibus particularibus materiae, et hoc ad eliciendum in intellectu actum intellectionis inhaerentem ipsi intellectui et informantem ipsum absque omni alia specie rei universalis intellectae illi inhaerente ad intelligendum rem universalem."

¹⁸ Henry of Ghent frequently claims that the species sensibles and phantasmata are intentions. In addition to note 11 above, cf. *Quodl.* V, q.6, q.12 and Brown's analysis, "Abstraction and the Object," pp. 88–89, esp. p. 88 n. 1 (although we dispute his interpretation of first and second intentions); *SQO*, a.53, q.5 [II: 64v]. For Godfrey of Fontaines, cf. his V *Quodl.* q.10 [III: 39]; q.9 [III: 34]. On Bacon's reference to species as virtues, see especially *De mult. specierum* I, i, 19–70; for a discussion of the multiplication of universals and particulars, *ibid.*, I, ii, 350–90.

the second intentions are derived from first intentions. The implicit advantage of his view over Bacon's sketchier account is that Henry's analysis of this derivation as inherent in the content of first intentions guarantees that second intentions are not merely arbitrary associations of first intentions made by acts of the cognitive faculty.¹⁹

Moreover, it was the intentional being (*esse intentionale*) of the sensible species (and, hence, of the phantasms) which, on Henry's account, rendered the intelligible species superfluous. Such species, posited by its proponents as the product of the progressive dematerialization of the received image, would be a means by which the immaterial intellect could contain (or grasp) essentially material entities. This problem did not appear to arise for *sensible* species in the senses, on the Baconian account, because the senses were construed as organic, that is, as faculties occupying anatomically located material organs (including the chambers of the brain).²⁰ If, as Henry argued, sensible species had only intentional being, whether in the medium, the external and internal senses, or the intellectual faculties of the soul, then the need to posit an additional intelligible species was obviated. That is because an *intentio* was precisely the kind of entity grasped by the intellect, at least in Avicenna's and Al-hazen's psychology.²¹

The claim that second intentions are virtually contained within first intentions in effect extended the Baconian causal tie between sensible species and extramental reality to encompass the second-order concepts that Henry and his contemporaries were coming to identify as the ground of scientific knowledge and to locate in the intellect.²² In other words, Henry's was one of several efforts at explaining, on the basis of the perspectivist causal account of concept formation, the psychological processes which produced the steps in logical demonstration. The latter was, ac-

¹⁹ See above, chapter I, at nn. 35, 47, 62, for discussion of this problem; that this is Henry's motivation in claiming that second intentions are virtually contained within first intentions is implied by a passage (from *Qyodl.* XI, q.3, 444S) quoted by Pinborg, *Logik und Semantik*, p. 90: "Non dicitur ... rationis, quia est inventus a ratione, quae est potentia animae, quia cum hoc quod perceptus est ex se exstitit in natura rei."

²⁰ One might be inclined to refer to the issue of how an immaterial intellect grasps material entities as the "mind-body" problem; it is therefore worth stressing that, inasmuch as the late-medieval notion of mind (roughly *anima*, or soul) included the *sensitive* faculties, in turn conceived as a compound of soul and material organs, this is *not* precisely the same problem faced by Cartesian dualists, or by those modern philosophers whose notion of the relation of mind and body descends from Descartes.

²¹ See above, chapter I, at nn. 34–38.

²² For theologians, this development was part and parcel of the evolution of their definition of their discipline as a speculative discipline, for which see the classic study by M.D. Chenu, *La Théologie comme science au XIIIe siècle*, 3d ed. in Bibliothèque Thomiste 33 (Paris: 1957); as well as Marrone, *William of Auvergne*.

according to Aristotle, prerequisite to scientific knowledge, which Henry held included knowing with certitude "the truth of a thing."²³ This "truth of a thing" (*veritas rei*) is the proper object of the intellect²⁴ as, for example, a visible object is the proper object of the sense of sight.

By defining the "truth of a thing" as the intellect's proper object, Henry of Ghent has moved beyond the perspectivists, who were imprecise concerning whether second intentions were contained in the senses or in the intellect. Henry agrees that the multiplication of species results in the apprehension of extramental things, and that this does not complete the perceptual process. He, like Bacon, was familiar both with Alhazen's hypothesis of an adjudicative act, "certifying" apprehensions in the *ultimum sentiens*, and with Avicenna's detailing of the apperceptual sorting and evaluation of received intentions. With them, Henry insisted on a further "reflective" act of the soul, in which the cognitive faculty examines the images received in it, compounding or dividing an object's intentions. Agreeing with his Aristotelian and perspectivist sources that these adjudicative acts are required to complete perception, Henry departs from them in attributing these acts not to an internal sense but to the *intellect*.²⁵ These reflective acts regard the mental terminus of a rela-

²³ Henry of Ghent, *SQO*, a.2, q.2 [I: 24r E]: "Non contingit hominem aliquid scire nisi de quo habet veritatis notitiam et in quantum veritatem noscit intantum scit. Sed habendo notitiam veritatis non contingit errare de re cuius est, quia non errat nisi falsitate deceptus. Sed ubi non contingit errare, scit homo certitudinaliter; ergo non contingit hominem aliquid scire quin sciat illud certitudinaliter."

This process of uniting a causal account of concept formation and the Aristotelian doctrine of *demonstratio* as the formal ground of scientific knowledge is discussed by Pinborg, *Logik and Semantik*, ch. 4.1, "Logik und Wissenschaft," pp. 77–87. The most important recent study of Henry of Ghent's views on truth, S. Marrone's *Truth and Scientific Knowledge in the Thought of Henry of Ghent*, in *Speculum Anniversary Monographs* 11 (1985) unfortunately reached me too late to incorporate a discussion here of his arguments for tracing different stages in Henry's notion of truth.

²⁴ Henry of Ghent, *SQO*, a.2, q.6 [I: 27r D]: "... veritas rei est id quod res scitur et intelligitur, quia ipsa est proprium obiectum intellectus; ex eodem autem est scientia rei et certitudo eius;" and a.1, q.12 [I: 23r P] "... quod omnis veritas est per se obiectum intellectus ..." The latter view is discussed in Brown, "Abstraction and the Object," pp. 96–99.

²⁵ *SQO*, a.34, q.5 [I: 216r–19r], discussed in Brown, "Abstraction," pp. 98–99n; see also his "Sensation," pp. 260, 263–64; and Schmitt, "Henry of Ghent," p. 236. Henry refers to this reflective act as intellectual "iudicium" several times, perhaps most helpfully at *SQO*, a.1, q.2 [I: 4v C]: "Cognitione igitur intellectiva de re creata potest haberi duplex cognitio. Una qua precise sci-tur> sive cognoscitur simplici intelligentia id quod res est; alia qua scitur et cognoscatur intelligentia componente et dividente veritas ipsius rei. In prima cognitione intellectus noster omnino sequitur sensum, nec est aliquod conceptum in intellectum, quod non erat prius in sensu. Et ideo talis intellectus in quantum huius-modi bene potest, est verus concipiendo sive cognoscendo rem sicuti est, quemadmodum et sensus quem sequitur, licet non concipiat vel intelligat ipsam veritatem rei certo iudicio percipiendo de ipsa quid sit, ut quod sit verus homo vel verus color;" also *SQO*, a.2, q.6

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tion of conformity between the intention (or species) of a true thing and that thing itself. In turn, this relation of conformity—precisely insofar as it is a relation between an object and its first intention—must be a second intention, because it derives in part from a first intention and not solely and directly from the object. The apprehension of this relation of conformity is, finally, what Henry designates as "knowing the truth of a thing."²⁶

The diverse elements of Henry's position probably were not original, nor were they pellucid; but as he connected them, his clarification of Bacon's weaving together of perception and logic, for which "first and second intentions" were the common threads, had several significant dimensions. First, it strengthened the rapprochement between the notion of apperceptual adjudication of sensory information, with the equally Aristotelian but *intellectual* judgment (*indicium*) proposed by logicians, especially Peter of Spain, to explain the formation of propositions (*compositio*, *complexum*, or *propositio*) from that information. Second, by classifying the relation of conformity among second intentions, Henry had proposed one way of explicating Avicenna's puzzling assertion that logic concerns the relation of second to first intentions, i.e. by identifying *relations* between objects and their mental images (first intentions) as among second intentions.²⁷

These elements of Henry's exposition were to have a long history in logic, perhaps largely as a result of their adoption by Radulphus Brito, the most influential logician of the generation taught by Henry.²⁸ Yet an

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[I: 27r D]; *Quodl.* II, q.6 [Wielockx VI: 32]. Henry's thought is explicated by Scotus's discussion, for which see below, chapter III.

²⁶ *SQO*, a.1, q.2 [I: 5r D]: "Sic convenit ei intentio veri, intantum enim vera est quaecumque res, inquantum in se continet quod exemplar eius repraesentat ... Quia igitur 'verum' dicit intentionem rei in respectu ad suum exemplar, quae non est prima sed secundaria ('ens' enim dicit intentionem rei primam et absolutam), id quod est ens et verum in re bene potest apprehendi ab intellectu absque hoc quod intentio veritatis eius ab ipso apprehendatur. Intentio enim veritatis in re apprehendi non potest nisi apprehendendo conformitatem eius ad suum exemplar; intentio vero entis apprehenditur in re absoluta sine omni reali respectu. In cognitione secunda, qua scitur sive cognoscitur veritas ipsius rei sine qua non est hominis cognitio perfecta de re, cognitio et iudicium intellectus omnino excedunt cognitionem et iudicium sensus, quia—ut dictum est—intellectus veritatem non concipit simplici intelligentia, sed solum compositione ed divisione, quod non potest facere sensus."

²⁷ On Peter of Spain's notion of iudicium as "an activity of the mind that combines concepts in a certain way, sees the conformity of this combination with reality, and consequently assents to it," see Nuchelmans, *Theories of the Proposition* pp. 190–91; it should also be noted that aspects of Henry's thought on this issue share common ground with Aquinas, as discussed by Nuchelmans, and by Pinborg, *Logik und Semantik*, p. 90.

²⁸ Radulphus Brito, who taught at Paris ca. 1290–1305 was "among the later authors of modistic grammar the most important," in the judgment of Pinborg, "Speculative

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even greater impact upon subsequent philosophy resulted from a distinction that Henry drew to explicate what he meant by "truth of a thing." When he attempted to show that the "truth of a thing" (*veritas rei*) could not be identical to a true thing (*verum*). Henry introduced the issue of existential certitude into late medieval discussions of the acquisition of scientific knowledge. By "true thing," Henry seems to have understood a really existent thing (among which, on his view, intentional entities should be counted) for he states that any thing (*res*) is a true one insofar as it contains within itself the ability to be represented.²⁹ That there must be such a distinction Henry confronts when he considers that the species remaining in the cognitive faculties, or generated by them when one dreams, is "indifferent" to such relations of conformity (*veritas*) or non-conformity (*falsitas*).³⁰ As he explains:

Insofar as truth is presented to us by a species of sensible objects abstracted from phantasms, in which [species] with the similitude of the true is mixed together a similitude of the false ... such that this similitude can deceive us into believing that the false is the true ... and thus, whenever [this occurs] we cannot know the truth at all and we shall be completely deprived of scientific knowledge ... Therefore, in this way in those things in which the verisimilitude happens to be apprehended with the true (*vero*), truth and falsity are compatible insofar as the intellect is concerned.³¹

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Grammar," *CHLMP*, p. 256. The influence upon him of Henry's thought is suggested by his discussions of concrete and abstract intentions; see Pinborg, "Die Logik der Modistae," *Studia Mediewistyczne* 16 (1975) pp. 50–51 [repr. in *Medieval Semantics*]. Radulphus' classification of propositions, syllogisms and relation among second intentions may also be indebted to Henry of Ghent (*ibid.*, pp. 56–58); indeed, there are also strong resonances in the logic of Boethius of Dacia, Simon Faversham, and Angelo of Camerino, as analyzed by N.J. Green-Pedersen, *The Tradition of the Topics in the Middle Ages* (Munich: 1984), pp. 229, 234–39. For the historical significance of Henry's and Radulphus' position, see below, in the discussions of truth in the thought of Aureol, and on the role of propositional knowledge for Campsall, Ockham, Chatton, and Wodeham.

²⁹ In addition to n. 26 above and 34 below, cf. *SQO*, a.34, q.1 [I: 211r K]: "Distinguendum est ergo de vero, quod est quoddam verum, quod est ens diminutum et tantum opus intellectus (scilicet verum conceptus de re, quod dicitur quod quid est rei apud animam) et notitia quedam in qua intuetur rem qua per essentiam suam non habet esse in anima. Est aliud verum quod est ipsa perfecta rei entitas extra intellectum existens de qua dicit Philosophus II Metaph., quod dispositio uniuscuiusque rei in esse est sua dispositio in veritate, secundum quod de hoc statim sermo habitus est."

³⁰ *SQO*, a.1, q.2 [I: 5v E]: "Huiusmodi exemplar, cum sit intentio et species sensibilis rei abstracta a phantasmate similitudinem habet cum falso sicut cum vero ita quod quantum est ex parte sua, internosci non potest."

³¹ *SQO*, a.2, q.3 [I: 25r O]: "In quantum tamen nobis presentatur <veritas> sub specie sensibilium abstracta a phantasmatis in qua cum similitudine veri similitudo falsi commixta est ut dictum est supra, ut per hoc ipsa similitudo possit nos decipere, ut falsum credamus verum—ut orichalcum aurum et econverso—ut sic quandoque omnino verum non intelligamus et privemur omnino scientia ... Veritatem obtinere nemo potest si falsis imaginibus deceptus comprehensionis modos laxaverit. Sunt enim istae imagines que con-

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How then is it possible on the basis of a reflective examination of such species to distinguish what is true from its verisimilitude? According to Henry, man is not able on the basis of his innate capacity (*ex puris naturalibus*) to do so infallibly, even where natural cognition of sensible objects is concerned; to apprehend the truth of a thing, divine illumination is required, Henry insists.³² His medieval readers would, of course, easily recognize the Augustinian basis of this solution, but if there were many who would agree with Henry on the necessity of divine illumination for knowledge of divine truths, his denial of the possibility of certain, scientific knowledge by man's *unaided* natural faculties was more disquieting, particularly to Duns Scotus.³³

Moreover, once Scotus's attempt to refute Henry's belief in the need for divine illumination for natural knowledge focused scholarly attention on the threat to existential certitude posed by species in the perceptual process, fourteenth-century scholars came to recognize corollary difficulties implicit in his understanding of the species as an intentional entity. Because Henry of Ghent attributed extramental existence to the *intentio*, his principle that the mental species and phantasms were of the same nature (*eiusdem nature*) as their object faced the difficulties that Bacon's confronted. That is, since the object is corporeal and material, while the species is intentional, then as Henry sometimes conceded, the species of color and the color itself must differ *in re*, i.e. essentially.³⁴ This, in turn,

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suetudine rerum corporalium nos etiam cum veritas tenetur et quasi in <omnibus> [*corr ex. manibus*] habetur decipere aut illudere moliuntur. Per hunc ergo modum in rebus in quibus verisimile contingit apprehendere cum vero veritas falsitatem bene compatitur quantum est ex parte intelligentis."

³² See Brown's discussion, "Abstraction," pp. 100–04; "Duns Scotus on Henry of Ghent;" "Duns Scotus on the Possibility;" and Schmitt, "Henry of Ghent," pp. 236–37. One aim of Marrone's *Henry of Ghent* is to demonstrate that Henry's understanding of divine illumination (and consequently of its role in the acquisition of knowledge) evolved over time (cf. e.g., his pp. 7–11, 14–15). Marrone may be correct; nevertheless, to understand Henry's impact upon his medieval readers it is important to recognize that they generally attributed to him (whether accurately or not) the view I have here described.

³³ See below, chapter III, at nn. 79–90.

³⁴ *SQO*, a.58, q.2 [II: 130 G]; modified *Quodl.* III, q.12 [I: 65r F]: "Dicendum quod difficultas tota huius questionis ortum habet ex modo generationis luminis ... si vero ponatur generatio eius fieri, non de potentia materia, sed solum ab efficiente, nescio per qualem diffusionem seu multiplicationem lucis a corpore luminoso in medium ... potest tamen distingui de re, sive ponatur lux generari per quandam multiplicationem sive per educationem de potentia materie quod quedam est res que ad sui permanentiam solum requirit quod sit generata ab agente ... quedam vero est que requirit continue presentiam generantis, ut si ad momentum subtrahatur, statim evanescat. Et illa que sunt de primo genere *proprie loquendo* res verae sunt, illa vero que sunt de secundo genere—et hoc respectu rerum que sunt de primo genere—sunt intentiones, licet in se, ut dictum est, alique res sunt."

undermines the status of the former as an "exact replica" of the latter, and thus the certitude of cognition based on representation, for how is one to discern whether the real difference between an object and its image introduces only innocuous dissimilarities?³⁵ It would also seem to follow from Henry's position that the species—as a *res*, albeit an intentional one—is the object directly known, rather than the means, unknown itself, by which the object is known. This consequence Henry noticed and dismissed; but it presented a serious problem for the theory of the multiplication of species, as Olivi had already recognized.³⁶

Peter Olivi

The Franciscan theologian, Peter Olivi, proposed a critique of the Baconian theory more fundamental and at times more rigorous than that of Henry of Ghent (and Godfrey of Fontaines), a rigor in no small measure due to Olivi's interest in and grasp of the optical issues involved.³⁷ Olivi was, in fact, in an ideal position to study perspectivist theory. He probably arrived at the Paris convent while the first two Latin perspectivists, Roger Bacon and John Pecham, were resident there, and it is possible that Olivi lectured on Lombard's *Sentences* before returning to Provence. If so, then such lectures were delivered within a year or two of Pecham's departure for Oxford.³⁸ Yet, for all Olivi's attention to the

³⁵ For reference to the species as a representative of its object, see texts quoted in Brown, "Sensation in Henry of Ghent," p. 248n. Henry may have this problem in mind when he explains that even sense experience yields imperfect knowledge of extramental reality, in *SQO*, a.1, q.2 [I: 7r], "omnis enim alia impressa a quocumque exemplari abstracto a re ipsa, imperfecta, obscura, et nebulosa est, ut per ipsam certum iudicium de veritate rei haberi non possit."

³⁶ *SQO*, a.33, q.2 [I: 207 D], discussed in Brown, "Sensation in Henry of Ghent," pp. 249–50; see also above, n. 34. Here Henry urges that the species is the *means* of knowing, and recognizes the difficulties for his position. For Olivi, see below, at nn. 52–54; see also Ockham, chapter V below, at nn. 78–79.

³⁷ The best starting point for studying Peter Olivi (or Olieu) is David Burr, *The Persecution of Peter Olivi*, in *Transactions of the American Philosophical Society*, n.s., v.66, part 5 (1976). On Olivi's epistemology and psychology see also Carter Partee, O.F.M., "Peter Olivi: Historical and Doctrinal Study," *FrSt* 20 (1960), 215–60; John Marschall, "The Causation of Knowledge in the Philosophy of Peter Olivi, O.F.M.," *FrSt* 16 (1956), 313–18; Burr, "Petrus Ioannis Olivi and the Philosophers," *FrSt* 31 (1971), 41–71; and Alfred Krömer, *Potenzhierarchie und Dynamismus des Geistes, Ein Beitrag zur Erkenntnistheorie des Petrus Iohannis Olivi (1248/49–1298)* (Freiburg-im-Breisgau: 1974). Also useful is the important study of Olivi in Brian Tierney, *Origins of Papal Infallibility 1150–1350. A Study on the Concepts of Infallibility, Sovereignty, and Tradition in the Middle Ages* (Leiden: 1972), pp. 93–115.

References to Olivi's *Sentences* commentary are to the *Quaestiones in secundum librum Sententiarum*, ed. Bernard Jansen (Quaracchi: 1922–26) in three volumes.

³⁸ Burr, *Persecution*, p. 6, argues convincingly against earlier scholars' reconstructions

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details of perspectivist theory, his principal motivation was not rooted in an interest in natural cognition for its own sake. Rather, above all else he considered it crucial to support the active nature of the cognitive powers because if they were shown to be passive, so too by extension the will could be demonstrated to be passive in operation: a position Olivi eschewed as endangering free will.³⁹

As Olivi recognizes, the perspectivist theory of the multiplication of species entails at least the initial passivity of the cognitive faculties vis-à-vis perceptible objects; hence, he rejects the theory. Quarreling explicitly with *perspectivi* and probably meaning chiefly Bacon,⁴⁰ Olivi argues in-

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of the dating of Olivi's lectures on the *Sentences*; equally difficult to determine is where he composed the *quaestiones* under attack in 1283. There is evidence that Olivi retained controversial positions after they had been censured, so the extant *Sentences* commentary, which was composed in 1287–88 in Florence, may tentatively be assumed to incorporate positions taught earlier in Paris, Narbonne, and Montpellier. This is evidently the case on one issue of concern here (see n. 84 below). At any rate, Olivi was studying (and presumably not yet teaching theology) at the Paris convent at least during 1266–68, i.e. when Bacon was laboring over his projected *summa*. Pecham left Paris, where he had been regent master in Theology at the Franciscan convent, for the Oxford convent sometime during the years 1271–72; cf. D. Lindberg, "Lines of Influence in Thirteenth-Century Optics: Bacon, Witelo, and Pecham," *Speculum* 46 (1971), pp. 66–83 [reprinted in idem, *Studies in the History of Medieval Optics* (London: 1983)] p. 76.

³⁹ Olivi, II *Sent.*, q.74 [III: 124]: "Sextum autem, quod scilicet actus cognitivus efficiatur ab ipsa potentia tamquam a vi activa, probatur. Primo, eisdem rationibus quibus probatur quod voluntas est potentia activa. Nam et principales rationes, quibus philosophantes conantur probare potentias cognitivas non esse activas sed passivas, non minus probant hoc de voluntate. Et tamen ex hoc sequitur destructio libertatis ac per consequens et omnis boni moralis, sicut satis in sua materia est probatum." See also II *Sent.* q.58, "An voluntas libera sit activa," where he also points out [II: 407]: "ponere quod visus sit potentia activa, ita quod eius actus non fiat per species ab obiectis venientes est destruere totam scientiam perspectivam aut maiorem eius partem." Question 58 presents interpretational difficulties because Olivi (perhaps already under attack at Paris?) hedges his bets, treating as the opinion of "quidam" views that, in other questions upon which we here rely, he offers as his own. That this is a hedge is underscored by his own crossreferences in other questions to what he proves here; cf. n. 56 below.

⁴⁰ In addition to n. 39 above, see II *Sent.* q.58 [II: 491–92]: "Sequentes vero perspectivam Arabum ideo fractionem hanc variam potius distinguunt respectu perpendicularis a loco fractionis ducendae ... Quia ergo species radiosa fortius et agilius fertur in medio subtiliori quam in densiori: ideo *virtus naturalis generans ipsam speciem a medio subtiliori in densius appetit faciliorem transitum et eligit illum* ... Sed contra eorum dictum arguitur ..." and, *ibid.* [II: 499]: "Ad decimam, dicunt quod indubitanter verum est quod positio destruens unam scientiam est insana, sed non minus verum est quod dicere librum seu inquisitionem unius Saraceni talem esse quod debeat sic firmiter censi esse ipsa scientia perspectiva, acsi ipse esset fons inerrabilis illius scientiae, est idolatrare;" again II *Sent.* q.73 [III: 69].

Although Alhazen must be the Arabic author whose work should not be treated as infallible, Olivi's quarrel is with the "sequentes Perspectivam Arabum." Olivi's description of the theory in general and in particulars most nearly matches Bacon: compare the critique (*italics above*) of the natural forces' tendency to "choose" an easier path to Bacon, *De mult. specierum* II, iii [p. 114, lin. 137–41]: "virtus naturalis generans ipsam speciem

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stead that perception occurs by means of a "virtual" (*virtualis*) or, synonymously, an "actual attention" (*actualis aspectus*) on the part of the soul's powers (*virtutes*).⁴¹ Thus, the powers of the soul, precisely as *spiritual* powers, are active in cognition; their "virtual" or "actual attention," Olivi insists, is not to be identified with a *corporeal* visual ray extramitted by the eye. Such rays, as he accurately notes, had been postulated by "Platonists," including (interestingly enough) Augustine and Anselm and, despite Alhazen's and Avicenna's refutation, had been redundantly retained by Bacon.⁴² Given Olivi's care to distinguish his from earlier extramissionist theories refuted by perspectivists, he may have derived this notion of "actual attention" from Alhazen as much as from Augustine, to whom Olivi attributes it.⁴³

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appetit faciliorem transitum et eligit illum; et hic est versus perpendiculararem;" and to Pecham, who rejected this explanation. Moreover, Pecham's treatises on *perspectiva* were written sometime between 1269–79, probably near the end of the decade; nor is it likely that Olivi knew Witelo's *Perspectiva*, which was probably written at Viterbo rather than at Paris, ca. 1270–ca. 1273. See Lindberg, "Lines of Influence," pp. 72–83.

⁴¹ II *Sent.* q.58 [II: 490]: "... dicunt quod virtus visiva, secundum hoc quod habet aspectum virtualement in organo corporeo existente, secundum hoc potest dici habere radium virtualement. Qui radius non est aliud quam ipse aspectus sic virtualiter protensus, et pro quanto ipse aspectus quodam spirituali modo committitur se pupillae ipsius oculi et quot sunt puncta seu partes in pupilla, tot possunt poni radii, non quod per essentiam sint plures, sed per quandam virtualement aequivalentiam et per quandam proportionalem commensurationem et applicationem seu inhaerentiam et assistentiam sui ad omnes partes pupillae;" II *Sent.* q.73 [III: 69]: "Quod autem de aspectu visivo dixi, intellege per simile de aspectu auditivo ..." Ibid., p. 89; Ibid., pp. 97–98: "Ostenso igitur quod necessarium est praedictos aspectus et eorum varias mutationes ponere in sensibus particularibus, sequitur hoc idem ostendere in sensu communi seu interiori;" II *Sent.* q.74 [III: 113]: "Dico quod actus cognitivus efficiuntur a potentia, non tamen per solam nudam essentiam eius, immo in omnibus exigitur actualis aspectus super obiectum actualiter terminatus." Cf. also Marschall, "Causation of Knowledge," pp. 316–17.

⁴² II *Sent.* q.73 [III: 55–58]: "Quidam vero Platonici seu Academici dixerunt potentiam visivam cum quibusdam radiis corporalibus realiter emitti usque ad res visas ibique recipere corporalem speciem ab obiecto ... Horum autem opinionem secutus est Augustinus ... hanc etiam opinionem videtur sequi Anselmus ... Praedicta autem opinio Platoniorum est conflata ex impossibilibus et ex improbabilibus et ex inutilibus ad actum sentiendi vel cognoscendi." The arguments showing the impossibility of the Platonic view are drawn explicitly from Avicenna; then (pp. 60–61): "Est enim conflata ex inutilibus ad actum videndi et audiendi res ut distantes a nobis ... Secundo, quia aut visio et auditio et ceteri actus sentiendi fiunt per species ab obiectis influxas, aut non. Si sic, frustra ponuntur praedicti radii ad eas deferendas usque ad nos, cum hoc sufficienter fiat et fieri possit per aerem et per alia media ad hoc apta." For Bacon's retention of visual rays in addition to species multiplied from the object, see above, chapter I, n. 43.

⁴³ For "aspectus" in Alhazen's *De aspectibus* (note title), see: Vescovini, *Studi*, pp. 120–26; Sabra, "Sensation and Inference," n. 33; Lindberg, *Vision*, p. 85; Smith, "Big Picture," p. 580. This is one of the three modes of cognition mentioned above, chapter I, n. 38. For the Augustinian notion of "aspectus," see McEvoy, *Grosseteste*, p. 258, 331 passim; and Olivi, II *Sent.* q.58 [II: 474] who quotes the same brief passage of Augustine's *Soliloquium* McEvoy identifies (p. 258n) as the sole source of the notion in Augustine's own oeuvre.

Whatever the sources for this notion of "virtual attention," Olivi has done more than reverse the operating direction of the "powers" or "forces" (*virtutes*) that he and Bacon name as causes in perception.⁴⁴ Because Olivi denies that the process of perception is inherently one of contact by material bodies, he thereby denies its susceptibility to physical analysis (though not to physical analogy).⁴⁵ This means that, unlike Henry of Ghent, Olivi rejects the Baconian effort itself. Parallel points of doctrine with the pre-Baconian epistemology of William of Auvergne,⁴⁶ suggest that Olivi's own views had been formed before he encountered perspectivist teaching, not developed originally in reaction to it. In any event, the radical tenor of his differences with the theory allowed him to see weaknesses that those committed to it had not. Among the specific counter-arguments that he advances are several, therefore, that are both historically interesting and philosophically acute.

In order to refute the *perspectivi*, Olivi endeavors to show that the Baconian theory does not, in fact, explain the physics of light and vision as it purports to do. Olivi asserts, for example, that the multiplication of species inadequately accounts for perception because "the site and distance [from the percipient] of an exterior object could not be sensed by means of any species received from it."⁴⁷ Olivi's objection rests on the claim that the *quantity* of distance, like the position of an object, is not a *thing* capable of generating representations of itself; on the Baconian model, therefore, it is not visible *per se*.⁴⁸ Perhaps more than Olivi himself re-

⁴⁴ See above, chapter I, nn. 13–14 for Bacon's emphasis upon "virtus" among the synonyms for species.

⁴⁵ To be more precise, Olivi denies that *virtutes* are governed by all of the same natural laws that, on an Aristotelian physics, govern corporeal things. For arguments using physical analogy, albeit reluctantly, cf. n. 65 below.

⁴⁶ For example, Olivi and William of Auvergne object repeatedly (and, for their century, unusually) to the errors of Platonism, and both hold that the intellect creates the *species* (below, n. 71). For discussions of William of Auvergne's theory of knowledge, see: Joseph Owens, "Faith, Ideas, Illumination, and Experience," CHLMP, pp. 446–47; E.A. Moody, "William of Auvergne and His Treatise on *De Anima*," in *Studies in Medieval Philosophy*, pp. 1–110; and Marrone, *William of Auvergne and Robert Grosseteste*.

⁴⁷ II *Sent.* q.73 [III: 82]: "De sensibus autem particularibus probatur hoc duplici via. Prima est, probando quod per nullam speciem ab exterioribus obiectis receptam possunt ipsa et eorum situm et distantiam sentire."

⁴⁸ *Ibid.* [III: 85–86]: "Item, quantitas spatii intermedii non potest repraesentari per speciem rei existentis ultra illud spatium; tum quia species non repraesentat nisi id a quo gignitur et cui assimilatur; tum quia nullius rei quantitas repraesentatur nisi per speciem lucis vel coloris per illam quantitatem formaliter extensi. Ergo per speciem obiecti praedicti non videbitur quantitas seu distantia spatii intermedii ac per consequens nec obiectum videbitur ut distans ab ipso vidente ... quantitas non est primo et per se repraesentabilis aut visibilis, sed solum per hoc quod est quantitas alicuius formae visibilis, et idem est de figura et situ et consimilibus ... Tertio, quia locus obiecti non cohaeret inseparabiliter formae obiecti a qua gignitur species, immo obiectum cum tota illa forma est saepe

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alized, this objection obliquely strikes a puzzling conceptual difficulty within Alhazen's notion of visible intentions as accepted by Bacon and other perspectivists. Among the twenty-two visible intentions they enumerated were some—as, e.g., position, distance (from the observer), and quantity—construable either as relations or as the result of the observer's inferential processes, rather than as accidents really inhering in objects and, hence, multiplied from them.

This problem may have been more obvious to Olivi than to his contemporaries because he disputed the traditionally Porphyrian interpretation of Aristotle's categories; but as Olivi presents his objection, while it is compatible with his reinterpretation of Aristotle, it neither requires nor depends upon the denial of separate, real existence to quantity apart from substance.⁴⁹ Rather, Olivi's point here is that, even if one attributes separate existence to the quantity of an object's distance from the observer or from another object, this quantity is not an accident *intrinsic* to that object—i.e. an accident inhering in the object's substance. At most, the quantity (of distance) would be an accident intrinsic to the *medium* occupying the intervening space, in which case this quantity cannot have multiplied from the object. Olivi's objection can be clarified by asking whether the quantity can have multiplied itself from the medium? If the observed quantity is of an *object's* position, it seems that this quantity, as an accident, must also be one extrinsic to the medium. Therefore, although *real*, the quantity of distance does not appear to be capable of being an intrinsic accident, so there will be no substance from which it multiplies.

According to Olivi, such lapses in the perspectivist account do not affect merely its ability to explain the physics of light, and he undertakes to demonstrate that the theory cannot simultaneously account for both the optical and the epistemological or psychological phenomena. The difficulties in coherently explaining the operation of species in both the extramental and intramental realms focus on the species' nature, that is, on whether they are "natural and sensible," or "spiritual and intentional" entities.⁵⁰ Either alternative, Olivi argues, leads to untenable conse-

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in aliquo loco propinquiore vel remotiori." For Alhazen's visible intentions, cf. above, chapter I at nn. 36–39.

⁴⁹ Classic studies of Olivi's denial of separate, real existence to Aristotelian categories other than substance and quality include: A. Maier, *Metaphysische Hintergründe der spätscholastischen Naturphilosophie* (Rome: 1955), 151–75; D. Burr, "Quantity and Eucharistic Presence: The Debate from Olivi through Ockham," *Collectanea Franciscana* 44 (1974), 5–44. Elsewhere in the questions examined here, Olivi alludes to his reinterpretation of Aristotle; see, e.g. II *Sent.* q.25 [I: 444]; q.58 [II: 440–49].

⁵⁰ II *Sent.* q.73 [III: 87]: "luxta quod et quidam dicunt quod a quolibet obiecto sen-

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quences while failing to explain the phenomena at issue. If one begins by considering species as having "natural and sensible being" (*esse naturale et sensibile*) then, Olivi points out, the hypothesis of species in the medium raises the question of their efficacy in achieving direct perception of the generating object. That is, if species are representations, and if a chain of species is generated between the sensible object and the sense, then the final species in this chain when received in the sense would first, most strongly, and most properly represent to the eye the species from which it had been multiplied, rather than the object.⁵¹ In other words, although the Baconian account purports to provide real and direct contact with extramental objects, in fact the direct contact is *only* with the final mediator in a chain of mediators. According to Olivi, one would be implicitly committed to this consequence by holding that the species have "natural and sensible being," i.e. are such entities as are perceptible. His assertion that this is the perspectivist understanding of the species' nature is arguably a fair restatement of Bacon's position that species' are material and corporeal entities of the same essential nature as their objects.⁵²

Thus, barring the discovery of any hitherto hidden source for this objection, Olivi merits a place in the history of epistemology as the first of Bacon's readers to recognize the central problem faced by representational theories of perception.⁵³ Those later scholastics who denied the

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sibili gignuntur duo genera specierum, una scilicet habens esse naturale et sensibile et alia habens solum esse intentionale et spirituale et simplex, ita quod tota est in qualibet parte aeris. Quidam tamen hanc intentionalem dicunt esse extensam sicut et aliam, attamen nobis insensibilem. Si autem solum est de genere primae, patet quod per eam non videtur res a qua exit ... Si vero est alterius generis a prima, tunc plura impossibilia ponuntur ..."

⁵¹ Ibid. [III: 84–85]: "Item ad primum, species influxa prius et fortius et magis proprie et conformius repraesentabit speciem a qua immediate gignitur quam aliam. Sed ab obiecto distant non potest fieri species in visu nostro nisi per aliquam genitam in medio. Ergo prius et fortius et conformius et magis proprie repraesentabit illam speciem quam illud obiectum. Sed illud videtur prius et immediatius et expressius quod visui sic primo repraesentatur ... Item ad primum ... inter primum influens et speciem in loco distante influxam erunt infinitae species generantes et genitae etiam in minima distantia, prout superius est probatum. Ergo species visualis ab obiecto distante influxa repraesentabit primo et per ordinem infinitas species intermedias ad hoc quod repraesentet primum influens." Cf. also II *Sent.* q.58 [II: 487–88] for the same argument; and on species as representative similitudes, pp. 470–73; qq. 24–25 [I: 434–46].

⁵² See above, chapter I, at nn. 63–65.

⁵³ Modern attacks on "representative realist" theories of knowledge usually take Locke's to be both early and paradigmatic. Although the perspectivist account is a major indirect source for Locke's epistemology, Bacon and Locke differ on the immediate object of perception. Whereas Locke holds it to be the mental representatives (in his terms, "ideas") received from objects, for Bacon these likenesses are only mediators. Thus, if successful, Olivi's attack on the latter stance as incoherent in effect renders the Baconian theory equivalent to Locke's view and thereby subject *mutatis mutandis* to the same critiques.

existence of sensible species *in the medium* were at least indirectly indebted to Olivi for this insight, as for his supporting argument disputing the experiential evidence for mediating species. That is, as Olivi asks, since our sight encompasses the space between the eye and the object, why does it not see the species existing in that space, especially as the medium when informed by them ought—according to the Baconian theory—to be more visible than it would be solely of itself?⁵⁴ If the species are not, however, themselves visible in this way, then how can one claim as perspectivists had that sometimes we see the species itself in the eye as we do, for example, when after viewing a strong light and turning away, an afterimage visibly remains in the eye?⁵⁵ The perspectivist account of this phenomenon by which the afterimage is identified as the visible species itself, Olivi counters, posits erroneously not only that the species are of themselves visible objects (*ex se visibilia*), but also that they are sometimes in fact seen by us.⁵⁶

Suppose instead, Olivi suggests, that as "some" hold, external species do not have "natural and sensible being," but rather "simple, spiritual, and intentional being" (*esse intentionale et spirituale et simplex*). In that event, the species cannot "truly and naturally flow from a natural, corporeal form, nor really and truly inform a natural body, e.g., the air or an eye."⁵⁷ Moreover, one of the chief advantages for perspectivists of the Baconian theory, the punctiform analysis of light radiation, would also vanish, for Olivi remarks that it is incompatible with the view that species have solely spiritual or intentional being, inasmuch as spiritual beings are not *res extensa*.⁵⁸

⁵⁴ II *Sent.* q.73 [III: 84]: "Quinto, quia noster visus videt totum spatium intermedium inter se et obiectum. Quare ergo non videbit species existentes in illo spatio, et maxime cum ipsum ut per eas informatum debeat esse visibilis quam sit ex se solo?"

⁵⁵ Ibid. [III: 88–89]: "Quintum inconveniens est quia istimet probant nos videre per species ab obiectis influxas inter alia ex hoc, quia aliquando videmus ipsam speciem quae est in oculo, utpote, quando postquam vidimus fortem lucem et avertimus oculum, ita quod postquam avertimus, adhuc videmus aliquam lucem. Dicunt enim quod illa lux quam tunc videmus est species lucis existens in oculo per quam primo videramus ipsam extrinsecam lucem." Olivi arguably distorts Bacon's unclear discussion in *De mult. specierum*, I, ii [p. 34, lin. 234–44].

⁵⁶ Ibid. [III: 89]: "In hoc enim supponunt isti quod species per quas videmus non solum sunt ex se visibiles, immo et aliquando videntur a nobis; quamvis et hoc improverim in quaestione 'an voluntas sit potentia activa.'" Olivi's crossreference is to II *Sent.* q.58 [II: 493–96].

⁵⁷ Ibid. [III: 87]: "Secundum impossibile est quod una harum specierum non habeat esse reale seu naturale, sed tantum intentionale, et tamen quod vere et naturaliter fluat a forma naturali et corporali et vere ac realiter informet corpus naturale, puta aerem et oculum." See also, *ibid.*, p. 98.

⁵⁸ Ibid. [III: 88]: "Tertium impossibile est quod in quolibet puncto aeris sit una species simplex et spiritualis, et quod respectu eiusdem obiecti sint tot tales in aere quot sunt

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Olivi does not elaborate on these criticisms, but his underlying assumptions can be inferred from what he does say about how what is spiritual is distinguished from the material, real, or "natural" realm—namely, what is *res extensa*. These remarks reveal a dualist who would not have been uncomfortable with the Cartesian distinction between *res cogitans* and *res extensa*.⁵⁹ Starting from that distinction, Olivi's insight seems to have been that if species are spiritual entities—that is, are not *res extensa*—it follows that they do not occupy corporeal "points" in a corporeal "ray" in a corporeal medium that is a continuum of such corporeal "points."⁶⁰ Further, insofar as "flowing" from a body is a physical action, i.e. a process defined by localization in a succession of places, then it entails extension. This, of course, contradicts the assumption that species are spiritual entities. The species in the medium must, then, be corporeal or material entities, an hypothesis which has already been rejected.

Having objected that each alternative understanding of the species' nature results in contradiction, Olivi also argues that the perspectivist account inconsistently requires that the species be sometimes material and sometimes spiritual and, hence, cannot explain both the physical processes in the medium and the physiological aspects of vision by the same hypothesis. As he recognized, the species in the medium had been posited in part to explain the apparently rectilinear diffusion of light. But if the species must travel along straight lines, Olivi queries, how are the species to pass from the eye to the brain—the seat of the common sense—since the species would have to travel through the "tortuous branchings of the

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ibi situs sub quibus idem oculus vel diversi oculi possunt illud obiectum videre. Et quidem haec species simul ponitur esse punctalis et punctalem situationem habere et nihilominus habere spiritualem simplicitatem quae est longe alia a punctali. Quaero etiam an haec species spiritualis sit tota in pluribus partibus aeris, sicut est anima in pluribus partibus corporis aut non. Si sic, ergo quoad esse non dependet a partibus materiae quas informat ... Et certe habere ex se tale esse et primo et per se dare illud materiae corporali non est formae accidentalis, immo substantialis, et hoc non qualiscunque, sed transcendentis omnem formam extensam. Quamvis enim quaedam spiritualia accidentia animae sint cum ea in pluribus partibus corporibus sui, non sunt ibi immediate nec primo et per se nec dant ipsi corpori esse simplex et spirituale, id est, animatum seu vivum et sensitivum ... Si vero non est tota simul in pluribus partibus aeris, tunc aut est extensa aut punctalis, et neutro modo est spiritualis."

⁵⁹ See, in addition to nn. 50, 58 above: II *Sent.* q.58 [II: 446–61, 479–80].

⁶⁰ This interpretation is suggested by the analysis of perspectivist theory in A. Mark Smith, "The Big Picture," p. 579, at nn. 37–38: "Worse [the perspectivists] have raised the apparently insoluble problem of how we can possibly see something that emanates from discrete points and strikes us along 'breadthless lengths' ... The perspectivists responded by conceding that physical radiation is only virtually punctiform, that it actually occurs from indefinitely tiny spots rather than points and, consequently, that 'rays' are really thin shafts instead of mathematical lines." Olivi seems to be groping towards such a critique without, however, completely recognizing the non-Euclidean treatment of points and rays in the perspectivist account.

nerves?"⁶¹ This could be answered—as Bacon had—by claiming that in the nerves the species proceed according to the laws of spiritual, rather than natural operation; but in that case, it seems one could not "save" the opinion that sensation occurs from species generated naturally from objects.⁶²

One further argument against the species in the medium from Olivi's critique has proven historically significant within fourteenth-century debates over their existence. This is Olivi's consideration of the fact that species had also been posited in part to avoid subscribing to action at a distance.⁶³ As apparent examples of unmediated action at a distance, Olivi adduces the action of a magnet upon iron but not upon the intermediate air, and of the sun upon the celestial bodies. Nevertheless, the fact

⁶¹ *Sent.* q.73 [III: 97–98]: "Species cuius generatio naturaliter procedit in rectum, nisi cum per media densiora aut per specularia eius incessus mutatur et hoc sub lege sibi naturaliter praefixa, impossibile est quod naturaliter et communiter teneat alium incessum. Sed species ab oculo ad cerebrum seu ad organum sensus communis non potest per rectam lineam ire, quia nervi visuales oblique tenduntur ab oculo ad cerebrum. Ergo contra natura erit iste processus. Et multo magis hoc patet de specie tangibilium genita in pede, quam oportebit per tortuosas ramificationes nervorum procedere usque ad cerebrum ubi est organum sensus communis." Cf. also II *Sent.* q.58 [II: 493].

⁶² *Ibid.* [III: p. 98]: "Sed ad hoc dicitur quod ibi species potius procedunt secundum leges spirituum quam secundum leges propriae naturae.—Contra hos autem obicitur. Primo quia isti, ut salvent suam opinionem de sentiendo per species genitas ab obiectis, non verentur contradicere communi et naturali et nimis experto cursui generationis corporalium specierum."

Olivi's wording here (and n. 61 above) shows affinities with both Bacon and Pecham. See Bacon, *De mult. spec.* II, ii [p. 102, lin. 115]; Pecham, *Perspectiva communis* I prop. 40 [ed. D. Lindberg, *John Pecham and the Science of Optics* (Madison, Wisconsin: 1970), p. 124, lin. 782–85].

⁶³ II *Sent.* q.73, "An aliqua virtus cognitiva vel alia secundum suam essentiam exterius non emissa possit ab extrinseco et distante medio vel obiecto absque eorum influxu mutari." Olivi points out [III: 54–55] that "Circa quaestionem istam fuit ab antiquo multorum opinio quod praedictas passiones vel mutationes impossibile esset dare in virtute vel potentia alicuius agentis secundum suam essentiam exterius non emissa, et praecipue hoc dixerunt esse impossibile in potentiis animae vel spiritus separati. Unde et haec fuit una de causis praecipuis propter quam posuerunt res extrinsecas cognosci per species ab obiecto genitas et immisas <in anima> per potentiam cognitivam. Propter hoc etiam dixerunt radios lucis solaris vel alterius non quoad omnes sui partes immediate gigni a luce existente in sole, sed solum illam partem radii quae immediate cohaeret luci solis; illa vero gignit immediate sequentem et sic deinceps usque ad finem, ita quod sunt ibi per ordinem infinitae generantes et genitae." Olivi discusses action at a distance also in II *Sent.* q.23 [I: 422–33], "An omne agens sit semper praesens suo patienti seu suo effectui primo," in which he comments (p. 423): "Quibusdam enim visum est quod agens per se agit in superficiem corporis quod immediate est post eum, in reliqua vero quae post illam superficiem consequuntur non agit, nisi per intermedias impressiones; utpote lux solaris per se gignit lucem in superficie corporis sibi immediati et per illam gignit aliam in partem sequentem et per illam aliam gignit tertiam et sic usque ad finem. Et isti moventur ratione immediationis quae debeat esse inter per se et primo agens et inter primum patiens; quae alias non videntur posse salvari."

that the air is not also drawn to the magnet is, Olivi argues, no evidence as to the air's reception of the magnet's influence; rather, regardless of the magnet's action, air is—unlike iron—not innately moveable by a magnet. The sun's influence on celestial bodies can be explained analogously.⁶⁴ Olivi proposes that if one rejects extramental species, the consequence of action at a distance can be avoided equally well by positing instead the soul's "virtual attention," because spiritual powers (*virtutes*)—by definition, powers that are not corporeal—do not require spatial immediacy to act upon their objects.⁶⁵ Insofar as (temporal) simultaneity is to be conceived as prevented only by the traversal of space, this reconception of the question of spatial immediacy removes, in turn, the difficulty in supposing that the soul's virtual or actual attention can operate with *temporal* immediacy, and this Olivi thinks solves the argument between the perspectivists and Aristotle concerning whether visual perception occurs in time or instantaneously.⁶⁶

Olivi's arguments remain sketches, a skeleton begging for flesh on the

⁶⁴ II *Sent.* q.23 [I: 423]: "Contra: Adamas trahit ferrum longinquum ad se et non aerem intermedium; ergo agit immediate in ferrum et non in aere intermedium, et ita primus effectus virtutis adamantis seu primum patiens non est sibi praesens ..." Olivi answers the objection, pp. 432–33: "Ad argumenta tamen superius facta facile est respondere. Ad illud enim quod contra primam opinionem obicitur dicendum quod adamas influxum per quem trahit ferrum causat per intermedium influxum factum in aere intermedio, influxus tamen qui in aere recipitur non trahit aerem, quia aer non est aptus moveri motu tractus per talem influxum sicut est ferrum; sicut lux solis vere influit lucem in corpora caelestia nec tamen transmutat ea, educendo in eis de potentia formas varias, sicut facit elementaria, quia illa non sunt apta per illum influxum sic moveri sicut ista ..."

⁶⁵ *Ibid.* [I: 431]: "... Quando igitur aspectui obicitur aliquid quod penetrare seu pertransire non potest, et hoc, antequam sit terminata tota inclinatio sua seu efficacia virtualis qua potest virtualiter et per modum agentis attingere in longinquum usque ad certum terminum distantiae sibi a natura praefixum secundum mensuram suae quantitatis virtualis: impetus inclinationis seu aspectus sui naturaliter dirigitur ubi potest, non quod haec variatio fiat in ipso aspectu localiter, acsi localiter usque ad obstaculum veniret et localiter ab eo in aliam partem reflecteretur; sed sicut virtus naturae per modum agentis aspicit suum patiens ..." II *Sent.* q.73 [III: 103–04]: "Ad obiectiones autem in contrarium patet responsio ex praedictis. Ad primum enim patet; tum quia mutatio aspectus non ponitur fieri ab obiecto sicut ab efficiente, se solum sicut a terminante; tum quia immediatio localis et corporalis indistantiae non est semper necessaria inter effectum et suam causam immediatam, sed solum immediatio virtualis intimatis et efficaciae."

⁶⁶ II *Sent.* q.26 [III: 446–64], "An primae impressiones omnium agentium fiant ab eis in instanti," especially (p. 448): "Circa quaestionem istam est quorundam perspectivorum opinio, ut auctoris *Perspectivae*, quod agentia corporalia agunt impressiones suas in tempore, licet nobis imperceptibili ... Haec autem via aliis non videtur posse stare; de quorum numero videtur Aristoteles esse ..." Siding for instantaneous occurrence, Olivi quotes Augustine to the effect that we simultaneously see both closer and farther objects, qualifying Augustine thus (p. 452): "Et si radium vocaret 'virtualem protensionem aspectus' et non localem, non esset hoc inconveniens secundum opinionem superius dictam in prima quaestione <i.e. q.23>."

bones, but they nevertheless testify to the acuity with which he recognizes the weaknesses at the seams of the Baconian account, where its author had sacrificed consistency for comprehensiveness of explanation. Yet, although he eliminates the generation of *sensible* species by extramental objects, and insists upon the adequacy of the soul's virtual attention to achieve perception, he is far from believing that this attention suffices to explain the apperceptual processes and cognition. Olivi considers it evident that in order to account for memory it is necessary to posit the retention in the sense-memory of images of external sensible objects. Furthermore, these images, or "memorative species" (*species memoriales*) as he calls them, are additional to intellectual species (*species intellectuales*) in the intellectual memory.⁶⁷ After all, Olivi emphasizes:

Cognitive acts are effected by the [cognitive] power—not, however, through its nude essence. Rather, in all [cognitive acts] an actual attention, actually terminated upon the object, is required ... And therefore, when the exterior thing in-and-of-itself (*per se*) is not placed before (*obicitur*) the attention, there must be a memorative species placed before it in lieu of the object, which [species] is not the origin (*principium*) of the cognitive act, except insofar as it serves as a term for or representative of the object.⁶⁸

That there must be such a mental representative of an object in order to think about it in its absence follows, Olivi claims, from the fact that "direct attention to an object *necessarily* terminates in something, for it is not possible to attend to nothing, nor for the attention to terminate in nothing."⁶⁹ If this justifies the hypothesis of species in the sense-memory

⁶⁷ II *Sent.* q.73 [III: 89]: "Nec mirum, quia etiam noster intellectus, quibuscumque scientiis valde habituatus, non potest actu recordari ea quae habet in sua memoria nec suosmet habitus nec se ipsum etiam cogitare, nisi per actualem conversionem aspiciat et intendat in species memoriales aut in alia interiora sua, nec sensus nostri non consopiti sed vigilantes percipiunt sua obiecta praesentia, cum per vehementiam attentionem ad alia est actualis intentio sensuum retracta a suis obiectis;" q.74 [III: 114]: "... sciendum septem hic esse monstranda. Primo scilicet, quod vice obiectorum absentium est species memorialis necessaria, et quod haec respectu actus intellectivi est intellectualis et in memoria intellectuali; quamvis aliqua species memoriae sensuality sit praeter hoc necessaria respectu sensibilium ..." Cf. also *ibid.*, p. 485.

⁶⁸ II *Sent.* q.74 [III: 113]: "Dico quod actus cognitivi efficiuntur a potentia, non tamen per solam nudam essentiam eius, immo in omnibus exigitur actualis aspectus super obiectum actualiter terminatus. De quo satis in praemissis quaestionibus est tractatum. Et ideo, quando res exterior per se non obicitur aspectui, oportet quod loco rei obiciatur aspectui aliqua species memorialis, quae non est principium actus cognitivi nisi solum per modum obiecti terminativi et repraesentativi, prout infra tangetur."

⁶⁹ *Ibid.* [III: 115]: "... quod scilicet ad cognitionem vel cogitationem absentium sit necessaria aliqua species pro obiecto, probatur. Primo, quia omnis aspectus ad obiectum directus terminatur necessario in aliquo, non enim potest aspicere nihil nec terminari in nihilo. Oportet etiam quod illud in quo terminatur sibi sit praesens, ita quod virtualiter attingatur ab ipso aspectu." Here (and above, n. 41) Olivi's use of "necessary," like

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ory, intellectual species must also be posited to explain the ability to recall the objects (including universal objects) of previous intellectual acts, to remember having had those acts, and to generate intellectual habits.⁷⁰

But if not generated by external objects and introduced via the external senses, how then do these species originate? Olivi answers that the internal senses act to create species within the sensitive memory, "that is, within the capacious and material sinew of that [internal sense] faculty itself where the act itself was," and that the intellect, similarly, makes a memorative species "in the material womb of the intellect itself" by its own act.⁷¹

Olivi's embrace of the cognitive faculties' activity in creating species was neither unprecedented nor destined to win wide acceptance.⁷² Nevertheless, insofar as Olivi construes these created species as "intentions" or mental concepts, his claim that the intellect makes (*ingit*) them may have influenced Peter Aureol's account of concept formation.⁷³ Hence, it is significant that Olivi accepts a catalogue of synonyms for these mentally created species that reveals his commitment to their psychological and semantic role, precisely as representatives of extramental objects.⁷⁴ The intellectual memory's species (*species intellectualis memorialis*), Olivi announces, are the same entities others posit as "a certain concept

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Bacon's and unlike that of most scholars after Scotus, is evidently quite loose, roughly substituting for "oportet," i.e. "it is required."

⁷⁰ Ibid. [III: 116]: "Quod autem respectu actus intellectivae potentiae oportet <speciem> eam esse intellectualem probatur. Primo, respectu obiectorum absentium et intellectualium, ut, cum quis recordatur se habuisse aliquos actus vel habitus in intellectu vel in sua libera voluntate.—Secundo, respectu universalium obiectorum, ut, cum quis cogitat generales vel specificas quidditates rerum sensibilium ..."

⁷¹ Ibid. [III: 116]: "Unde, per actum sensus interioris generatur species in sua memoria sensuali, hoc est, in capaci et materiali sinu eiusdemmet potentiae cuius fuit ipse actus; et consimiliter per actum intelligendi generatur species memorialis in materiali utero ipsius intellectus."

⁷² See, e.g., William of Auvergne, *De anima* as quoted in Owens, "Faith, Ideas, Illumination," p. 447nn. More generally, see Moody, "William of Auvergne," pp. 46–47, 61–64.

⁷³ II *Sent.* q.74 [III: 121]: "Sciendum etiam quod quia anima per suos actus cognitivos format seu educit in se et de se species memoriales: idcirco quidam crediderunt animam formare in sua acie species per quas formaliter seu effective intelligeret, et maxime quia non solum format in se species rerum a se visarum vel expertarum, immo etiam novas compositiones priorum. Non enim potest novas *ingere* seu *formare* nisi ex primis quas traxit a rebus expertis per earum actualem visionem seu experientiam, prout dicit Augustinus ...". For Peter Aureol, see below, chapter IV, as well as the dispute between Chatton and Ockham concerning concepts as "res ficta" in chapters V, VII.

⁷⁴ Mentioned, passim, by Pinborg, "Bezeichnung in der Logik," p. 257, and by the editor of Olivi's *Quaestiones logicales*, Stephen F. Brown, in "A Modern Prologue to Ockham's Natural Philosophy," *Miscellanea Mediaevalia* 13/1 (1981), p. 109n. See also the connection between mental species, mental terms, and mental propositions mentioned in distinguishing mental habits and species, n. 80 below.

or word (*verbum*) formed by abstractive consideration or investigation or discovery, in which [concept] the real objects are understood just as if in a mirror."⁷⁵ Further terms for the memorative species that can be appropriated from these unnamed "others" (probably Thomas Aquinas) include "the first or immediate object of the intellect" (*primum intellectum, immediatum obiectum*), the "*raison d'être* of things" (*ratio rerum*), intention, and concept (*conceptio*). Olivi rejects only the synonymy of *verbum*, and that on theological grounds.⁷⁶

Given Olivi's critique of the species in the medium as mediators preventing direct perception of their generating objects, his emphasis on the mental species' role as representatives of extramental objects seems initially inconsistent. Should not the mental species pose the same threat to existential awareness that extramental mediators present? Presumably Olivi thinks not, because unmediated perceptual "contact" (to speak loosely) is established between object and knower by the soul's "virtual" or "actual attention" *prior* to the generation of images by the memory and intellect as a result of that contact.⁷⁷ Moreover, Olivi evidently supposes, on the grounds that attention must be directed at some object, that the presence of the extramental object can safely be inferred from the existence of such attention. Although the derivation of the term "*aspectus*" (from "to look at") may have suggested that attention requires an existent object, whether it is indeed the case cannot be easily established in the absence of more analysis than Olivi offers of the notion of "actual attention," which he describes principally by reference to what it is not, namely a "visual ray." Perhaps, however, its very failure to satisfy helped to generate the subsequent, cognate efforts to demonstrate that visual perception requires an object.⁷⁸

⁷⁵ II *Sent.* q.74 [III: 120–21]: "Sciendum tamen quod quidam ponunt quendam conceptum seu verbum per considerationem abstractivam aut investigativam seu adinventivam formari, in quo tamquam in speculo intelliguntur realia obiecta. Hoc enim vocant primum intellectum et immediatum obiectum, et est quaedam intentio et conceptio et ratio rerum. Quod autem hoc non debeat dici verbum, nec possit esse aliud quam ipse actus considerationis aut quam species memorialis per ipsum formata, probavi in principio Lecturae super Iohannem ubi agitur de Verbo Dei aeterno."

⁷⁶ For Aquinas' use of these synonyms for the species impressa, see Vescovini, *Studi*, pp. 157–58. Olivi's critiques of Thomas have been sensitively discussed in M.T.d'Alverny, "Un adversaire de Saint Thomas: Petrus Iohannis Olivi," in *St. Thomas Aquinas 1274–1974 Commemorative Studies* (Toronto: 1974), pp. 179–92.

⁷⁷ This follows from Olivi's delineation of the process (nn. 67–71, 73 above) but it is unclear whether this objection occurred to him. Mahoney, "Sense, Intellect, Imagination" *CHLMP* p. 609 n. 28 errs in attributing this to Olivi, presumably on the basis of the general and equally erroneous assumption by modern scholars that Olivi denied *intellectual* species.

⁷⁸ As posed in the period after Scotus, the question was whether *intuitive* cognition of a

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Although Olivi's focus is upon image-memory and representational mental contents, the fact that he also acknowledges essentially non-representational habits distinct from species deserves notice.⁷⁹ Olivi proffers a series of arguments against the identity of intellectual habits and species, beginning with the observation that one and the same species can be held in the memory, where it supplies the object (or terminus) of diverse intellectual habits (such as scientific knowledge, belief, opinion, or estimation). Just as one species can function for several habits to which it cannot therefore be numerically identical, Olivi continues, it is also the case that by the same scientific habit we know scientifically (*scimus*) propositions concerning objects both present and absent, even though "by means of memorative species an object cannot be presented except as absent."⁸⁰ Presumably this is so because such a species would otherwise not be the image of a *remembered* object.

The remaining arguments are notable primarily insofar as they clarify Olivi's notion of scientific knowledge, which he construes as including "mental assent" or "dissent." Asserting that this cannot be identical with the memorative species, and implicitly assuming that the only alternatives are that such assent is either an intellectual act or a habit, Olivi determines in favor of the latter. The underlying conviction is one shared with Bacon and Henry of Ghent: that mental acts or habits are not identical with their contents. Nor are "intellectual acts" and "intellectual habits" synonymous terms for Olivi, for habits are, he thinks, the formal disposition of the soul's powers by which they are made more capable of acting. If Olivi's remarks on scientific habit begin to seem consonant with Henry of Ghent's, it should be remembered that for Olivi, such acts as the acquisition of habits facilitates, like all other cognitive acts, require species as

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non-existent object could occur. See especially Aureol, chapter IV below; Campsall's argument appealing to the *connotatio* of 'vision,' below, chapter VI, at notes 16–19.

⁷⁹ II *Sent.* q.74 [III: 114]: "... Tertio <sciendum>, quod aliquando exigitur ibi alius habitus determinans potentiam ad speciale obiectum, aliquando vero non necessario exigitur, sed tamen cooperatur ad faciliorem modum agendi, et aliquando ad meliorem, aliquando ad deteriolem, et quod omnes hi habitus differunt a speciebus memorialibus nec habent proprie rationem repraesentativam suorum obiectorum."

⁸⁰ Ibid. [III: 118–19]: "Quod etiam hi habitus differant a speciebus memorialibus suorum obiectorum probatur. Probatur, quia huiusmodi species saepe habentur et haberi possunt cum contrario habitu et absque utroque; nam Iudaeus credens Iesum non esse Deum nec de Virgine natum ita habet memoriales species horum terminorum sicut habet Christianus hoc credens. Multi etiam sciunt terminos quarundam propositionum contrarium qui neutram partem sciunt vel credunt.—Secundo, quia per eundem habitum scientiae scimus eadem principia vel conclusiones in obiectis praesentibus et absentibus, per species autem memoriales non potest praesentari obiectum nisi ut absens, etiam dum per alium actum praesentialiter videtur."

termini.⁸¹ Thus, for later readers Olivi's arguments would constitute a counter to Henry of Ghent's insistence that, given the presence of intellectual habits, intellectual species would be superfluous.

At the end of the thirteenth century (and, indeed, long afterwards) most scholars were far from prepared to construe either sensible or intellectual species as superfluous to an account of the process of human knowledge, no matter how trenchant Henry's or Olivi's critiques eventually appeared. Furthermore, where Olivi was concerned, conditions were hardly auspicious for consideration of his arguments against the *species in medio*, for while he was still teaching at Paris the first of the numerous attacks on his orthodoxy resulted in the examination and censure of several positions taken from his lectures.⁸² Among these were two derived from his denial of species. To the claim of his judges that "to say that the soul knows nothing by means of a species differing from the act of knowing, is false, and contrary to the saints and philosophers," Olivi responded by accepting their opinion "insofar as the species existing in the memory are concerned." Nevertheless, he continued,

insofar as the species in the mind's eye (*acie intelligentiae*) is concerned, I recited the contrary [view] without asserting it [as my own], for in the schools I always held and taught the common opinion; and, because I do not much care about these *philosophical* [matters], I am prepared to revoke the aforesaid recital.⁸³

If Olivi avoided the question by distinguishing between the memorative

⁸¹ Ibid. [III: 119]: "Tertio, quia praedicti habitus non repraesentant proprie sua obiecta, quia super obiecta disparata vel contraria simul feruntur...—Quarto, quia species memoriales non dicunt mentis assensum vel dissensum, etiam respectu proprii obiecti quod proprie repraesentant, praedicti autem habitus semper dicunt assensum vel dissensum. Unde etiam scire simplicem rationem et quidditatem unius termini differt a specie memoriali per quam repraesentatur, prout scire includit assensum... Quinto, quia habitus sunt quaedam principia effectiva suorum actuum, id est sunt formales dispositiones potentiae per quas fit potens vel potentior ad talem actum efficiendum. Species vero memoriales serviunt tantum de obiecto terminante actum et aspectum potentiae et repraesentante eis obiectum absens, prout superius est probatum." On the significance of the remarks on assent and dissent, see Ockham, chapter V below.

⁸² On the commission of four masters and three bachelors of Theology summoned by the Franciscan Minister General in 1283, the resultant censure, and Olivi's responses, see Burr, *Persecution*, esp. pp. 37–44, 52–54.

⁸³ Recorded in C. du Plessis d'Argentre, *Collectio judiciorum de novis erroribus*, I (1728; repr. Bruxelles: 1963), p. 231: "Dicere quod anima nihil cognoscit per speciem differentem ab actu cognoscendi, falsum est, et contra Sanctos et Philosophos. (Hanc sententiam accepto <<respondet Olivi>> quantum ad species existentes in memoria: quantum autem ad species, quae sunt in acie intelligentiae, recitavi nec asserendo contrarium. Semper tamen in Scholis tenebam et docebam communem opinionem: et quia de istis Philosophicis non multum curo, paratus sum revocare recitationem praedictam.)" For Olivi's attitude towards the new Aristotelian and Muslim learning, see above, n. 40 and Burr, *Persecution*, pp. 25–32.

species and species in the intellect, and by alluding to his oft-stated conviction that his contemporaries were too concerned with the thought of pagan philosophers at the expense of Christian thought, his response to the second article was more straightforward. Olivi simply denied that he had held "that things do not multiply their species, but by means of their essence are known by the soul."⁸⁴ At first sight disingenuous, Olivi's denial may have been directed primarily at the second clause, which did not carefully state his position.

The list of errors does not explicate the grounds on which these theses were attacked, so the extent to which Olivi's response would have satisfied his opponents cannot be established; in the event, these articles were not the principal focus of his censure, which, moreover, was overshadowed by later condemnations. Yet, even if the inclusion of these articles in a list of suspect opinions inhibited scholars for a generation from following Olivi's lead, there was another, and probably more important reason why so few scholars then or later jettisoned species. This was the integration by Scotus of the theory of the multiplication of species within a new account of knowledge which appeared to clarify and tighten up the most obvious loose ends, while supplementing the theory where Henry and Olivi had exposed its greatest weaknesses.

⁸⁴ Ibid. p. 232: "Quod res non multiplicat species suas, sed ab anima per essentiam cognoscuntur. (Hoc sibi falso imponi <<Olivi>> asseverat.)" Among the implications of this article worth noting is that, if the extant *Sentences* commentary was entirely composed at Florence in 1287–88 (which is unclear), then Olivi began or continued to maintain views already censored in 1283. It is more likely that he had already insisted that "res non multiplicat species suas" before the commission—however imprecisely—attributed this view to him; in which case some part of the arguments of the *Sentences* commentary circulated by that date.

Chapter Three— John Duns Scotus

Although his teaching career was not as long as those of Henry of Ghent or Godfrey of Fontaines, John Duns Scotus's direct impact upon later medieval thought was greater. Partly this was because of his greater mobility as a mendicant; by the time he died in Cologne (1308), he had been sent by his order to teach in the Franciscan convents in Cambridge, Oxford, Cologne, as well as Paris. More important, however, as his own contemporaries recognized, and as Scotus's earliest extant teaching (from ca. 1298) demonstrates, already as a bachelor of Theology at Oxford he had begun coherently and with impressive acuity to reshape the issues that confronted him in the thought of the preceding two scholarly generations.¹ At his death, Scotus left behind at each *studium* students and colleagues who, if they did not agree with all that he taught, recognized clearly and found heuristically fruitful the new framework he had given to many issues.² Yet as they and his early readers sought to understand this Subtle Doctor's teaching, they faced a relatively large oeuvre, not all of which was quickly and uniformly available,³ and which, when taken

¹ Unlike Bacon, Olivi, and Henry of Ghent, when Scotus arrived in Paris (probably in 1302), he came only near the end of his theological training. He may already have been studying theology at Oxford by 1288, and almost certainly by 1291; there he evidently lectured on Lombard's *Sentences* for the first time in 1298–99. His second set of lectures on Lombard were delivered at Cambridge, perhaps in 1301–02; he read again at Paris, 1302–03, before finally incepting as master of Theology. He spent most of the rest of his life in Paris, with the final months in Cologne. See Catto, "Theology and Theologians," pp. 505–06, who summarizes the research into Scotus's biography. The literature concerning Duns Scotus's discussion of cognition is too extensive to catalogue here; it must suffice in the following notes to mention the most significant studies. Except where otherwise indicated, citations to Scotus's work are to the critical edition, Charles balic * ed., *Joannis Duns Scoti opera omnia* (Vatican City: 1950 – present) or to the 1639 edition of Luke Wadding, reprinted by Vivès, *Joannis Duns Scoti opera omnia* (Paris: 1891–95) [hereafter balic* and Vivès].

² See, most recently, C. Bérubé, "La première école scotiste," in Z. Kaluza and P. Vignaux, eds., *Logique, Ontologie, et Théologie au XIVe Siècle. Preuve et Raisons à l'Université de Paris* (Paris: 1984), 9–24; Catto, "Theology and Theologians," pp. 509–13; H. Gelber, "Logic and Trinity," pp. 103–29, 163–72; and chapter IV, below.

³ It is not clear how quickly those works revised or written after leaving Oxford for the continent were available to scholars in Oxford and Cambridge—not to mention other *studia* in England. Moreover, it is not yet possible to date Scotus's works precisely. The generally accepted chronology of the works discussed below is: *Lectura prima*, Scotus's early Oxford lectures on Lombard; commentaries on Aristotle's *Metaphysics*, *De anima*, and two on his *Perihermenias*; the *Reportata Parisiensia* of Scotus's lectures at Paris 1302–03, also

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together, would speak for a scholar whose thought on many inquiries evolved over time. Epistemology is among those where the evolution is both evident and difficult to trace, and where his effect seems, initially, most revolutionary; yet closer acquaintance with his thought reveals that he has in fact accepted major elements of the theories he rejected, including those of Henry of Ghent, Peter Olivi, and Godfrey of Fontaines.⁴ Where epistemology was concerned, Scotus's acumen lay especially in taking seriously their critiques of the theory of cognition by the multiplication of species, which he accepted but endeavored to supplement on the basis of their proposals.

Of all those among the previous generation to whom Scotus most steadily directed his attention, Henry of Ghent was very nearly in first place. His views on human knowledge, particularly his denial of intelligible species with the corollary issues this raised, provoked extensive rebuttals from John Duns Scotus over a lifetime of teaching.⁵ It is not clear how quickly copies of Henry's *Quodlibetal Questions* and *Summa* reached England, but they were known to Scotus's own teachers, who had already begun to recognize the significant issues Henry had introduced into epistemology.⁶ Thus, William of Ware—who as a Franciscan master

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including material from lectures of 1305, as does the Vivès edition of the *Opus Oxoniense*; these interpolations are being removed in the critical edition of the latter [distinguished in notes below as *Ordinatio*], i.e. Scotus's own revised commentary. The latest of Scotus's works (in order of delivery, if not revision) are the *Quodlibetal Questions*, probably from 1305, disputed at Paris. See Day, *Intuitive Cognition*, pp. 70–72; Allan B. Wolter, "Duns Scotus on Intuition, Memory and Our Knowledge of Individuals," in L.J. Thro, ed., *History of Philosophy in the Making. A Symposium of Essays to Honor Professor James D. Collins* (University Press of America: 1982) pp. 81–104, esp. p. 83. On the authenticity of the questions on the *De anima*, see Tachau, "The Problem of the *Species in medio* at Oxford in the Generation After Ockham," *MedSt* 44 (1982) p. 431, n. 127.

⁴ For example, Scotus's views on judgment (see below) may be accepted largely from Henry; similarly, the understanding of second intentions as relations follows Henry, while the stress on the partial activity of cognitive faculties may be inspired partly by Olivi. Because Scotus's views developed over time, and because his own revisions probably never resulted in formulations he considered definitive and, finally, because his medieval readers knew and used all his works without regard to the chronology of their composition, it has seemed unwise to rely chiefly on the most mature texts.

⁵ This focus on Henry, which eclipses Scotus's attention to anyone else on these issues, is already clear in the *Lectura*. On the importance of Henry's thought for Scotus, see also Wolter, "Scotus on Intuition;" Douglas Langsten, "Scotus and Ockham on the Univocal Concept of Being," *FrSt* 39 (1979), 105–29. The relation of Scotus's thought to Henry's is the focus of several of J.V. Brown's articles, listed above, chapter II, n. 7; most recently, in "Duns Scotus on the Possibility of Knowing Genuine Truth: The Reply to Henry of Ghent in the 'Lectura Prima' and in the 'Ordinatio,'" *RTAM* 51 (1984), 136–82. Brown has unfortunately continued to read their views as a conflict between "Augustinianism" and "Aristotelianism," which hardly conveys the complexity of their intellectual interaction.

⁶ The editors of Henry of Ghent's *opera omnia* describe all known manuscripts, but

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of Theology at Oxford, was probably among those with whom Scotus actually studied⁷—shows his familiarity with Henry's thought in summarizing the problem that the multiplication of species presents for knowledge of truth in this life:

[It is objected that] the means by which (*illud per quod*) something is known to be true must be such that by means of it the true can be discerned from the false; but every *species* in itself indifferently represents the false just as the true, as is obvious in those who are hallucinating (*freneticis*) and those who are dreaming, to whom the species represents something false just as if true. Nor does it follow from this, that the Uncreated Light of necessity would itself be seen by the mind irradiated by It, but the mind [instead] sees [something] else by means of It, just as it does in corporeal vision when light falls directly (*directo aspectu*) upon the eye from the object thus altering sight to see it ...⁸

William's own response to Henry, that the species itself "always represents what is true and makes a true cognition" was not the response Scotus would himself offer,⁹ but here as elsewhere he may be tacitly indebted for his appreciation of the issues raised by Henry's views to William. It is suggestive, at least, that among the many points of agreement between William of Ware and Scotus is their shared conviction that the hypothesis of intellectual habits in lieu of intellectual species cannot adequately account for the phenomena.¹⁰

Indeed, Henry of Ghent's and Godfrey of Fontaines' elimination of

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although several were at Cambridge and Oxford libraries by the end of the century, there is not yet clear evidence how early such manuscripts were available. There were already scholars who disputed Henry's views at Oxford during the 1280s (although the last of his *Quodlibeta* probably dates from 1292); see Catto, "Theology and Theologians," pp. 503–05.

⁷ Catto, "Theology and Theologians," p. 508.

⁸ Guillelmus de Ware, I *Sent.* d.3, q.1 (in Vatican, Chigi B.viii.135, fol. 13va): "Item illud per quod scitur aliquid esse verum oportet quod sit tale quod per illud possit discerni verum a falso, sed omnis species de se indifferenter representat falsum sicut verum, sicut patet in freneticis et sompniantibus quibus species representat aliquid falsum sicut verum. Nec tamen sequitur ex hoc quod lumen istud increatum de necessitate videatur in se a mente irradiata per ipsum, sed mens videt alia per illud sicut in visione corporali quando lumen incidit directo aspectu supra oculum a obiecto (*ms.* obiective) tunc immutat visum ad videndum se; et videtur. Quando vero oblique incidit, puta quando primo terminatur ad colorem, postea ad visum, non videtur lumen obiective sed color sic irradiatus a lumine videtur per se; ita lumen divinum, quando directo aspectu incidit ..."

⁹ *Ibid.* (fol. 13vb): "Ad aliud dico quod species quantum est de se semper representat verum et facit veram cognitionem; unde quod accidat error in cognitione hoc est aliunde—puta ex passione vel ex aliqua alia rationis positione concurrente." For Scotus's discussion, see below at nn. 79–88.

¹⁰ William of Ware argues that intelligible species are required in addition to habits in II *Sent.* d.4, particularly fol. 86va–vb; and for the distinction of the soul's faculties against Henry of Ghent in I *Sent.*, d.3, qq.7–8, fols. 15vb–19rb.

intelligible species seemed to Scotus to threaten a tenet fundamental to his (and William's) psychology, the distinction between sense and intellect, and the independence of the latter from the former.¹¹ Like Henry and Godfrey, Scotus devoted relatively little space to delineating *in extenso* either the multiplication of species in the medium and through the senses, or the attendant process of abstraction insofar as the internal senses were involved. If not expansive, however, his allusions were both frequent and explicit: the process seemed to him well-established and largely uncontroversial.¹²

Where Scotus found considerable dispute, on the issue of the ontological status of the species in the medium and in the senses, he essentially came to agree with Henry of Ghent. Explaining that light (*lumen*), as the sensible species of *lux*, is an intention, Scotus specifically rejects the possibility that species are spiritual, corporeal, material, or that they are a substantial form (*forma substantialis*), as had Henry before him.¹³ Instead, by comparison to their generating objects, species have only "diminished being" (*esse diminutum*), and belong to the Aristotelian category of quality:

For this 'information of the sense' [which is called vision] is the species proper, and is received in the organic part [of the sense], that is, in the body mixed with it ... hence, what is properly called an image is called vision, just as conversely—and much more truly—vision can be called an image, since vision is, in truth, a certain quality (*quedam qualitas*): such a quality as is a certain similitude of the object, perhaps a more perfect one than the prior similitude [i.e. *in medio*] which is usually called a 'species.'¹⁴

¹¹ Cf. e.g., I *Ord.* d.3, p.1, q.4 [balic* III: 140]: "Respondeo—quantum ad istam notitiam—quod intellectus non habet sensus pro causa, sed tantum pro occasione, quia intellectus non potest habere notitiam simplicium nisi acceptam a sensibus; illa tamen accepta, virtute sua potest simul componere simplicia ..." Wodeham discusses Scotus's motivation; see below, chapter X, at n. 20.

¹² Scotus's most extensive discussion of species *in medio* is in II *Sent.* d.13, q. un. [edited and examined in the four extant versions by Edward R. McCarthy, "Medieval Light Theory and Optics, and Duns Scotus' Treatment of Light in D.13 of Book II of his Commentary on the Sentences," Ph.D. dissertation, City University of the City of New York 1976]. Sensible species are explicitly assumed also in I *Ord.* d.3, p. 1, qq.1–2 [balic* III: 51]; IV *Oxon.* d.49, q.11 [Vivès XXI: 418]; and in passages quoted nn. 15, 18, 20 below; in *De anima* q.V [Vivès III: 491–96]; in II *Metaphysicorum* q.3, n. 24 [Vivès VII: 113; quoted in Wolter, "Scotus on Intuition," p. 87, n. 41]. In his *Sentences* commentaries and in *De anima* qq. 9–10, Scotus discusses or mentions the following internal senses as those he accepts: imagination, common sense, memory, phantasy, and a cogitative power (rejecting Avicenna's estimative faculty); see Steneck, "Internal Senses," pp. 103–37.

¹³ II *Ord.* d.13, q.un. [ed. McCarthy: pp. 25–27]; II *Rep.* d.13, q.un. [ed. McCarthy: pp. 39–40]; cf. also *De anima*, q.5 [Vivès III: 494]; I *Ord.* d.3, p.3, q.2 [balic* III: 267, 282–84, 322–23]. See also below, n. 28.

¹⁴ I *Ord.* d.3, p.3, q.2 [balic* III: 299]: "Ista glossa arguitur ex dicto eius XI *De trinitate* cap. 2, ubi vult quod informatio sensus, quae fit a solo corpore, 'visio' dicitur. Illa autem 'informatio' est propria species, quae recipitur in parte organi, scilicet in corpore sic

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As Scotus mentions in passing (and elsewhere explains), he understands the internal and external senses to be organic, that is, composites of body (*corpus*) and cognitive faculty (*potentia cognitiva*).¹⁵ The intellect, by contrast, is solely and *per se* a cognitive *faculty*, and not in the least organic.¹⁶ Given that distinction, Scotus argues that Henry of Ghent cannot explain intellectual cognition by resort to the hypothesis of phantasms, which are sensible species as preserved in the internal sense-memory. If there were in addition no intelligible species, Scotus asks, regardless of whether the intellect could know singulars,¹⁷ how would one explain intellectual knowledge of universals, or the processes of composition and division which Henry defends as required for knowing "the truth of a thing," or syllogistic reasoning itself?¹⁸

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mixto; hoc patet ex hoc quod dicit quod 'gignitur a solo corpore quod videtur.' Sicut ergo illud quod est proprie imago dicitur 'visio,' ita e converso visio potest dici 'imago' et multo verius, quia visio—secundum veritatem—est quaedam qualitas, et talis qualitas quae est quaedam similitudo obiecti, et forte perfectior quam illa similitudo prior, quae dicitur usitate 'species.' Cf. also IV *Oxon.* d.45, q.3 [Vivès XX: 329]. For the claim that species have diminished being, see n. 53 below.

¹⁵ I *Ord.* d.3, p.3, q.1 [balic* III: 236–37]: "Cum arguitur in opinione prima <<Henrici de Gandavo>> quod 'recipere speciem convenit sensui praecise quia potentia organica,' dico quod falsum est, quia illud non est praecisa causa. Sed praecisa causa, cuiuscumque potentiae habendi speciem representantem obiectum suum ut suum est, est ista, quia ipsa est cognitiva—et natura dedit sibi ut possit habere obiectum praesens sibi prius naturaliter quam cognoscat. Sed potentiae organicae dedit ut obiectum sit praesens non in potentia ipsa sed in organo, hoc est in parte corporis quam perficit potentia organica: et ista praesentia sufficit, quia totum—compositum ex parte corporis sic mixta et ex potentia—est organum; et huic toti obiectum sufficienter est praesens quando species est in illa parte corporis." Cf. also II, d.3, p.2, q.1 [balic* VII: 540]; and n. 70 below.

¹⁶ I *Ord.* d.3, p.3, q.1 [balic* III: 236–37]: "Cum ergo intellectui nihil perfectionis auferatur in quantum potentia cognitiva est, per hoc quod non est organicus, immo magis additur perfectio ..."

¹⁷ Scotus holds that the intellect does, indeed, know singulars via intuitive cognition in II *Quaest. super De anima*, q.22 [Vivès III: 631]; I *Ord.* d.23, q.un [balic* V: 349–63]; and VII *Metaphysicorum*, q.5, n. 4 [Vivès VII: 436–37; quoted and discussed in Wolter, "Scotus on Intuition," pp. 88–89]. This puts Scotus at odds with Thomas Aquinas' interpretation of Aristotle, for which see Mahoney, "Sense, Intellect, and Imagination," p. 609.

¹⁸ I *Ord.* d.3, p.3, q.1 [balic* III: 209–10]; note also Scotus's summary [205–06] of Henry's position: "Modus ponendi est iste: habita impressione speciei sensibilis in organum sensus, et toto illo processu usque ad virtutem phantasticam, intellegens agens abstrahit ab obiecto in phantasmate et immutat intellectum possibilem ad simplicem apprehensionem essentiae, ita tamen quod intellectus possibilis nullam speciem impressam recipit a phantasmate, nec est obiectum praesens intellectui nisi quia praesens in imaginatione;" and of Godfrey's, p. 208. Scotus had no quarrel with the phantasms in the sense memory; in addition to this question, cf. e.g. II *Ord.* d.3, p.2, q.2 [balic* VII: 554]; R. Dumont, "The Role of the Phantasm in the Psychology of Duns Scotus," *The Monist* 49 (1965), 617–33. In his earliest work, the *Lectura prima*, Scotus already defended intelligible species against Henry; see J. Brown, "Scotus on the Possibility," p. 155, n. 55.

Scotus clearly considers Henry—and, for that matter, Godfrey¹⁹—to be without an adequate response to these demands, which are almost rhetorical. They rest on a premise accepted by Henry of Ghent and defended by Duns Scotus: that objects must somehow be *present* "in a knowable manner" to the sense or intellect for them to be known. That is, if objects are not themselves manipulated in these processes, then representatives of them (species) are required for serving as the manipulated terms (*termini*). Sensible objects, however, "are not by their nature in themselves present to the intellect in a form actually intelligible to it, but can be present only in an intelligible species, insofar as abstractive intellection is concerned."²⁰

The problems raised by the denial of intelligible species, Scotus thinks, do not end here, with the inability to explain the acquisition of intellectual knowledge; thus, he elsewhere turns to angelic cognition to reveal less obvious *lacunae* in Henry's account of cognition. In doing so, Scotus recognized like other theologians before him that one way of examining the logical consequences of claims concerning the nature of the human intellect was to consider angelic cognition, since angels were generally agreed to be purely spiritual beings and so to have no organic senses.²¹ On that basis, he points out that Henry's account of cognition is unable to account for angelic memory, and hence intellectual memory in general,

¹⁹ Cf. also I *Ord.* d.3, p.3, q.2, for Scotus's presentation of Godfrey's position [balic * III: 256–60], and critiques already levelled against it [pp. 264–67; repeated 279–80 against Thomas Sutton and Giles of Rome]. Those Scotus construes as telling ones against Godfrey include [p. 267] "quomodo intellectus discurreret, syllogizando et arguendo? ... quomodo causabuntur intentiones logicae vel relationes rationis?"

²⁰ I *Ord.* d.3, p.3, q.1 [balic* III: 237] after passage quoted above, n. 15: "Sequitur quod <intellectui> potest esse obiectum praesens ante actum, sicut aliis potentiis cognitivis; sed illa praesentia non erit per aliquid impressum organo, quia non habet organum; igitur erit per aliquid impressum ipsi potentiae. Tale impressum repraesentans, praecedens in potentia intellectiva actum intelligendi, voco 'speciem intelligibile.' Breviter ergo: sensus habet obiectum praesens in illa parte corporis, quae dicitur 'organum' illius sensus; sed intellectus tam illam praesentiam priorem actu quam ipsum actum habet ratione eiusdem receptivi;" and [p. 243] "... Quando autem obiectum non est natum esse in se praesens sub ratione actu cognoscibilis a tali potentia, tunc quaelibet potentia apprehensiva est in potentia ad apprehensionem et ad illud in quo cognoscibile erit praesens, et prius, ordine originis, ad habendum illam praesentiam quam ad habendum actum. Ita est in proposito. Sensibilia non sunt nata esse in se praesentia intellectui sub ratione actu intelligibilium, sed tantum in specie intelligibili possunt sic esse praesentia, et hoc quantum ad intellectionem abstractivam, de qua est sermo in proposito ..." Cf. also *ibid.*, pp. 231–33. For Henry's acceptance of this premise, see above, chapter II, at n. 10.

²¹ Thus, for example, Scotus's discussion in I *Ord.* d.3, p.3, q.2 [balic* III: 275–85] of the opinion of Giles of Rome (Aegidius Romanus) depends on the latter's questions on angelic cognition. An obvious model is Guillelmus de Ware, II *Sent.* d.4 (Vat. Chigi B.viii.135, ff. 86ra–88va). Cf. also Wolter, "Scotus on Intuition," p. 84.

because angels possess no sense-memory and concomitantly no phantasms. Unable therefore to draw upon a store of these, angels would have no memory at all, if they were also devoid of intelligible species. This difficulty, he insists, could not be eluded by positing the retention of habits, as Henry of Ghent had argued, because habits would not suffice to recall images of a single thing (*res*), nor of a thing with which there were only one encounter, as no habit would be formed thereby.²² That is, as Scotus was aware Henry held, intellectual habits require repeated cognitive acts for their causation, which neither case permits.²³ Similarly, neither the blessed in heaven nor angels could acquire any new knowledge of individual singulars if objects must be "present in a knowable manner" and intelligible species do not exist.²⁴

For these and a barrage of other reasons, Scotus insists (perhaps, as a mendicant, even with conscious irony) against Henry of Ghent that,

If you object that 'plurality must not be posited except where there is a necessity [to do so]; here there is no necessity; ergo etc.', I respond that there is a necessity when the perfection of nature requires [their hypothesis]. Although this *suppositum* which is a man can have an object present [to him] in a phantasm because he is a man, nevertheless the intellectual nature of man, inasmuch as it is intellectual, does not have an object sufficiently present if it has it only in presence begged (*mendicata*) from the phantasy. Therefore, this greatly vilifies the intellectual nature inasmuch as it is intellectual, because this removes from [the intellect] what is the perfection of a cognitive power, and what is found in the sensitive power, as [it is] in the [internal sense] phantasy. This plurality is, therefore, posited on account of necessity, and in order to preserve the perfection of a more perfect nature, that it [i.e. the intellect] may be greater than that of a more imperfect nature [i.e. the sense] or, at least, equal to it.²⁵

²² I *Ord.* d.3, p.3, q.1 [balic* III: 225, 230, 240–41]; II *Ord.* d.3, p.2, q.3 [balic* VII: 591–93] "opinio propria;" IV *Oxon.* d.45, q.3 [Vivès XX: 326–27, 341].

²³ II *Ord.* d.3, p.2, q.3 [balic* VII: 576, 591]; I *Ord.* d.3, p.3, q.2 [balic* III: 318–20]; I *Ord.* d.27, qq.1–3 [balic* VI: 85]; for Henry's view, see above, chapter II, n. 16.

²⁴ IV *Oxon.* d.45, q.2 [Vivès XX: 301–02].

²⁵ I *Ord.* d.3, p.3, q.1 [balic* III: 224–25]: "Si obicias 'pluralitas non est ponenda nisi ubi est necessitas, hic non est necessitas, ergo etc.', respondeo: necessitas est quando perfectio naturae hoc requirit. Licet autem hoc suppositum quod est homo, possit habere obiectum praesens in phantasmate, quia homo est, tamen natura intellectualis hominis, ut intellectualis est, non habet obiectum sufficienter praesens si non habet ipsum nisi in praesentia mendicata a virtute phantastica. Hoc ergo multum vilificat naturam intellectivam ut intellectiva est, quia removetur ab ea illud quod est perfectionis in potentia cognitiva, et quod invenitur in potentia sensitiva, ut in virtute phantastica. Ponitur ergo hic pluralitas propter necessitatem, quia propter perfectionem naturae perfectioris salvandam, maiorem quam sit naturae imperfectionis, vel saltem aequalem." For Henry of Ghent, see above chapter II, n. 16.

Concepts, Intentions, and Intellectual Acts

The "greater perfection" of the intellect over the senses lies in the ability to reason demonstratively, an Aristotelian axiom to which both Scotus and Henry are committed. For such reasoning, as mentioned above, Scotus considers the intelligible species, in their function as mental terms, the building blocks.²⁶ On this basis, we should expect Scotus to have considered concepts, intelligible species, and intentions in the intellect identical, but he does not explicitly say so. Still, his œuvre contains several historically important discussions where this is implied. Moreover, he apparently was the first to recognize that the term "intentio" had multifarious and hence ambiguous uses, as he notes in explaining the intentionality of light in the medium:

The noun 'intention' ... is used one way to mean an act of the will; second, to mean the formal reason (*ratio*) of a thing, as when [it is said that] the intention of a thing from which its genus is accepted, differs from the intention from which the thing's [specific] differences (*differentia*) are accepted. Third, it is said to be a concept. Fourth, it is what 'intends' toward the object, as a similitude is said to be the 'reason for tending' (*ratio tendendi*) toward that thing of which it is a similitude.²⁷

Scotus holds that it is in the final employment of the term that the sensible species is properly speaking an intention, functioning as a sign to its object. Yet if this admits of a distinction between the species and concept, his own justification for construing the species as a "sign"—appeal to Augustine's *De doctrina christiana*—would be more consonant with an analysis conflating the third and fourth uses of "intention." In that manner, the same Augustinian notion of the species or intention as sign had inspired the connection Roger Bacon endeavored to trace between perception and semantics.²⁸ Scotus at any rate generally treats "intention" as

²⁶ Above, nn. 18–20.

²⁷ II *Ord.* d.13, q.un. [McCarthy: p. 26]: "Cum autem genus qualitatis quantum ad tertiam speciem distinguatur in qualitatem sensibilem, et in qualitatem quae est species sive intentio qualitatis sensibilis, notandum est quod huiusmodi nomen 'intentio' est equivocum. Uno modo dicitur actus voluntatis intentio. Alio modo: ratio formalis in re, <<sicut>> intentio rei a qua accipitur genus differt ab intentione a qua accipitur differentia. Tertio modo dicitur <<conceptus>>. Quarto modo, dicitur ratio tendendi in obiectum, sicut similitudo dicitur ratio tendendi in illud cuius est." The text here diverges significantly from the *Reportatio* version published by Vivès.

²⁸ *Ibid.*, "Notandum est quod intentio non dicitur hic 'quod intendit sensus'; quia hoc modo ipsum obiectum esset intentio. Sed intentio dicitur hic 'illud per quod tamquam per principium formale in obiectum tendit sensus'. Et sicut quidquid est signum, est res, secundum Augustinum *De Trinitate* et *De Doctrina Christiana*, licet non e converso: et ideo in distinctione rei et signi res accipitur pro illa re quae non est signum, licet illa quae est signum sit etiam res, ita in distinctione rei et intentionis licet intentio sit res et forma sen-

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a synonym for "intellectual concept," as when he explains the relation of second and first intentions to extramental things:

Every second intention is a relation of reason, not any whatsoever, but [such as] pertains to the act of the intellect composing [together] and dividing [its] extreme[s], or at least comparing the one to the other. This is clear, because a second intention—according to everyone—is caused by an act of the intellect concerning the object (*rem*) of the first intention; [the intellect] cannot cause with respect to (*circa*) the object, except a relation or relations of reason.²⁹

Scotus indicates that the defining difference between second intentions, as the result of adjudicative acts by the intellect, and first intentions is that "every concept which is naturally [such that it] is made immediately by a thing, without any work or act of the intellect concerning it, is of a first intention; and such a concept is not only positive but also negative."³⁰ The specification that a concept of a first intention's object is "not only positive but also negative," is puzzling. Scotus's explanation indicates that the claim stems from the effort to account for the intellect's ability to distinguish individuals from each other as, e.g., distinguishing Socrates from every not-Socrates requires.³¹ Yet this does not clarify precisely

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sibilis in quam possit sensus tendere, tamen illa dicitur intentio quae non est tantum res in quam sensus tendit, sed est ratio tendendi in alterum cuius est propria similitudo). Hoc modo dico quod lumen est proprie intentio sive species propria ipsius lucis sensibilis." See also I *Ord.* d.3, p.3, q.1 [balic * III: 232]: "Ad secundum, de praesentia, respondeo quod obiectum respectu potentiae primo habet praesentiam realem, videlicet approximationem talem ut possit gignere talem speciem in intellectu, quae est ratio formalis intellectionis; secundo, per illam speciem genitam, quae est imago gignentis, est obiectum praesens sub ratione cognoscibilis seu repraesentati." For Roger Bacon, see his *Opus tertium* c.27 (quoted in Bacon, "De signis," p. 76).

²⁹ I *Ord.* d.23, q.un. [balic* V: 352]: "Omnis intentio secunda est relatio rationis, non quaecumque, sed pertinens ad extremum actus intellectus componentis et dividendis vel saltem conferentis unum ad alterum (hoc patet, quia intentio secunda—secundum omnes—causatur per actum intellectus negotiantis circa rem primae intentionis, qui non potest causare circa obiectum nisi tantum relationem vel relationes rationis)."

³⁰ *Ibid.* [p. 360]: "Omnis enim conceptus est intentionis primae qui natus est fieri immediate a re, sine opere vel actu intellectus negotiantis, qualis est conceptus non tantum positivus sed etiam negativus."

³¹ *Ibid.* [pp. 360–61]: "Et si hoc poneretur, cum dubitatur 'quomodo potest esse negatio communis sine positivo communi, cui insit', respondeo: quantumcumque diversis, si nihil etiam commune haberent, potest esse negatio communis,—sicut non-Socrates est commune univocum ad omnia alia a Socrate, entibus et non entibus ..." The concern arises from the definition of a person that Scotus accepts [p. 356] from Richard of St. Victor as "intellectualis naturae incommunicabilis existentia," which contains within the definition a negation, viz. incommunicability. On Scotus's understanding of individuals' communicable common natures and incommunicability (i.e. uniqueness), see Richard Dumont, "Scotus" Intuition Viewed in the Light of the Intellect's Present State," *De doctrina Ioannis Duns Scoti, in Studia, Scholastico-Scotistica* II (Rome: 1968) pp. 47–64, esp. pp. 53–56.

how on the causal account of the multiplication of species the mind could receive—rather than create, by the adjudicative acts of "compounding and dividing," or inferring—information of what is not.³²

Within three decades Adam Wodeham wrote that Scotus's definition of intentions had dropped out of use, as too subtle; in fact, however, it had become a hidden source of the discussion among fourteenth-century authors as disparate as Campsall, Chatton, and Ockham over whether the proposition was the object of scientific knowledge.³³ A nucleus of this discussion lay in Scotus's claim that the second intention is a relation, created by the reason. Here, Scotus is principally indebted to Henry of Ghent, and like him is occupied with the difficulty of establishing correspondence between extramental reality and mental constructs as—unlike first intentions—second intentions are.³⁴ Thus, the purpose of the statement that "a second intention concerns the *thing* [i.e. the object] of the first intention," is evidently to avoid what was becoming the standard gloss of second intentions as concepts of concepts.

Scotus's grounding of the relation instead in extramental reality, inasmuch as that is the focus of the intellect's attention, presumably rests tacitly on his belief that the sensible species, as a "similitude that intends toward the thing of which it is a likeness,"³⁵ is the means by which (*medium quo*) an object is known without itself being what is known (*medium quod*).³⁶ If so, this would also help to explain what Scotus means by describing the creation of the first intentional concept as "immediate:" the passage could be interpreted as referring either to temporal imme

³² The problem lies in the causal requirement that there be some really existing object from which species multiply. Scotus's own solution depended upon his hypothesis of a formal distinction, whereby he held that an individual person's communicability and incommunicability were formally distinct *in re* prior to any perceptual act by the individual's beholder. See Hester Gelber, "Logic and the Trinity," pp. 71–102, especially at nn. 81–88.

³³ On Campsall, see below, chapter VI, at nn. 20–21; for Ockham, chapter V, at nn. 146–58; Chatton, chapter VII, at nn. 78 ff. Wodeham makes the statement in his *Lectura secunda*, d.23, q.un. [ed. in Tachau, "Adam Wodeham on First and Second Intentions," CIMAGL 35 (1980), p. 40].

³⁴ Knudsen's reading to the contrary, "Intentions and Impositions," pp. 485–86 at n. 34 misconstrues the definition quoted above, n. 28. See also C. Verhulst, "A propos des intentions premières et des intentions secondes chez Jean Duns Scot," *Annales de l'Institut de Philosophie* (1975), 7–32; for Henry of Ghent, see above, chapter II, at n. 26.

³⁵ Above, n. 27.

³⁶ Cf. II *Ord.* d.3, p.2, q.2 [balic * VII: 551]: "Licet imago quae est tantum ratio cognoscendi, non 'ut cognita' (sicut est de specie visibili in oculo et de specie intelligibili in intellectu), repraesentet obiectum immediate, absque discursu,—tamen illa imago per quam non cognoscitur illud cuius est nisi ut per speciem cognitam, non est ratio cognoscendi illud nisi tantum per discursum, sicut discurritur a cognoscente ad cognitum ..." and *ibid.*, pp. 564–65.

diacy, or to the denial of intermediate species *in medio*. It is more likely, however, that Scotus merely seeks to distinguish these intentions from those for which earlier received intentions are constituent parts. Whatever Scotus's intent, the mention of negative information as intrinsic to concepts immediately obtained from objects, without the involvement of discursive reasoning, may have inspired Ockham's controversial effort to establish secure existential awareness of what does not exist.³⁷

Scotus's most extensive remarks explaining the dictum that intelligible species, or concepts, are the means by which things are known, and not objects known themselves (except by reflection) occur when he turns his attention to the relations between words, concepts, and things.³⁸ In the *Ordinatio* Scotus concludes that "although there be a great dispute concerning whether a spoken word (*vox*) is a sign of a thing or of a concept, nevertheless to be brief I concede that what is signified by a word is the thing."³⁹ When he chooses to be less brief, in his commentaries on Aristotle's *Perihermenias*, Scotus sees the debate as largely dependent on exaggerating the differences between the two alternatives.⁴⁰ Hence, while the question, Scotus thinks, has become irresolvable according to the by then standard arguments, the distance between the two positions can be dissolved by careful distinction. Explicitly restricting the discussion to such common names as would correspond to first intentions, Scotus first distinguishes between the concept, or intelligible species, as an accident informing the soul—and thereby a real entity, albeit one of diminished being—and as a sign. To provide a parallel, Scotus adduces the example of a statue of Hercules, which can be considered as a reality

³⁷ See below, chapter V, nn. 45–67.

³⁸ For what follows concerning the relation of words, concepts and things, I depend upon Stephen F. Brown, "Words, Concepts and Things in the Period Between Aquinas and Ockham: Reflections on *Perihermenias* Commentaries During the Late Thirteenth and Early Fourteenth Centuries," unpublished paper (March, 1978); and his "A Modern Prologue."

³⁹ I *Ord.* d.27, qq.1–3 [balic * VI: 97]: "Licet magna altercatio fiat de 'voce', utrum sit signum rei vel conceptus, tamen breviter concedo quod illud quod signatur per vocem est res. Sunt tamen signa ordinata eiusdem signati littera, vox, et conceptus, sicut sunt multi effectus ordinati eiusdem causae, quorum nullus est causa alterius, ut patet de sole illuminante plures partes medii; et ubi est talis ordo causatorum absque hoc quod unum sit causa alterius, ibi est immediatio cuiuslibet respectu eiusdem causae, excludendo aliud in ratione causae, non tamen excludendo aliud in ratione effectus immediatiore. Et tunc posset concedi aliquo modo effectum propinquiorem esse causam effectus remotioris, non proprie, sed propter prioritatem illam quae est inter tales effectus ad causam; ita potest concedi de multis signis eiusdem signati ordinatis, quod unum aliquo modo est signum alterius (quia dat intelligere ipsum), quia remotius non <<significaret>> nisi prius aliquo modo immediatius <<significaret>>."

⁴⁰ This is Brown's conclusion vis-à-vis the first of Scotus's two commentaries on Aristotle's *Perihermenias*, in "Words, Concepts and Things."

(namely, as a statue) or as a likeness or sign of Hercules. A second distinction can be drawn between artificial and natural likenesses; as a likeness of Hercules, the statue must be an artificial one. Since Scotus has also stated when discussing the intentionality of light that a concept is a likeness, that is, a sign of something to which it "intends,"⁴¹ then, so construed, it must be a natural sign of the thing. In this way, just as a statue is the means by which we can recognize the person of whom it is a likeness, so a concept is a means by which we know things. Similarly, the concept itself is not known directly, but only by reflection.

Spoken words, however, are more strictly analogous to the statue of Hercules, like which they are artificial likenesses inasmuch as words are conventional. As the statue is only a statue, and cannot function as a sign (or reminder) of Hercules to someone who has never known him, so words presuppose knowledge of the things they signify. If, therefore, the intelligible species is considered as the natural sign by means of which an object is known, then words signify the object immediately, but as known. In his *Ordinatio*, Scotus suggests that from the fact that words signify an object *as known*, it follows that words secondarily indicate that the user has a concept (or intelligible species) of the object as well.⁴² From the point of view of semantics, this position should have the advantage of preserving a causal correspondence of both language and concepts to reality, while "loosening" the strict isomorphism between words and concepts that would be required if words were similitudes in the same way as are concepts. This, in turn, allows language, while still grounded to reality, to be both more and less precise than the concepts which precede it.⁴³

These concepts are, finally, not to be identified with the mental processes for which they are the "contents." Clearly, for Scotus first intentions (i.e. received species) are those whose existence is independent of any operation of the intellect; their existence is caused by their objects. On that view, first intentions, or intelligible species, cannot be (as Giles of Rome and others proposed) identical to intellectual acts, as this implies a contradiction.⁴⁴ Nor, at the other Aristotelian extreme, can they be

⁴¹ *Quaestiones in I Perihermias*, q.2. para. 1, 3, 7, as analyzed by Brown, "Words, Concepts, and Things."

⁴² This is evidently the thrust of *Quaestiones ...*, q.2, para. 4; as analyzed by Brown, *ibid.* See also nn. 36, 39 above.

⁴³ See E.J. Ashworth, "'Can I Speak More Clearly Than I Understand?' A Problem of Religious Language in Henry of Ghent, Duns Scotus and Ockham," *Historiographia Linguistica* VII (1980), 29–38.

⁴⁴ Scotus *I Ord.* d.3, p.3, q.2 [balic * III: 277–78]; cf. also *ibid.*, d.27, qq.1–3 [balic* VI: 97–98]: "Ad tertium concedo quod notitia est proles et vere genita, scilicet actualis intellectio,—sed illa non est actio de genere actionis (quia, ut dictum est supra, actualis intellectio non est actio de genere actionis), sed est qualitas nata terminare talem actionem, quae signatur per hoc quod est 'dicere' et—in communi—per hoc quod est 'elicere' ..."

identical to Henry of Ghent's "scientific habit," inasmuch as he himself holds that habits presuppose intellectual acts.⁴⁵

Even more obviously, Scotus's acceptance of the theory of the multiplication of species, reaffirmed by his understanding of first intentions as caused by objects, requires him to reject Olivi's view that intellection could be explained by supposing that the intellect creates, rather than receives, its intelligible species. Clearly recognizing at the outset the overriding concern underlying Olivi's opinion, Scotus states that "on this question there is one opinion which, with respect to intellection, attributes the entire (*totam*) activity to the soul itself."⁴⁶ If this were the case, Scotus asks, then why would an object be required at all for cognition, let alone as a cause *sine qua non* as Olivi has admitted? That is, as Scotus indicates, inasmuch as Olivi grants that the object is such a cause, he undercuts his own claim that the intellect is the sole or total active cause of its apprehensions of extramental objects; at most the cognitive faculty will be a partial cause.⁴⁷

It is interesting that despite Scotus's frequent and lengthy discussion of Olivi's opinions regarding intelligible species, his attacks on the perspectivist thesis of species in the medium are not examined. This suggests the possibility that Scotus was unaware of these arguments; perhaps Olivi's *Sentences* commentary was available to Scotus only indirectly or in partial copies.⁴⁸ In any event, the influence on his thought of Olivi's views may not have been entirely negative. Although the Subtle Doctor rejected as incoherent the insistence that souls are exclusively active vis-à-vis the extramental objects of perception and cognition, he did find some merit in Olivi's conviction that the cognitive phenomena could not be satisfactorily explained by positing that the cognitive faculties were entirely passive in perception, mere recipients of sensible and intelligible informa-

⁴⁵ See above nn. 22–23.

⁴⁶ I *Ord.* d.3, p.3, q.2 [balic * III: 247]: "In ista quaestione est una opinio, quae attribuit totam activitatem respectu intellectionis ipsi animae."

⁴⁷ Ibid. [p. 252–53]: "Per hoc improbantur diversi modi tenendi ponentium istam opinionem. Si enim ponatur obiectum necessarium in ratione causae 'sine qua non', vel in ratione excitantis,—si non detur sibi aliqua 'per se causalitas' (cum anima semper sit in se perfecta et passo approximata), nec aliquod impedimentum de novo, remotum,—quomodo salvabitur quod ipsum necessario requiritur, nisi ponendo quinque genera causarum? Specialiter etiam illud de 'excitatione' non videtur valere. Quaero enim quid sit 'excitare'? Si 'aliquid causare' in intellectiva, ergo obiectum aliquid causat antequam intellectiva de se agat, ergo intellectiva non est tota activa causa prima respectu cuiuscumque in se causati, sed etiam obiectum ..."

⁴⁸ Olivi's name is supplied for the above arguments by Scotus's editors. William of Ware is a possible source if Scotus knew Olivi's arguments via an intermediary; cf. William's discussion, I *Sent.* d.3, q.8 (Vat. Chigi B.viii.135, ff. 18ra–19vb), which may be directed in part against Olivi. It is also possible that Scotus was aware that Olivi's rejection of species in medio had been condemned; see above, chapter II, n. 84.

tion. Committed, like Olivi, to a soteriology and, concomitantly to an ethics which presupposed activity by a soul in which will and cognitive faculties were symmetrical, Scotus was no more predisposed than Olivi to accept the soul's total passivity in cognition.⁴⁹ Thus, the hypothesis of intuitive cognition, as the soul's *act* of noticing the object's existence, perhaps bears indebtedness to Olivi's notion of *aspectus*.⁵⁰

Intuitive and Abstractive Cognition

For Scotus, the perspectivists' multiplication of species constituted what he labelled "abstractive cognition" (*cognitio abstractiva*). At some point early in his teaching, Scotus decided that the delineation of this process yielded an incomplete account of cognition, in spite of its ability to explain perception, apperception, image-memory, dreaming, and learned behavior. The problem Scotus saw was not simply that the species informed the knower only of the accidents, not the substance, of the extramental object.⁵¹ This in itself entailed theological and philosophical difficulties.⁵² More seriously, even as images or similitudes of an object's accidents, species must represent objects from which, however, they differed *essentially* insofar as the species had intentional or "diminished

⁴⁹ Thus, I *Ord.* d.3, p.3, q.2 [balic * III: 292–95]: "Ex istis solvitur quaestio sic: si ergo nec anima sola nec obiectum solum sit causa totalis intellectionis actualis—et illa sola videntur requiri ad intellectionem—sequitur quod ista duo sunt una causa integra respectu notitiae genitae ... Qualiter autem hoc sit intelligendum, distingo de pluribus causis concurrentibus ad eundem effectum. Quaedam enim ex aequo concurrunt, sicut duo trahentes aliquid idem corpus <<ut navem>>. Quaedam non ex aequo, sed habentes ordinem essentialem ... Obiectum intelligibile—praesens in se vel in specie intelligibili—et pars intellectivae non concurrunt ut 'causae ex aequo' ad intellectionem, quia tunc alterum haberet causalitatem talem imperfectam, et reliquum suppleret eam ... Sunt ergo causae essentialiter ordinatae ..." My bracketed insertion from the apparatus reflects the version that Rodington knew (see below, chapter VIII at n. 73). On Scotus's ethics and soteriology, see: P. Vignaux, *Justification et prédestination au XIVe siècle* (Paris: 1934); W. Dettloff, *Die Lehre von der acceptatio divina bei Johannes Duns Scotus mit besonderer Berücksichtigung der Rechtfertigungslehre* (Werl: 1954); A. Wolter, *Duns Scotus on the Will and Morality* (Washington, D.C.: 1986).

⁵⁰ See chapter II above, at nn. 41–45.

⁵¹ See, e.g., I *Lectura* d.3 [balic* XVI: 266]: "Unde dico quod intellectus noster primo cognoscit accidentia, a quibus abstrahit intentionem entis, quod praedicat essentiam substantiae sicut accidentis; et tantum intuitive cognoscit de substantia, et non plus. Hoc sicut dixi, experitur quilibet in se, quod non cognoscit plus de natura substantiae nisi quod sit ens. Totum autem aliud quod cognoscimus de substantia, sunt proprietates et accidentia propria tali substantiae ..."

⁵² The first philosophical difficulty is that we could not know the object's substance by means of the species, which convey to us the accidents. Among the theological difficulties this posed was that the following claims could not be justified (except by fiat): that man has true knowledge (rather than faith or conviction) that transubstantiation occurs, as the accidents remain the same; and that, in the Beatific Vision, man knows God's *essence*.

being" whereas the objects had "simple, real being" (*esse simpliciter et reale*).⁵³ As Olivi had recognized, this posed the difficulty of explaining how an object could first—that is, ever—be known in-and-of-itself (*prime et per se*), since the theory analyzed knowledge of objects as mediated.⁵⁴ Unwilling to follow either Olivi by dispensing with the Baconian multiplication of extramental species, or Henry of Ghent by discounting the objection itself,⁵⁵ Scotus attempted to come to grips with the quandary mediation presented. It introduced the probability that perceptions of extramental reality were not only sometimes, as in the case of sensory illusions, but inevitably inaccurate or approximate (even if harmlessly so), as a result of the *essential* difference of species and their generating objects. In other words, the perspectivist theory was paradoxical: on the one hand it reduced cognition of extramental reality to an inferential process, while on the other treating knowledge as a process of assimilation of knower to object.

Scotus's attempt to solve these difficulties was many-pronged, but his most significant step was to provide the knower with immediate, direct contact with objects by positing an additional, concurrent process of cognition, *both* in the senses and in the intellect: intuitive cognition (*cognitio* or *notitia intuitiva*).⁵⁶ The term "intuition," found in Augustine, had been employed to translate Alhazen's hypothesis of a perceptual act whereby the *ultimum sentiens* scrutinizes the intentions it has received.⁵⁷

⁵³ In addition to nn. 13–14 above, cf. II *Ord.*, d.3, p.2, q.1 [balic * VII: 526], *Opinio propria*: "Praeterea, in intelligibilibus habentibus species intelligibiles, illae species virtute obiectorum—cum intellectu—causant intellectionem, in quibus tamen obiecta habent esse diminutum; igitur si in se haberent tale esse absolutum et esse simpliciter (scilicet actu intelligibile), possent verius causare eundem effectum, quia quidquid potest causari ab aliquo diminute tali in aliquo esse, virtute alicuius simpliciter talis potest—et ab illo—simpliciter causari;" IV *Oxon.* d.1, q.1 (as quoted in Brampton, "Scotus," p. 453): "obiectum cognitum habet esse diminutum; obiectum autem extra habet esse simpliciter et reale." On Scotus's view of images, see e.g., II *Ord.* d.3, p.2, q.2, quoted n. 36 above.

⁵⁴ Above, chapter II, at n. 51.

⁵⁵ Above, chapter II, n. 36.

⁵⁶ At several junctures Scotus indicates that intuitive cognition is simple (i.e. involves the initial perception of such things as are signified by the terms of a proposition), rather than complex (i.e. involving the proposition, or *complexum*, itself). See, e.g.: *Quodl.* q.6 [Vivès XXV: 243]: "Distinguitur de duplici actu intellectus, et hoc loquendo de simplici apprehensione sive intellectione obiecti simplicis ..." The contact that intuition provides with the object is, Scotus specifies, immediate, i.e. unmediated. Thus, in speaking of intellectual intuition at IV *Oxon.* d.45, q.2 [Vivès XX: 305]: "Causa sufficientes sunt obiectum in actuali existentia presens, et intellectus agens et possibilis ... et ita, ut videtur, probatur quod necesse est rem ipsam immediate sufficere ad cognitionem <intuitivam> intellectualem habendam de ipsa, quia solum phantasma non sufficit ad cognitionem intuitivam obiecti quia phantasma repraesentat rem existentem vel non existentem, praesentem vel non praesentem." See also nn. 69, 72–73 below.

⁵⁷ See above, chapter I, n. 69.

Perhaps the term's increased currency in the West from Bacon's generation on was due to the introduction of Alhazen's treatise; but although "intuition" was mentioned by Bacon and used at least as early as Richardus de Mediavilla, the notion of intuitive cognition was still inchoate when Scotus adopted it,⁵⁸ and subsequent medieval readers credited him with its invention.⁵⁹ If their attribution is not precisely accurate, it is indicative of the fact that virtually everyone who employed the terminology to the mid-point of the fourteenth century took Scotus's definition as his starting point.

To do so required interpretation, for the Subtle Doctor himself did not delineate his views on intuitive cognition precisely or consistently. Instead, he seems throughout his teaching career to have developed and changed his views concerning the nature and function of this cognitive event which he had grafted onto the abstractionist model.⁶⁰ Beyond considering the aspects of his discussion that presented medieval thinkers with

⁵⁸ Richardus de Mediavilla, O.F.M., *De humanae cognitionis ratione*: "Visio intellectualis est cognitio non quaecumque, sed intuitiva, non discursiva; immediata, non mediata ... sed cognitio, quam possumus habere de Deo per rationem naturalem, creaturis sensibilibus adiutam, est obscura, non clara," as quoted in Vescovini, *Studi sulla prospettiva*, p. 24, n. 12. The notion of intuitive cognition seems also to have been developed by Vital du Four; see John E. Lynch, "The Knowledge of Singular Things According to Vital du Four," *FrSt* 29 (1969), 271–301; and idem, *The Theory of Knowledge of Vital du Four* (St. Bonaventure, N.Y.: 1972). Between 1277–79 Matthew of Aquasparta (for whom, see above, chapter II, n. 1) already referred to intuitive cognition in these terms (*Quaestiones disputatae de anima separata*, q.4, p. 70): "non est simile de specie in sensu et in intellectu, quoniam species in sensu dicit actualem relationem ad rem sensatam ut est hic et nunc, non sic autem in intellectu. Et ideo ad hoc quod intellectus cognitione intuitiva et per modum visus cognoscat rem ut actu existentem et hic et nunc, necesse est a re ipsa actu immutari et de novo speciem rei recipere sive in eo fieri." Henry of Ghent also uses the term "intuitio;" see chapter II above, n. 29.

⁵⁹ See, e.g., Holcot, below chapter IX, n. 8.

⁶⁰ The starting point for Scotus's teaching on intuitive and abstractive cognition has long been Sebastian Day's *Intuitive Cognition: A Key to the Significance of the Later Scholastics* (St. Bonaventure, N.Y.: 1947). Also pertinent are: John Boler, "Scotus and Intuition: Some Remarks," *The Monist* 49 (1965), 551–70; C.K. Brampton, "Scotus, Ockham, and the Theory of Intuitive Cognition," *Antonianum* 40 (1965), 449–66; R. Dumont, "Scotus' Intuition;" and Thomas F. Torrance, "Intuitive and Abstractive Knowledge: From Duns Scotus to John Calvin," *De doctrina Ioannis Duns Scoti*, in *Studia Scholastico-Scotistica* IV (Rome: 1968), pp. 291–305. It should be noted that each of these studies concentrates principally on intuition, a focus directed by the historiographical concern with the issue of late medieval skepticism (see below, n. 76). The most careful study of the development of the notion of intuition in Scotus's thought is Wolter, "Scotus on Intuition," who traces the following phases: an incipient stage, preserved in the first book of the *Lectura*; a second, reached in discussing angelic cognition in II *Lectura*, where intuition provides knowledge of existence; a third stage, preserved in the Questions on the *Metaphysics*, in which Scotus has decided that some intellectual intuition is attainable in this life; a fourth stage, found in the *Ord.* and *Quodl.*, stressing the non-inferential character of intuition; and a final stage in IV *Ord.* The last two stages are to be taken as the most mature expression of Scotus's views.

major interpretive difficulties, it is neither necessary nor feasible here to recapitulate systematically the effort by modern scholars to establish what Scotus's theory of intuition was, since our concern will be what medieval readers thought it to be. They, it must be remembered, were not methodologically inclined to construe the changes in Scotus's descriptions of or attitudes towards the dichotomy as due to an evolution of his thought; rather, his readers usually ignored or interpreted as inconsistencies such disparities as they found.

Among the consistent elements of Scotus's remarks distinguishing between intuition and abstraction, is his suggestion that the two modes of cognition differ specifically because whereas a "species similar to the [extramental] object" moves one to abstractive cognition, the object present in itself moves one to intuitive cognition.⁶¹ Thus, he also says, the former is indifferent to existence, while intuitive cognition is precisely *of* existence.⁶² Scotus adds a level of complexity beyond his discoverable sources by distinguishing further between "perfect" and "imperfect" intuitions.⁶³ When of an object both present and existing (*praesentialiter existens*), an intuitive cognition is "perfect," according to Scotus.⁶⁴

⁶¹ IV *Oxon.* d.49, q.12 [Vivès XXI: 442]: "Actus abstractivus et intuitivus differunt specie, quia aliud et aliud est ibi movens; hic enim movet species similis rei; ibi autem movet res praesens in se;" III *Ord.* d.14, q.3 (below, n. 65); cf. also II *Lectura* d.3, quoted in Wolter, "Scotus on Intuition," p. 101, n. 27; for the Quodlibetal questions, see *ibid.*, p. 98, n. 8.

⁶² IV *Rep.* d.45, q.2 [Vivès XXIV: 575]: "Cognitio intuitiva non est tantum singularis, in quantum est cognitio intuitiva, sed essentialiter est ipsius naturae existentis ut existens est;" II *Ord.* d.3, p.2, q.2 [bale * VII: 553]: "Et ut brevibus utar verbis, primam <<intellectionem seu cognitionem>> voco 'abstractivam',—quae est ipsius quiditatis, secundum quod abstrahit ab actuali existentia et non-existentia. Secundam, scilicet quae est quiditatis rei secundum eius existentiam actualem (vel quae est rei praesentis secundum talem existentiam), voco 'intellectionem intuitivam'; non prout intuitiva distinguitur contra discursivam (sic enim aliqua 'abstractiva' est intuitiva), sed simpliciter intuitivam, eo modo quo dicimur intueri rem sicut est in se. Istud etiam secundum membrum declaratur per hoc quod exspectamus cognitionem de Deo, qualis possit haberi de eo, ipso—per impossibile—non existente vel non praesente per essentialitatem, sed exspectamus intuitivam, quae dicitur *facie ad faciem*, quia sicut sensitiva est 'facialiter' rei secundum quod est praesentialiter existens, ita et illa exspectatio;" *Quodl.* VII [Vivès XXV: 290]: "Etsi cognitio abstractiva possit esse non existentis aequae sicut et existentis, tamen intuitiva non est nisi existentis ut existens est." See also Day, *Intuitive Cognition*, p. 65; Brampton, "Scotus," pp. 454–55.

⁶³ Scotus may, however, have been influenced by a distinction that William of Ware suggested (without reference to intuition) between "perfect and imperfect" cognition (Vatican Chigi B. viii. 135, f.86va–vb). Arguing there against Henry of Ghent, William insists that habits alone will not suffice to produce "complete, perfect" cognition.

⁶⁴ III *Ord.* d.14, q.3 [ed. Wolter, "Scotus on Intuition:" p. 98 n. 11]: "Loquendo autem de alia cognitione, scilicet intuitiva, quae est de natura vel singulari, ut concernit actualem existentiam, dico quod illa est vel perfecta, qualis est de obiecto ut existens praesentialiter, vel imperfecta, qualis est opinio de futura vel memoria de praeterito ..."

As the requirements of presence and existence appear *prima facie* to be minimal ones for attaining an existential certitude *not* already possible via the multiplication of species, it is hardly surprising that Scotus's additional hypothesis of "imperfect" intuitive cognitions raised substantive problems of interpretation for his readers. The difficulties that the notion of an imperfect intuitive cognition poses for his account are illustrated by the examples that he suggests of such cognitions: an opinion concerning the existence of a future object, or a memory of having had intuitive awareness of an object's existence.⁶⁵ Scotus does not say much concerning imperfect future intuitions, and the best guess may be that he thinks of prophecies as instances.⁶⁶ He sketches more fully his appreciation of the need for imperfect past intuitions for learning; nevertheless, even in his latest work a sympathetic reader may find that the notion of imperfect intuitive cognition retains aspects of the notion of abstractive cognition.⁶⁷

Two further points were the foci of considerable controversy among Scotus's medieval readers and modern commentators alike.⁶⁸ In the first place, Scotus was clear that insofar as cognition of natural objects and man's internal acts are concerned, man does experience both sensitive and intellectual intuitive cognition in this life (*in via*)—not just in the

⁶⁵ Ibid. [ed. Wolter: p. 99 n. 12]: "Et si obiicitur quod ex re praesente non derelinquitur nisi species intelligibilis impressa in intellectu et in parte sensitiva, ut in virtute phantastica, species imaginabiles, hoc falsum est, quia de re praesente non tantum derelinquitur species intelligibilis in intellectu qua cognoscitur sub nulla differentia temporis, sed alia in potentia memorativa. Et istae potentiae cognoscunt obiectum sub alia et alia ratione. Una cognoscit obiectum ut existit praesentialiter, alia cognoscit ipsum ut in praeterito apprehensum ita quod apprehensio praeteriti est immediatum obiectum memoriae et immediatum obiectum illius apprehensionis praeteritae est obiectum mediatum recordationis. Ita etiam praesente aliquo sensibili sensui, potest virtute illius causari in intellectu duplex cognitio, una abstractiva, qua intellectus agens abstrahit speciem quidditatis, ut quidditas est, a specie in phantasmate, quae repraesentat obiectum absolute, non ut existit nunc et tunc; alia potest esse cognitio in intellectu intuitiva, qua obiectum cooperatur intellectui ut existens, et ab hac potest derelinqui habitualis cognitio intuitiva importata in memoria intellectiva, quae non sit quidditatis absolute, sicut fuit alia prima abstractiva, sed cogniti ut existens, scilicet quomodo in praeterito apprehendebatur."

⁶⁶ This is Wolter's opinion, "Scotus on Intuition," p. 82.

⁶⁷ See Wolter, "Scotus on Intuition." Some of Scotus's readers doubted whether imperfect intuitive cognition could be introspectively discerned from abstractive cognitions, and asked whether such intuitions were superfluously posited. Cf. Wodeham, below, chapter X, at n. 25.

⁶⁸ Compare Chatton (Chapter VII, nn. 17, 57–58), Reading (chapter VI, n. 66), Ockham (chapter V, nn. 43–46), and Wodeham (chapter X, n. 19) below on whether Scotus posited intellectual intuitive cognition *in via*. The modern tendency to confuse intellectual and sensitive intuition has served to extend the controversy concerning Scotus's stance *vis-à-vis* the occurrence of intuitive cognition in this life.

afterlife (*in patria*).⁶⁹ He treats as obvious that man has sensitive intuitive cognition and, as in his defense of intelligible species, bases his description of the intellectual process upon the sensitive.⁷⁰ An unequivocal denial of intellectual intuitive cognition in this life would be unexpected, given Scotus's commitment to the principle that the intellect is a more perfect cognitive faculty than the senses. The sensible objects the existence of which one must know by intuitive cognition in order to arrive at scientific knowledge (*scientia*) of contingent reality, are extramental things (*res*). Although at least one of the objects of the intellect, namely God, is not intuitively knowable in this life, according to Scotus there are other intelligibles similarly requisite to scientific knowledge. These include the intellectual soul's own acts—e.g., the will's volitions and the intellect's cognitions.⁷¹ Furthermore, his analysis of the faculties of the soul as in part active, rather than uniformly passive, was not a little supported by the assumption that intuitive cognition occurs in this life.

In the second place, Scotus's commitment to sensitive intuitive cognition was in fact so strong as to make ambiguous by the end of his career, if not sooner, his commitment to cognition by abstraction. For he claims in his *Quodlibeta* that the senses know the object existing immediately in-and-of-itself (*in se*):

I distinguish between the operations: one cognition is *per se* of existence, and it attains the object in [the object's] own actual existence. An example is

⁶⁹ In addition to nn. 16–17, 62 above, see IV *Oxon.* d.49, q.8 [Vivès XXI: 306]: "Quia quod est simpliciter perfectionis in aliquo genere, si competit inferiori in illo genere, competit et superiori; sed cognitio intuitiva competit sensui; ergo multo magis intellectui; ergo, non tantum ipsius quidditatis materialis; nec causate ab ea, est tantum cognitio beatifica. Praeterea, si non haberemus de aliquo cognitionem intuitivam, non sciremus de actibus nostris si insunt nobis; vel non certitudinaliter—de actibus dico intrinsicis—sed hoc est falsum; ergo, etc."

⁷⁰ IV *Oxon.* d.49, q.12 [Vivès XXI: 440]: "Cognitio intuitiva competit sensui circa obiectum suum; ergo et intellectui circa suum." Any references to sensitive cognition must for Scotus be to this life, given his explicit statement that, as the sense is a composite of organ and faculty, with the former no longer functioning after death, sensation ceases with death: cf. IV *Oxon.* d.49, q.11 [Vivès XXI: 419]: "Ad secundum dicendum, quod non est simile, quia sensus non potest esse potentia non organica, vel non potest non esse potentia organica; et ideo non potest elevari ad immateriale apprehendendum, nec etiam visus beati ..."

⁷¹ See, e.g. IV *Oxon.* d.45, q.3 [Vivès XX: 348–49]: "Supposito enim quod intellectus non tantum cognoscat universalia ... sed etiam intuitive cognoscat illa, quae sensus cognoscit ... et etiam quod cognoscit sensationes ... sequitur quod in intellectu possint inveniri omnes conditiones prius dictae pertinentes ad recordari ... Et utrumque probatur per hoc quod <intellectus> cognoscit propositiones contingentes veras, et ex eis syllogizat; formare autem propositiones, et syllogizare proprium est intellectui; illarum autem veritas est de obiectis ut intuitive cognitis, sub ratione scilicet existentiae, sub qua cognoscuntur a sensu." See also IV *Oxon.* d.49, q.11 [Vivès XXI: 418ff.]; also below, nn. 83–88.

vision of color and, commonly, exterior sensation. The other also is cognition of an object, but not as an existent *in se*, for either the object does not exist, or at least the cognition is not of it *as* actually existing: an example is the imagination of color ...⁷²

Such a description of intuitive and abstractive cognition, limited specifically to the intellectual processes, appears earlier in his Oxford *Sentences* commentary, where he proceeds by a similar analogy:

And there is in the intellect a distinction between intuitive and abstractive intellection, just as in the sensitive part [of the soul] there is a distinction between the act of vision and the act of the phantasy ...⁷³

Among the significant interpretive problems that Scotus's medieval readers saw in this analogy—especially as presented in the *Quodlibetal* version—were these: first, does Scotus mean that the cognitions are really distinct and, if so, do they differ on the part of the object (*ex parte obiecti*) or solely in the manner of knowing the object? At issue is the claim that the two cognitions have precisely the same object. Second, does Scotus assign temporal and causal priority to intuitive cognition as he does to external perception? A third problem that is bound to occur to anyone who assumes that species cannot be the means by which cognition is effected, without also becoming *what* is known, is whether these passages rule out species in the medium that in fact intervenes between object and percipient. For if intuitive cognition is of an object's existence when present in-and-of-itself, would not species, as representatives, block or hinder direct attainment of the object?

Scotus himself seems not to have considered whether the species blocked direct, i.e. intuitive, cognition of the object, but the issue was soon to be raised, and those who adopted his dichotomy were to struggle with the description of external sensation as intuitive. One solution was to defend intuitive cognition of species; another was to evade the difficulty by referring to Scotus's dictum that the species was not a partial *cause* of

⁷² *Quodl.* q.13 [Vivès XXV: 521]: "Distinguo de operatione ... Aliqua ergo cognitio est per se existentis, sicut quae attingit obiectum in sua propria existentia actuali. Exemplum de visione coloris, et communiter in sensatione sensus exterioris. Aliqua etiam est cognitio obiecti, non ut existentis in se, sed vel obiectum non existit, vel saltem illa cognitio non est eius, ut actualiter existentis. Exemplum, ut imaginatio coloris, quia contingit imaginari rem quando non existit, sicut quando existit. Consimilis distinctio probari potest in cognitione intellectiva."

⁷³ I *Ord.* d.1, p.1, q.2 [balic * II: 23–24]: "Secundo sic: Visio est existentis ut existens est et ut praesens est videnti secundum suam existentiam; et secundum hoc distinguitur visio ab intellectione abstractiva, quae potest esse non-existentis, vel existentis non in quantum se praesens est; et est in intellectu ista distinctio inter intellectionem intuitivam et abstractivam sicut in parte sensitiva est distinctio inter actum visus et actum phantasiae."

perception, but a prior *effect*. This dictum did not, however, carry much conviction as even Scotus himself ignored it when describing vision.⁷⁴ Indeed, this opened the further question of the Subtle Doctor's understanding of the relation of species to perceptual acts; thus his categorization of the species in the senses as "a certain quality" in the same breath as his identification of it as "the vision itself," was to become a *locus classicus* both for those who denied the existence of species and for those who insisted upon their necessity.⁷⁵

Intuitive Cognition and Existential Certainty

Perhaps the most stubborn truism of twentieth-century accounts of late medieval scholastic philosophy is that, beginning with Duns Scotus, theologians became determined skeptics in epistemology.⁷⁶ It is therefore important to recognize one of the functions Scotus most explicitly gave *notitia intuitiva* within his opus: for him, intuitive cognition made possible existential certainty. Thus, Scotus insists:

However, there can also be such an intellectual cognition, which is called 'intuitive;' otherwise the intellect would not be certain concerning the existence of any object. Nor can this intellectual intuition (or intuitive intellection) be had by means of a species present [to the intellect], because the species represents indifferently an existent or non-existent thing.⁷⁷

⁷⁴ For a defense of the intuitive cognition of species, see Crathorn, chapter IX below, at n. 69; that species are only a prior occasion, see Reading, chapter VI below, at n. 68. Among the instances where Scotus refers to species as a partial cause one is quoted above, n. 49.

⁷⁵ See nn. 14, 77; also IV *Oxon.* d.45, q.3 [Vivès XX: 329]: "Sensitiva <potentia> non percipit primo nisi qualitatem aliquam sensibilem ... sed nec recipit speciem propriam, nisi alicuius talis qualitatis ..."

⁷⁶ This view still underlies such recent studies as Leonard Kennedy, "Philosophical Scepticism in England in the Mid-Fourteenth Century," *Vivarium* 21 (1983), 35–57. Although already a common assessment of fourteenth-century thinkers by the late nineteenth century, the characterization of the period after the development of the notion of intuitive cognition as an age of skepticism owes its continued existence especially to the pioneering studies of Michalski. See particularly, Konstanty Michalski, "Le criticisme et le scepticisme dans la philosophie du XIVe siècle," *Bulletin de l'Academie Polonaise des Sciences et des Lettres. Classe d'histoire et de philosophie* 1925 [repr. in Kurt Flasch, ed. *La Philosophie au XIVe siècle* (Frankfurt am Main: 1969), pp. 67–150]; and idem, "Les sources du criticisme et du scepticisme dans la philosophie du XIVe siècle," 1924 [repr. in *ibid.*, pp. 35–66].

⁷⁷ IV *Oxon.* d.45, q.2 [Vivès XX: 305]: "Talis autem cognitio, quae dicitur intuitiva, potest esse intellectiva, alioquin intellectus non esset certus de aliqua existentia alicuius obiecti. Sed nec ista intuitio intellectiva, vel intellectio intuitiva haberi potest per speciem praesentem, quia illa repraesentat rem indifferenter existentem vel non-existentem." Clearly, *cognitio intuitiva* is crucial also to Scotus's theology of the Beatific Vision, and to other theological issues that focus on knowledge of God's essence, for which see Wolter, "Scotus on Intuition."

Far from offering evidence of skepticism, the concern Scotus manifested to describe the foundations of existential certainty, and his recognition of the inability of the Baconian theory adequately to provide such a foundation, bespeak an anti-skeptical commitment. It seemed incontrovertible to Scotus that existential certainty was in fact experienced in this life. The question for him was not *whether* one could be certain of existence, either extra- or intra-mental, but rather to explain the means by which that certitude came to be present in the natural course of cognition.⁷⁸

The problem of existential certitude was nevertheless relatively peripheral in Scotus's epistemology, if only because he saw no insuperable threat to our ability to distinguish which of our experiences yield existential certitude, even in the face of explicit arguments against its very possibility by route of the innate capacity of the created soul. That existential certitude was impossible by the soul's unaided cognitive faculties had been the conclusion of Henry of Ghent, who offered as evidence sense illusions and dreaming.⁷⁹ Taking up his arguments, Scotus recites the difficulty that species allegedly present:

The third reason [is that] no one has certain and infallible cognition (*notitiam*) of the truth, unless he has a way in which he can discern the true from what seems true (*verisimile*), because if he cannot discern the true from the false or from what seems true, he can be in doubt [as to whether] he is deceived ... [Henry's] proof of the minor premise: such a [sensible] species can represent itself as itself, or otherwise as an object, as is [the case] in dreams. If it represents itself as the object, this is falsehood; if as itself, this is truth. Therefore through such a species there is not had sufficient [means of] distinguishing when it represents itself as itself, from when it represents itself as the object, and thus there is not sufficient means of distinguishing the true from the false.⁸⁰

⁷⁸ As Day correctly recognized; cf. *Intuitive Cognition*, pp. 83–88.

⁷⁹ For the context of Henry's discussion, see above, chapter II, at nn. 29–35. Scotus, I *Ord.* d.3, p.1, q.4, "Utrum aliqua veritas certa et sincera possit naturaliter cognosci ab intellectu viatoris absque lucis increatae speciali illustratione" [balic * III: 123–72]. This question is concerned exclusively with the opinion of Henry, carefully set out at length: "(p. 126) In ista quaestione est opinio una talis, quod intentiones generales habent inter se ordinem naturalem. De duabus, quae sunt ad propositum, videlicet de intentione entis et veri, loquamur ... sequitur quod ens possit cognosci sub ratione entitatis licet non sub ratione veritatis ... (pp. 127–28) Sed si loquamur de cognitione veritatis, respondetur quod sicut est duplex exemplar, creatum et increatum, secundum Platonem in *Timaeo* ... ita duplex est conformitas ad exemplar et duplex veritas. Una est conformitas ad exemplar creatum, et isto modo posuit Aristoteles veritates rerum cognosci per conformitatem earum ad speciem intelligibilem; et ita videtur Augustinus ponere VIII *De Trinitate* ... Sed quod per tale exemplar, acquisitum in nobis, habeatur omnino certa et infallibilis notitia veritatis de re, hoc videtur omnino impossibile,—et hoc probatur triplici ratione, secundum istos."

⁸⁰ *Ibid.* [pp. 129–30]: "Tertia ratio: notitiam veritatis nullus habet certam et infallibilem nisi habeat unde possit 'verum' discernere a verisimili, quia si non possit discernere

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Henry had proposed an additional, veridical species infused by divine illumination against which the intellect could compare the species received from the object to determine whether they represented their extramental objects as they were.⁸¹ Scotus found Henry's explanation incoherent, and the hypotheses of divine illumination and infused species unnecessary, especially if the existence of intelligible species were granted.⁸² In Scotus's eyes, Henry's arguments bore, rather, on three issues: the reliability of sense experience, the independence of the intellect from the senses, and the intellect's awareness of its own acts.

Scotus's treatment of these issues overlaps. With Aristotle, he insists that the intellect does know with certainty "principles known in-and-of-themselves" (*principia per se nota*). As he explains, the "terms of such principles are identical, such that the one evidently includes the other necessarily. Thus the intellect has within itself when compounding the terms [together] the necessary cause of the conformity of that act of compounding and the terms themselves, from the fact that it apprehends those terms."⁸³ Therefore, he continues, the intellect cannot apprehend the terms and the affirmative proposition (*compositio*) formed by composing

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'verum' a falso vel a verisimili, potest dubitare se falli; sed per exemplar praedictum creatum non potest discerni 'verum' a verisimili; ergo etc.—Probatio minoris: species talis potest repraesentare se tamquam se, vel alio modo se tamquam obiectum, sicut est in somniis. Si repraesentet se tamquam obiectum, falsitas est, si se tamquam se, veritas est. Igitur per talem speciem non habetur sufficiens distinctivum, quando repraesentat se ut se, vel ut obiectum, et ita nec sufficiens distinctivum veri a falso;" see also pp. 134–35. Compare this summary with that of Guillelmus de Ware, above nn. 8–9.

⁸¹ Ibid. [pp. 130–31]: "Ex istis concluditur quod certam scientiam et infallibilem veritatem si contingat hominem cognoscere, hoc non contingit ei aspiciendo ad exemplar a re per sensus acceptum, quantumcumque sit depuratum et universale factum, sed requiritur quod respiciat ad exemplar increatum ... Qualiter autem possit esse ratio cognoscendi et non 'cognitum', ponitur exemplum, quia sicut radius solis quandoque derivatur quasi obliquato aspectu a suo fonte, quandoque directo: quod videtur in radio primo modo derivato, licet sol sit ratio videndi, non tamen ut visus in se,—eius autem quod videtur secundo modo in radio, sol est ita ratio cognoscendi quod etiam est cognitum. Quando igitur ista lux increata intellectum quasi directo aspectu illustrat, tunc ut 'visa' est ratio videndi alia in ipsa. Intellectum autem nostrum pro statu viae quasi obliquato aspectu illustrat, et ideo est intellectui nostro ratio videndi non 'visa.'" For Henry, see *SQO* a.1, q.3 [9v–10r].

⁸² Ibid., pp. 153, 157–59, concluding [p. 159]: "Si dicas quod lux increata cum intellectu et obiecto causet istam veritatem sinceram, haec est opinio communis, quae ponit lucem aeternam sicut 'causam remotam' causare omnem certam veritatem. Vel ergo erit ista opinio inconueniens, vel non discordabit a communi opinione."

⁸³ Ibid. [pp. 138–39]: "Quantum ergo ad certitudinem de principiis, dico sic: termini principiorum per se notorum talem habent identitatem ut alter evidenter necessario alterum includat, et ideo intellectus, componens illos terminos, ex quo apprehendit eos—habet apud se necessariam causam conformitatis illius actus componendi ad ipsos terminos quorum est compositio, et etiam causam evidentem talis conformitatis; et ideo necessario patet sibi illa conformitas cuius causam evidentem apprehendit in terminis."

them, without there being a conformity of the proposition to the extramental objects signified by the terms, "just as there cannot be one and another white [object] without there being a likeness."⁸⁴ Inasmuch as the truth of the proposition lies in this conformity between the proposition and its extramental terms, Scotus concludes that there therefore cannot be a composition of such terms without it being true; hence the intellect's perception of the proposition and of its [extramental] terms entails the perception of its truth.⁸⁵

Just as the intellect is certain of propositions known *per se*, so it is certain of those perfect acts that lie within the soul's power, such as that one understands, or hears, or is awake. This certitude extends to illusion, Scotus claims:

Although because an illusion may be brought about in the medium, or in the [sense] organ, or many other ways, there may not be certainty whether an extramental object that I see is at such a distance and in such a subject; nevertheless there is certitude that I see even if the illusion is made in the [sense] organ. The latter most of all seems to be an illusion, that is, when in the organ itself the act that is naturally brought about by a present object, is brought about without a present object.⁸⁶

Similarly, Scotus claims, such visual illusions as afterimages or those that

⁸⁴ Ibid. [p. 139]: "Igitur non potest in intellectu apprehensio esse terminorum et compositio eorum quin stet conformitas illius compositionis ad terminos, sicut stare non potest album et album quin stet similitudo." It should be noted that for Scotus (here and below, n. 89) as for Henry (above chapter II, at nn. 22–27), the term "compositio," because it clearly refers to the product of the psychological process of "compounding (composing) and dividing" concepts, is a synonym for "affirmative mental proposition." See also above, n. 29 and, on "compositio:" Maierù, *Terminologia*, pp. 499–507, especially 503–04. J. V. Brown, "Scotus on the Possibility," pp. 166–67 argues that Scotus's notion of "compositio" underwent refinement between the writing of the *Lectura* and *Ord.*

⁸⁵ Ibid. "Haec autem conformitas compositionis ad terminos est veritas compositionis, ergo non potest stare compositio talium terminorum quin sit vera, et ita non potest stare perceptio illius compositionis et perceptio terminorum quin sit perceptio conformitatis compositionis ad terminos, et ita perceptio veritatis, quia prima percepta evidenter includunt perceptionem istius veritatis;" cf. also p. 157. From certitude of first principles follows certitude of conclusions drawn from them [p. 140]: "Habita certitudine de principiis primis, patet quomodo habebitur de conclusionibus illatis ex eis, propter evidentiam formae syllogismi perfecti,—cum certitudo conclusionis tantummodo dependeat ex certitudine principiorum et evidentiā illationis."

⁸⁶ Ibid. [pp. 144–45]: "De tertiis cognoscibilibus, scilicet de actibus nostris, dico quod est certitudo de multis eorum sicut de primis et per se notis ... (p. 145) Et sicut est certitudo de 'vigilare' sicut de per se noto, ita etiam de multis aliis actibus qui sunt in potestate nostra (ut 'me intelligere,' 'me audire'), et de aliis qui sunt actus perfecti. Licet enim non sit certitudo quod videam album extra positum vel in tali subiecto vel in tali distantia, quia potest fieri illusio in medio vel organo, et multis aliis viis, tamen certitudo est quod video etiam si illusio fiat in organo (quae maxime illusio videtur, puta quando actus fit in ipso organo non ab obiecto praesente, qualis natus est fieri ab obiecto praesente), et ita si potentia haberet actionem suam posita tali positione, vere esset illud ibi quod visio dicitur, sive sit actio sive passio sive utrumque."

occur by the impression of sensibles outside the visual organ proper—namely the point where the optic nerves meet—are indeed visions, even if they must be qualified as "not the most perfect." Scotus evidently does not think this is a serious difficulty, for he claims that in most cases the evidence from one sense can be checked against what he terms the "judgment" of the other senses by which the object is perceived.⁸⁷

When the judgments of the external senses themselves diverge, certitude can still be had by appeal to the ultimate independence of the intellect from sense. Thus, the intellect can compare the (illusory) sense-experience to the propositions that it knows *per se*. These, Scotus states, are "more certain than any judgment of the sense ... such that the intellect always corrects the acts of the senses with such a proposition." If, for example, to the sense of sight a stick partly submerged in water appears broken, the truth can be arrived at by the intellect's recourse to the proposition "nothing that is harder can be broken by the touch of something softer yielding to it." Even though this *per se nota* may be composed of terms received by erring senses, the intellect cannot doubt its truth, Scotus claims; as a result, on his view deception of the senses does not inevitably lead to intellectual deception.⁸⁸

⁸⁷ Ibid. [pp. 145–46]: "Si autem illusio fieret non in organo proprio sed in aliquo proximo, quod videtur organum—sicut si non fieret illusio in concursu nervorum, sed in ipso oculo fieret impressio speciei qualis nata est fieri ab albo—adhuc visus videret, quia talis species, vel quod natum est videri in ea, videretur, quia habet sufficientem distantiam respectu organi visus quod est in concursu nervorum istorum, sicut apparet per Augustinum XI *De Trinitate* cap. 2, quod reliquiae visorum remanentes in oculo oculis clausis videntur, et per Philosophum *De Sensu et sensato*, quod ignis qui generatur ex elevatione oculi violenta et multiplicatur, usque ad palpebram clausam videtur. Ista verae sunt visiones, licet non perfectissimae, quia hic sunt sufficientes distantiae specierum ad organum principale visus. Sed quomodo habetur certitudo eorum quae subsunt actibus sensus, puta quod aliquid extra est album vel calidum, quale apparet? Respondeo. Aut circa tale cognitum eadem opposita apparent diversis sensibus, aut non, sed omnes sensus cognoscentes illud, habent iudicium de eo." For Scotus's reference to the "judgment" of the senses, see the following note; for the significance of granting that these events are visions, "licet non perfectissimae," see Aureol, chapter IV below, at nn. 63–64.

⁸⁸ Ibid. [p. 147]: "Si autem diversi sensus habeant diversa iudicia, de aliquo viso extra—puta visus dicit baculum esse fractum cuius pars est in aqua et pars in aere; visus semper dicit solem esse minoris quantitatis quam est, et omne visum a remotis esse minus quam sit—in talibus est certitudo, quid verum sit et quis sensus erret, per propositionem quiescentem in anima, certiore omni iudicio sensus, et per actus plurium sensuum concurrentes, ita quod semper aliqua propositio rectificat intellectum de actibus sensus, quis sit verus et quis falsus, in qua propositione intellectus non dependet a sensu sicut a causa sed sicut ab occasione. Exemplum. Intellectus habet istam propositionem quiescentem: 'nullum durius frangitur tactu alicuius mollis sibi cedentis'. Haec est ita per se nota ex terminis quod, etiam si essent accepti a sensibus errantibus, non potest intellectus dubitare de illa, immo oppositum includit contradictionem.

Exemplum: si ratio 'totius' et ratio 'maioritatis' accipiatur a sensu, et intellectus componat istam 'omne totum est maius sua parte', intellectus virtute sui et istorum ter-

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In effect the Subtle Doctor underestimates the difficulties posed by Henry's arguments. For example, Scotus grants that the terms of a mental proposition that he considers to be a proposition known *per se* have as their "prior occasion," although not their cause, the sense perceptions of which these terms are the images.⁸⁹ To anyone unconvinced by the distinction between the prior occasions and causes, the attempt to defeat Henry's claim that sense perception is inherently unreliable by resort to premises known *per se* as correctives is arguably an instance of *petitio principii*. Further, if one inquires how the mind forms such analytical premises from terms, one discovers that for Scotus only existence—and then only via intuitive cognition—is known in and of itself (*per se*) rather than through its accidents.⁹⁰ The circularity of this argument is more than anything else an indication why the establishment of existential certitude does not consistently occupy Scotus's attention: he thinks that Henry's arguments have a straightforward solution on Aristotelian lines.

When Scotus's early students and readers began to reconsider his response to Henry, one result was an effort by some to reduce such quasi-axiomatic principles to a minimum, which neither Aristotle nor Scotus had seen a need to do.⁹¹ This approach was itself a sign of a more rigorous appreciation of the epistemological issue of certitude, for which Scotus's thought was the major catalyst, and for which the notion of intuition attained a central importance. Its great value to succeeding thinkers lay increasingly in its role as the means by which existential certitude could be acquired. One measure of the significance of that role is that, once the problem of sensory illusion was brought to the center of epistemological discussion, most scholars required intuitive cognition to dissolve the problem presented by illusions, even though Scotus himself had not.⁹² Hence, despite the difficulties presented by his innovation in

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minorum assentiet indubitanter isti complexioni, et non tantum quia vidit terminos coniunctos in re—sicut assentit isti 'Socrates est albus', quia videt terminos in re uniri. Immo, dico quod si omnes sensus essent falsi, a quibus accipiuntur tales termini, vel quod plus est ad deceptionem, aliqui sensus falsi et aliqui sensus veri, intellectus circa talia principia non deciperetur, quia semper haberet apud se terminos qui essent causa veritatis."

⁸⁹ Ibid. [pp. 140–41]: "Sed numquid in ista notitia principiorum et conclusionum non errabit intellectus, si sensus omnes decipiantur circa terminos? Respondeo—quantum ad istam notitiam—quod intellectus non habet sensus pro causa, sed tantum pro occasione, quia intellectus non potest habere notitiam simplicium nisi acceptam a sensibus; illa tamen accepta, virtute sua potest simul componere simplicia,—et si ex ratione talium simplicium sit complexio evidenter vera, intellectus virtute propria et terminorum assentiet illi complexioni, non virtute sensus a quo accipit terminos exterius."

⁹⁰ See nn. 71, 72, 83–88 above.

⁹¹ As Pinborg remarks concerning Aristotle, *Logik und Semantik* p. 25; see below, chapter IX (at nn. 92–98).

⁹² In Scotus's discussion of the common sense, *De anima* q.9, there is one further dis-

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grafting intuition onto the process induced by species, the dichotomy of intuitive and abstractive cognition was rapidly and widely adopted by Parisian-trained theologians. Within a decade of the Subtle Doctor's death, its acceptance on the other side of the English Channel was also ensured. That is not to say that his understanding was uniformly employed; nor, indeed, that all who employed the terminology of intuitive and abstractive cognition considered Scotus's an adequate delineation of the modes of cognition; nevertheless, the history of medieval theories of knowledge from ca. 1310 can be traced as the development of this dichotomy.

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cussion of illusion (again, without reference to intuition) which was important for subsequent developments [Vivès III: 517–18]: "Alia via Avicennae sumitur ex eo, quod ad sensum videmus, scilicet quod si attendamus ad guttas pluviae sibi mutuo succedentes, apparebit nobis una linea de omnibus illis guttis quasi continua. Similiter, si moveatur circulariter aliqua virga in cuius summitate sit color aliquis, apparebit nobis circulus quidam in summitate ejus propter circularem motum percelerem summitatis, vel conii illius virgae. Ex hoc sic potest argui: Impossibile est sensum particularem percipere suum sensibile ubi non est; sed summitas virgae motae non est semper in eodem loco, in quo apparet circulus, quia circulus apparet quasi immobilis, illa autem semper movetur, simile est de guttis; ergo ille circulus in illa linea non percipietur a sensu particulari; ergo a communi. Simile est de homo existente in navi mota, qui iudicat ad sensum ripam moveri."

**PART TWO—
INTERPRETATION AND RECONCEPTION**

Chapter Four— Peter Aureol

Few visitors to the upper church of St. Francis at Assisi would overlook the famous fresco cycle depicting the life of the founder of the Franciscan Order, but most do stroll without pause past the fifteenth-century intarsia portraits in the choirstalls. There, in the company of saints, of St. Francis' original companions, and of Franciscan popes, are seven friars whose reputation in the order began with their eminence as theologians at the major late thirteenth- and early fourteenth-century *studio generalia*. The portrait of Peter Aureol (d.1322) among these theologians remains to remind us of his numerous late-medieval readers' esteem.¹

By contrast, few modern scholars have recognized the quality of Aureol's thought.² Instead, it has become customary in discussions of fourteenth-century epistemology to skip from Duns Scotus to William of Ockham without even a nod in Aureol's direction, except perhaps to classify him as a "nominalist" whose teaching proceeded, in general, along the

¹ The portraits on the thirty-nine choirstalls, which the author examined in June 1980, include the following scholars: Nicholas de Lyra, Franciscus Meyronnes, Mattheus de Aquasparta, Petrus Aureoli, S. Bonaventura, Alexander de Hales, Johannes Duns Scotus.

² Valuable studies of Aureol's thought include Paul Vignaux, *Justification et prédestination*; Stephen A. Brown, "The Unity of the Concept of Being in Peter Aureol's *Scriptum* and *Commentarium*," Diss., Institut Supérieur de Philosophie, Université Catholique de Louvain, 1964; and Jan Pinborg, "Zum Begriff der Intentio Secunda, Radulphus Brito, Hervaeus Natalis, und Petrus Aureoli in Diskussion," *CIMAGL* 13 (1974), 49–59 (repr. in Pinborg, *Medieval Semantics*).

Other important, if generally unsympathetic studies include: R. Dreiling, *Der Konzeptualismus des Petrus Aureoli* BGPTM XI, 6 (1913); P. Boehner, "Notitia Intuitiva of Non Existents According to Peter Aureoli, O.F.M. (+ 1322)," *FrSt* 8 (1948), 388–415; Sofia Vanni-Rovighi, "L'Intenzionalità della conoscenza secondo P. Aureolo," in *L'homme et son destin, d'après les penseurs du Moyen-Age* (Actes du Premier Congrès international de philosophie médiévale) (Louvain/Paris: 1960), pp. 673–80; A.F. Prezioso, "La teoria dell'essere apparente nella gnoseologia di Pietro Aureolo, O.F.M. (+ 1322)," *Studi Francescani* 46 (1950), 15–43; Prezioso, "L'intuizione del non-esistente in Pietro Aureolo e in G. Ockham e i prodromi del fenomenismo moderno," *Rassegna di scienze filosofiche* 2 (1968), 116–36; Julius R. Weinberg, "The Problem of Sensory Cognition," in idem., *Ockham, Descartes, and Hume* (Madison, Wisconsin: 1977), 33–49; Marilyn Adams, "Ockham's Nominalism and Unreal Entities," *Philosophical Review* 86 (1977), 144–76; R.G. Wengert, "The Sources of Intuitive Cognition in William of Ockham," *FrSt* 41 (1981), 415–47; and, most recently, Tiziana Suarez-Nani, "'Apparentia' und 'Egressus.' Ein Versuch über den Geist als Bild des trinitarischen Gottes nach Petrus Aureoli," *Philosophisches Jahrbuch* 93 (1986), 39–60. Other studies which consider the response of later scho-

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lines his more famous confrères laid out.³ Such characterizations of Aureol's thought are inadequate, not least in the implicit assumption that Scotus's was *solely* responsible for shaping the younger Franciscan's thought.

The Subtle Doctor's lectures at Paris on Lombard's *Sentences* between 1303 and 1308 were the most important, but by no means the only great commentaries presented to Parisian theological students during those opening years of the fourteenth century. Although Scotus's lectures eventually eclipsed those of most of his fellow bachelors, two at least exerted a significant influence upon the next scholarly generation. These were the commentaries of two Dominicans, Hervaeus Natalis and Durand of Saint Pourçain. The former, who commented on the *Sentences* at Paris either at the same time as or the year before Scotus began to do so, marked the end of a generation whose noetic was unaffected by the dichotomy of intuitive and abstractive cognition. For Hervaeus as for Scotus, Henry of Ghent's epistemology inspired refutation, most extensively in the treatise *De quatuor materiis contra Henricum de Gandavo*, possibly composed before lecturing at Paris on the *Sentences* for the first time (1302–03), or during the three years teaching theology elsewhere,⁴ but in any event before Hervaeus, as regent master of the Parisian Dominicans, encountered Durand's views on species.⁵ The latter, whose Parisian teaching

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lastics to Aureol will be cited in the following chapters.

³ In doing so, scholars have overlooked the conclusions Vignaux drew (study cited above, n. 2) as, for example, do Gordon Leff, *The Dissolution of the Medieval Outlook* (N.Y./London: 1976), pp. 33–35; John Boler, "Intuitive and Abstractive Cognition," CHLMP, 460–78.

⁴ Bruno Decker, *Die Gotteslehre des Jakob von Metz: Untersuchungen zur Dominikanertheologie zu Beginn des 14. Jahrhunderts*, BGPTM 42/1 (1967) pp. 73–77 evaluates earlier attempts to establish the curriculum vitae of Hervaeus (Hervé Nedelec), and I find persuasive his arguments dating the Paris bachelor lectures to 1302–03, positing further lectures in accordance with Dominican statutes at provincial *studia* until 1307, when Hervaeus received the licentiate at Paris and shortly thereafter became *magister actu regens* at Paris, a position in which he remained for two academic years. Decker believes the final redaction of Hervaeus's *Sentences* occupied the regent master, and was completed in 1309. For Hervaeus's position as a Thomist and career after Paris, see also Frederick J. Roensch, *Early Thomistic School* (Dubuque: 1964), pp. 106–17; Edouard Wéber, "La Démonstration de l'Existence de Dieu chez Hervé de Nedellec et ses confrères precheurs de Paris," in Kaluza et Vignaux, eds., *Logique, Ontologie*, 25–41.

⁵ Neither Hervaeus's *Sentences* commentary (I have employed the edition of Paris 1647) nor the *De quatuor materiis* (which I have read in Firenze, B.N. conv. soppr. B.1.569 77ra–100vb), shows familiarity with Durand's attacks on species, which Hervaeus later opposed. Moreover, his views on intelligible species and intellectual acts remained consistent within these two works, thus confirming that both are his.

This cannot be said of the text upon which most recent discussions of Hervaeus's epistemology have been based (as e.g. Vescovini, *Studi*, pp. 143–44), namely the eleventh question of the fourth *Quodlibet* attributed to Hervaeus, "utrum cognitio intuitiva requirat

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probably began in the month or two before Scotus died in Cologne, and continued while Hervaeus was a regent master in Paris, revealed the early impact of Scotus's thought beyond Franciscan lecture halls.⁶ In the eyes of their contemporaries, both Hervaeus and Durand were important scholars in their own right, as their later careers and the attention of their more junior colleague, Peter Aureol, attest.⁷

The years in which Hervaeus and Durand taught, and Aureol studied theology, were ones in which scholars increasingly accepted the perspec-

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necessario presentiam rei cognite." The title itself demonstrates that the question depends upon the distinction between intuition and abstraction that I find absent from Hervaeus's other work. Although other *Quodlibeta* attributed to Hervaeus by medieval copyists have proven not to be his, as Glorieux (*Litt. Quodl.* I, 200–01) noted, he believed the fourth to be indubitably Hervaeus's even though it depended, in Glorieux's words, "upon the thought of Peter Aureol" (*Litt. Quodl.* II, 138), and thus must postdate the latter's teaching.

By 1316, however, when Aureol began to lecture at Paris, Hervaeus had been Prior Provincial of the Dominicans' French province for seven years, spending most of his time not in Paris, but elsewhere, including lengthy stays at Avignon. Hervaeus would not have been sufficiently "regent" in Theology to participate regularly in disputations at Paris, although his magisterial degree gave him the right to do so there and at other *studia*. The most likely place for him to have engaged in public disputations after leaving Paris was where it would most help his career: at the Dominicans' *studium generale* attached to the papal curia at Avignon. Peter Aureol's *Sentences* was available there at least from 1317 (see n. 11, below). If it provoked a response from Hervaeus in the form of this quodlibetal question on intuition, it is surprising that the question is determined *in favor* of Aureol's own position—one not easily mastered by any scholar unfamiliar with discussions of intuition and abstraction.

A simpler hypothesis is that Aureol himself may have authored the question, and thus that it has been falsely ascribed to Hervaeus.

⁶ Decker, *Jakob von Metz*, pp. 80–87 correcting earlier dating by Josef Koch (*Durandus de S. Porciano O.P.* BGPTM 26 [1927]) and others, argues that Durand probably heard Hervaeus's Parisian lectures in 1302–03, and began reading his own lectures in some other Dominican studium before returning to Paris for the academic year 1307–08, where he lectured again on the *Sentences* in 1308–09. On this chronology, what Koch termed the "First Redaction" of Durand's commentary preserves pre-Parisian lectures; the "Second Redaction" is a *Reportatio* of the 1308–09 lectures, while the "Third Redaction" (printed in the Venice 1571 edition) was corrected in accordance with the demands of the commissions investigating his works at Avignon.

In the Third Redaction of his commentary, Durand adopts as his own the definition of intuitive and abstractive cognition offered by Scotus; cf. I *Sent.*, prol., q.3 [Venice: 1571, ff. 6vb–8ra], esp. fol. 7rb–va: "Similiter experimur in nobis, quod omnem cognitionem abstractivam intellectivam precedit cognitio intuitiva sensitiva ... Prima cognitio necessario est entis in actu; sed talis cognitio (7va) necessario est intuitiva ..."

⁷ Hervaeus, after serving 1309–18 as Prior Provincial of the French Province, was named Master General of the Dominicans in June 1318, remaining in that post until his death in 1323. Although for several years beginning in 1314 Durand suffered through a process at Avignon (under Hervaeus's direction), which condemned numerous propositions from the *Sentences* lectures, he evidently cleared his name by accepting the commission's results. Durand died after being raised to a series of bishoprics, and the future Pope Benedict XII referred to him as "bone memorie Durandus episcopus Meldensis, famosus et antiquus magister in theologia" (quoted in G. Cremascoli, "Il 'Libellus de visione Dei'")

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tivist account of vision,⁸ even as the ontological status of the *species in medio* remained unresolved, and indeed a question of considerable controversy in the Theological and Arts Faculties alike. In neither Faculty during the decade did there emerge a single "common opinion" (*opinio communis*) to which the academic community as a whole could subscribe, but what one scholar has termed the "knotting together of *intentiones*, intentional being, the *ens rationis*, and theory of perception"⁹ achieved, at least, a new pattern in the work of Peter Aureol. As one would expect from his presence in Paris as a student during part of the decade, his commentaries on the *Sentences* owed much not only to those of other theologians, but also to such scholars in Arts as Radulphus Brito and Jean de Jandun, whose logical treatises and commentaries on Aristotle shaped the understanding of intentions and species at other continental *studia*, too.¹⁰ Still, Aureol's lectures on the *Sentences*, offered first at the Franciscan *studia*, of Bologna and Toulouse (ca. 1312–16) and, finally, in revised form at Paris during the academic years 1316–18,¹¹ sufficiently refocused discussions of cog-

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di Durando di S. Porziano," *Studi medievali* 3 ser., 25 [1984], 393–442, p. 397).

⁸ This is evident not only from the increased citation of authors by then generally termed "perspectivi" in the commentaries of Hervaeus, Durand, and Aureol themselves, but also from Jean of Jandun's list of disciplines studied in the *vico Straminum* (*rue de Fouarre*), the center of instruction for the Arts Faculty: "In urbe urbium Parisius, in vico vocato Straminum, non solum septem artes liberales exercitantur ... Amplius nonne dogmatizatur in vico philosophie infallibilis et incontradicibilis doctrine mathematice certitudo per quam numerorum et figurarum tam secundum se quam per celestes magnitudines, sonos armonicos, ac *visuales radios* contractorum mirabilia accidentia indicantur," quoted (with my italics) from Guy Beaujouan, "L'Enseignement de l'arithmétique élémentaire à l'Université de Paris aux XIIIe et XIVe siècles," in *Homenaje a Millas Vallicrosa* (Barcelona: 1954), vol. I, p. 101.

⁹ J. Pinborg, "Zum Begriff," pp. 49–50.

¹⁰ See Pinborg, "Zum Begriff," idem, "Radulphus Brito's Sophism on Second Intentions," *Vivarium* 13 (1975), 119–34; idem, "A Note on Some Theoretical Concepts of Logic and Grammar" (1975), [repr. in Pinborg, *Medieval Semantics*]; Jean Jolivet, "L'Intellect et le Langage selon Radulphus Brito," in Kaluza et Vignaux, eds., *Logique, Ontologie*, pp. 83–95. In addition to the texts Pinborg considers, important discussions include Jean of Jandun's *De anima* commentary (Venice: 1587 edition); Durand's II *Sent.* d.3, q.6 (q.5 in Vat. lat. 1072, fols. 135va–136va); and Hervaeus's II *Sent.* d.13, q.2, and d.17, q.2.

¹¹ Because Stephen Brown's "Unity of the Concept" is not easily accessible, scholars have had to rely primarily upon the dating of Aureol's commentaries offered by A. Teetaert, "Pierre Auriol," *Dictionnaire de Théologie catholique* XII, 2 (Paris: 1935), cols. 1810–1881, as revised by E. Buytaert in the introduction to his edition of *Petri Aureoli Scriptum super primum Sententiarum, prooemium-dist.* 8 2 vols. (St. Bonaventure: 1953–56) [Hereafter: *Scriptum*].

Teetaert cites documentary evidence that Aureol was at Paris (as a student) in 1304 and, as a lector, at Bologna in 1312. There seems little reason to doubt that Aureol had studied at Paris sometime before he came there as a bachelor of the *Sentences*; nevertheless, as Buytaert argues, the evidence for 1304 is weak at best. In any case, if we assume minimal stints at each *studium* lecturing on the *Sentences* and a year lecturing on the Bible before commencing the Paris *Sentences* lectures in the fall of 1316, then Aureol probably

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dition to excuse, if not to justify, our examining the debates of his teachers and senior colleagues through his sights.

The "Esse Apparens" and Its Formation

The place to begin to understand Aureol's epistemology is with his notion of the *esse apparens*, or "apparent being," which he explains most extensively in four sections of his *Sentences* commentaries, although he argues for it repeatedly throughout. Aureol's medieval readers usually linked two of these discussions: the treatment of intuitive and abstractive cognition in the second question of the Prologue (or Prooemium), and the discussion of *amor* and *notitia Dei* in the third distinction of Book I.¹² Internal evidence of consistent purpose on the part of their author indicates that these discussions are to be understood by reference to his treatment of first and second intentions at distinction 23 of the first book; and above all, to the second question of Book I, distinction 27. There Aureol inquires "whether the created and uncreated Word emanates as actual intellection does, or just as an object placed in 'formed being' (*esse formato*),"

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taught at Bologna over the academic year 1312–1313, then at Toulouse 1313–1314, if not longer.

At least two versions of Aureol's *Sentences* commentary survive. The second of these, which reflects Aureol's reworking, is therefore termed *Scriptum* by the scribe of the best manuscript, Vatican Borgh. 329. This codex was completed on May 19, 1317 and presented to Pope John XXII—a gift presumably not unrelated to the latter's presentation (July 1318) of Aureol for the licentiate in Theology. Given the circumstances, this manuscript should be treated as the best witness to Aureol's definitive "ordinatio" revision of his lectures, so for that version we rely on it for distinctions following those edited by Buytaert.

How many series of lectures are preserved in the remaining manuscripts has not yet been established, but some contain copies of the *Scriptum*; all others containing lectures on Book I presumably contain versions predating the establishment of that definitive revision. The Parisian *reportatio* [*Rep. Paris.*] is preserved in Vat. Borgh. 123, and a cursory comparison reveals how extensively material has been reworked and elaborated for the *Scriptum*. Aureol seems never to have prepared an "ordinatio" revision of lectures on the other books, and lectures survive on Book II delivered after the *Scriptum* was completed and (we may assume) before Aureol became *magister regens* (November 1318), as we know from the scribe of Florence A.III.120 (fol. 123ra): "Explicit lectura super secundum librum Sententiarum sub magistro Petro Aurioli de ordine fratrum minorum doctore in sacra theologia tempore quo legebat reportata Parisius sententias, videlicet anno domini 1318 ..."

¹² See, for example, Chatton, Wodeham, and Parisian readers in chapters VII, X, XI, and XII below. Aureol's medieval readers knew different versions of his commentary (as can be established from their discussions) and this, together with the degree to which they recognized the connection from section to section, affected their appreciations of his views. Hence it is useful to be clear concerning where Aureol states what.

In addition to the passages upon which the following discussion is based, others pertinent to the understanding of Aureol's theory include: I *Scriptum* d.9, a.1; d.35, p.1, a.1; II *Rep. Paris.*, d.11, q.3, a.1 (which Vanni-Rovighi discusses). Ph. Boehner supplies a text of *Rep. Paris.* prol., q.2 from Vat. Borgh. 123 in "Notitia Intuitiva of Non Existentia." The same manuscript has, in I *Rep. Paris.*, d.3, p.2, q.4 (fols. 37rb-38ra) cross-references

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and in answering explicitly confirms his systematic intent whenever he speaks of concepts, intentions, the "apparent beings," and their formation in intuitive cognition.¹³ Not all of Aureol's medieval readers recognized the connection among these passages, although those who did so, even when familiar only with part of Aureol's commentary (as was sometimes the case in English *studia*), were justified in inferring an underlying unity. In England, Adam Wodeham seems to have been the first to note Aureol's statement in distinction 27, and to have recognized that "in [it] stands the intention of his entire work dispersed throughout the whole opus."¹⁴

"Apparent being" is the most characteristic name for an entity which Aureol also termed, synonymously, an "intentional being" (*esse intentionale*), "objective being" (*obiectivum*), or a being that is "conspicuous" (*conspicuum*), "fictitious" (*fictivum*), "seen" (*visum*), "judged" (*iudicatum*), or "intuited" (*intuitum*).¹⁵ Aureol posited this "apparent being" in addition to sensible species, which he did not employ as an explanatory mechanism in his discussion of cognition, both because he found species inadequate to account for discrepancies between what is *in veritate rei* and what appears to be, and because he was convinced that the roles that the intellect and the senses played in perception could not be completely explained in terms of passive reception.

Thus, in the third distinction of Book I, Aureol sets out to argue that "the act of the exterior sense puts the [perceived] thing in 'intentional being' (*esse intentionali*), as is clear from many experiences."¹⁶ The eight

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back to the question edited by Boehner, thus confirming that Aureol intended the arguments to be complementary.

¹³ Aureol, I *Scriptum*, d.27, q.2 (fols. 298vb–303r): "Utrum verbum creatum et increatum emanet ut intellectio actualis vel sicut obiectum positum in esse formato." The cross-reference is on fol. 300vb: "Prima, quod in omni intellectione emanat et procedit non aliquid aliud sed ipsamet res cognita in quodam esse obiectivo secundum quod habet terminare intuitum intellectus. Hoc autem efficaciter declaratum est superius multis viis, nam octo experienciis et rationibus multis sumptis a priori et a posteriori, dist. 3 in questione de ymagine <d.3, s.14> articulo primo et tertio; et declaratum est etiam auctoritatibus multis ... d.20, q. prima ..."

For I *Scriptum*, d.23, Jan Pinborg kindly supplied his transcription of Borgh. 329 (fols. 258v–264r); portions are published in his "Radulphus Brito on Universals," CIMAGL 35 (1980), 56–142.

¹⁴ Wodeham, *Lectura secunda*, prol., q.4 (Cambr., Gonville and Caius 281/674, fol. 116rb): "... in qua responsione stat intentio totius operis sue disperse per totum opus suum, quod sive res sit presens sive absens, visus immediate unitur realitati sui obiecti quam ponit in esse formato ..." For Wodeham's discussion, see chapter X below.

¹⁵ See, e.g., nn. 16, 19, 22, 25, 29, 34, and 35 below. For the historical ramifications of Aureol's inclusion of "fictivum" among these synonyms, cf. the debate between Ockham and Chatton concerning "ficta," below, chapters V and VII.

¹⁶ I *Scriptum* d.3, s.14, a.1 [II: p. 696, #31]: "quod in actu intellectus de necessitate res intellecta ponitur in quodam esse intentionali conspicuo et apparenti. Non est enim

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"experiences" that Aureol proposes here and that he repeats elsewhere along with others, were to become canonical in discussions of Aureol's views.¹⁷ Even though he deals with most of his purported experiences only briefly, they gradually reveal what he means by "intentional being." The first was historically to prove the most significant:¹⁸

When one is carried [by ship] on the water, the trees existing on the shore seem to move. Therefore, this motion, which is *objectively* in the eye, cannot be posited to be vision itself; otherwise, vision would be the object [of the sense] of vision, and a vision would be seen; thus, the sense of sight would be a reflective faculty. Nor can [the motion] be posited to be really in the trees or in the shore, because then they would really move. Nor can [the motion] be posited to be in the air, as it is not attributed to the air, but to the trees. Therefore, it is only intentionally, not really, in 'seen being' and in 'judged being.'¹⁹

The second experience that Aureol proposes is of a circle that to a viewer appears to be produced in the air when a flaming stick is spun in a rapid circular motion. Third, Aureol alludes to the fact that a stick partly submerged in water appears to be broken. Fourth, he refers to double vision, such as an experience whereby one sees two candles in "apparent being" (*in esse apparenti*) where in fact there is only one in "real being" (*in esse reali*). The fifth example of an "apparent being" is of the colors that a dove's neck appears to have.²⁰

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magis formativus sensus interior aut exterior quam sit actus intellectus; sed actus exterioris sensus ponit rem in esse intentionali, ut patet in multis experienci-<i>s."</i>

¹⁷ See below, chapters V, VI, VII, X, and XI.

¹⁸ For its importance to the recognition of the relativity of the perception of motion, see Wodeham's treatment of it in chapter X at nn. 86–89, 114–15 below.

¹⁹ I *Scriptum* d.3, s.14, a.1 [II: 696]: "Prima <<experientia>> quidem quia cum quis portatur in aqua, arbores existentes in ripa moveri videntur. Iste igitur motus, qui est in oculo obiective, non potest poni quod sit ipsa visio; alioquin visio esset obiectum visus, et visio videretur, et esset visus potentia reflexiva. Nec potest poni quod sit realiter in arbore vel in ripa, quia tunc realiter moverentur. Nec potest poni quod sit in aere quia aeri non attribuitur, sed arbori. Est igitur tantum intentionaliter, non realiter, in esse viso et in esse iudicato."

This experience, which Scotus in his *De anima* questions cited as evidence of the storage of species (above, chapter III, n. 92), Aureol probably found under the rubric of visual errors in Alhazen, III *De aspectibus*, c.7, prop. 39 [Risner p. 96], Witelo, IV *Perspectiva*, prop. 138 [Risner p. 180], or Bacon, *Opus maius*, pt.5.2, d.3, c.6 [II: 119].

²⁰ Aureol, *ibid.* [II: 696–97]: "Secunda experientia est in motu subito baculi et circulari in aere. Apparet enim quidam circulus in aere fieri ex baculo sic moto. Quaeritur ergo quid sit ille circulus qui apparet videnti; aut enim est aliquid reale existens in baculo, quod esse non potest cum sit rectus; aut in aere, quod minus esse potest, nam circulus coloratus et terminatus in aere esse non potest; nec potest esse ipsa visio, quia tunc visio videretur, et iterum visio non est in aere ubi circulus ille apparet; nec alicubi intra oculum esse potest propter easdem rationes. Et ideo relinquitur quod sit in aere habens esse intentionale sive in esse apparenti iudicato et viso. Tertia experientia est de fractione baculi apparentis in aqua. Quarta de dualitate candelarum apparentium uno oculo elevato;

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Aureol describes the sixth experience, consisting in virtual images, at greater length:

The images which seem sometimes to be behind a mirror, sometimes in the mirror's surface, and sometimes in the air between mirror and viewer, according to the different places of the image, with which the Perspectivist concerns himself in books four, five, and six [of the *De aspectibus*].²¹

What are these images? Along with Alhazen, the "Perspectivist" to whom Aureol alludes, he argues that these images cannot be species which have *really*, or in fourteenth-century terms, subjectively (*subjective*) penetrated the mirror to become a real part of it. Equally hard to accept would be that such an image is itself truly an independently existing thing (*res*), having real being. Nor can the image be either vision or anything else existing in the eye. Here he again cites Alhazen, who had demonstrated mathematically that the virtual image appears behind the mirror and, thus, spatially separated from the observer's eye. "It therefore remains," he concludes, "that the image is only an appearance of the thing, or that it is a thing (*res*) having 'seen, judged, and apparent being' (*esse viso iudicato et apparenti*)."²²

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sunt enim ibi duo in esse apparenti, et tamen non est nisi una candela in esse reali. Quinta experientia in coloribus colli columbae."

The second experience was treated by Scotus (probably quoting Avicenna) in the *De anima* discussion noted above, n. 19. Aureol may have known the third experience from Scotus's refutation of Henry of Ghent on intellectual error; see above, chapter III, note 88. The most likely source for Aureol's reference to the colors in a dove's neck is Bacon (see below, n. 38). Cf. also *Rep. Paris.* prol., q.2 [Boehner, p. 413]; d.23 (below, n. 35).

²¹ Ibid. [II: 697]: "Sexta in imaginibus que videntur in speculo aliquando quidem infra, aliquando in superficie speculi, et aliquando extra in aere inter videntem et speculum secundum quod sunt diversa loca imaginis; de quibus tractat Perspectivus IV, V, et VI libro."

²² Ibid.: "Talis autem imago vel est species realis quae intimatur subjective in speculo; et hoc poni non potest ut demonstrat Perspectivus libro IV, tum quia maior est imago quam sit speculum, cum videatur in eo aliquando una turris vel medium caelum, — nullum autem accidens excedit suum subiectum;—tum quia infra speculum per magnam quantitatem videtur imago, et multo maior est quam sit speculi spissitudo; tum quia, si imago illa esset species impressa in speculo, non penetraret in profundum per calibem vel plumbum, a quibus vitrum terminatur; videntur etiam ex omni situ et omni parte et multa alia, ex quibus demonstrative patet quod illa imago non est species in speculum impressa. Vel illa imago ponetur ipsa vera res habens esse reale; et hoc esse non potest, quia facies non est realiter infra speculum, ubi species ipsa apparet. Vel dicetur quod imago illa est visio existens in oculo vel aliquid aliud ibi existens; quod esse non potest, cum appareat infra speculum et in situ diverso, ut Perspectivus probat. Relinquitur igitur quod sit sola apparentia rei vel res habens esse apparens et intentionale, ita ut ipsamet res sit infra speculum in esse viso iudicato et apparenti." Aureol discusses virtual images again at I *Scriptum*, d.1, s.6 [I: 366–67], where he specifies that Alhazen is the perspectivist to whom he refers.

The modern physicist's term "*virtual image*," which I here accept, in fact concurs with Aureol's conclusion, both because the term is used to distinguish such images from

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The same conclusion can be drawn from the final two experiences, which Aureol takes from Augustine's *De trinitate*: that of seeing an afterimage when looking at the sun, and of the afterimage of red seen when, after staring at crimson, one looks at letters of another color.²³ These experiences, like each of the preceding six, can only be explained, according to Aureol, by hypothesizing that what is seen has only an "apparent or intentional being."

Like Scotus—but for entirely different reasons—Aureol is committed to the active role of sensitive and intellectual powers in cognition: he insists that they are "formative" powers, i.e. that they create the "intentional being" (*esse intentionale*). This intentional being, as a strictly cognitive entity, the *res cognita*, is numerically distinct both from the cognitive *act* by which it is generated or for which it is a terminus, and from extramental reality.²⁴ This is a point Aureol reiterates:

Nor is it valid if one should say that these appearances derive from impressions made in the eye or in the disposition of the medium, or from motions of the [inner] spirits, or from any other causes. However that may be, it remains that these appearances are neither the act of vision, nor have they any being except cognized, intentional, and apparent [being]. Some imagine that the images are in the mirror, and that the appearances are in the medium, whether or not they are seen; but both these [views] are false. Otherwise, it would follow that [the appearances] had true, real being.²⁵

We will return to Aureol's concern to avoid an account of cognition

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"real" ones and because, historically, the word chosen to make that distinction (virtual) derives from medieval references to what lies within the capacity of the soul's powers (*virtutes*) as we have seen, for example, in Bacon's and Olivi's usage.

²³ Ibid.: "Septima autem experientia est in illo qui vidit solem; postquam enim advertit obtutum apparent quaedam rotunditates lucidae ante oculos quae paulatim evanescent, ut Augustinus dicit XI *De trinitate*. Octava autem in hiis qui aspexerunt aliqua rubea vel per cancellos; ex tunc enim aspicientes litteras vel aliqua alia, apparent eis rubea vel cancellata; quae quidem cancellatura vel rubedo non dubium quod non habent nisi esse intentionale et apparens." Augustine's discussion is at XI *De trinitate*, c. ii [Corpus Christianorum, series latina, vol. 50 (Turnholt: 1968), p. 337].

²⁴ On Scotus's view, see above, chapter III, at nn. 46–50. For a few of the many places where Aureol states this explicitly, see above, n. 16; below nn. 28, 29, 53. Aureol's lengthy defenses at dd.23 and 27 of his distinction between concepts and the intellectual acts forming them are aimed principally at Radulphus Brito, as is Aureol's refusal (n. 53 below) to identify concept and the act of speaking (*locutio*); see Pinborg, "Zum Begriff;" Jolivet, "Langage chez Brito."

²⁵ I *Scriptum* d.3, s.14 [II: 698]: "Non valet etiam si dicatur quod illae apparentiae proveniunt ex impressionibus factis in oculo vel dispositione medii, vel ex motibus spirituum vel ex quibuscumque aliis causis. Quomodocumque enim sit, constat quod illae apparentiae non sunt actus visionis, nec habent aliquod esse nisi cognitum intentionale et apparens; quod enim aliqui imaginantur quod imagines sint in speculo et apparentiae in medio, sive videantur sive non videantur, hoc utique falsum est. Tunc enim sequeretur quod haberent verum esse reale."

which would entail that "whatever appears to be must have true, real being."²⁶ For the moment we need to appreciate that Aureol's commitment to the *necessary*²⁷ creation of intentional or apparent entities by the knower in the course of sensation and intellection is not aimed primarily at explaining illusions, for these were phenomena that proponents of the perspectivist theory deemed it uniquely able to explain. His goal is not merely to establish the formation of an "apparent being" in sensation, but to show that *also* "in the act of the *intellect*, of necessity the thing known is placed in a certain conspicuous and apparent intentional being." Like his contemporaries understanding the intellect to be a higher faculty than the sensitive faculties, Aureol derives this claim for intellection on the grounds that neither the external nor the internal senses are more "formative" powers than the intellect; hence what holds for the senses holds as well for the intellect.²⁸ In effect, then, sensory illusions are offered as the most obvious evidence for the origin of the intellect's concepts, that is, first and second intentions.²⁹

Moreover, by claiming the cognitive faculty's role in creating these intentions, Aureol divested them of the ontological ambiguity in which they had hitherto paraded. That ambiguity lodged especially in Avicenna's and Alhazen's indications that although intentions were produced by any perceptible object, they nevertheless resulted in part from mental activity. This Aureol considered contradictory, and he simply rejected any extramental existence of intentions independent of mental activity. In so doing, he explicitly refused to concur in the already traditional identification of both extramental and intramental sensible species as the

²⁶ See below, at n. 65.

²⁷ Note the wording, n. 16 above, where Aureol explicitly claims that the formation is necessary; again, I *Scriptum*, d.7, s.18 [II: 832]: "impossible est enim rem intellegi nisi ponatur in esse apparenti et cognito obiective." The claim that the *esse apparens*' creation is necessary or that the alternative is impossible has the strength of notions of physical necessity in perspectivist discussions of the preconditions of sight (e.g. claims that light is necessary), rather than the stronger notions of logical necessity which, given the general use of the distinction of divine powers (that Aureol also employs as, e.g. below at nn. 85–86), these claims would not meet.

²⁸ I *Scriptum* d.3, s.14 [II: 697–98]: "Cum igitur sensus exterior formativus sit, sic quod ponat res in esse intentionali, et similiter imaginatio idem habeat,—nam pater meus imaginatus a me est, ipsemet positus in esse intentionali; non enim est species, quia tunc imaginatio non caderet super rem, sed super species tantum, et esset potentia reflexiva et multa alia inconvenientia sequerentur,—cum inquam ita sit de sensu interiori et exteriori, relinquatur quod intellectus multo fortius ponit res in esse intentionali et apparenti." See also nn. 13, 16 above.

²⁹ I *Scriptum* d.23 (on first and second intentions), ed. in J. Pinborg, "Brito on Universals," p. 137: "Ex praedictis ergo colligitur prima affirmativa propositio in hac materia, quod scilicet intentio non est aliud, prout hic loquimur de ea, nisi conceptus formativus obiective per actum intellectus. Et quia duo sunt ordines conceptuum, primus quidem eorum qui directe formantur, secundus vero eorum qui super primos fundantur

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"thing in intentional being."³⁰ If the identification of the species as an intentional being was traditional, and supported by both Henry of Ghent and Duns Scotus, it was not universal among the scholars at Paris in the decade before Aureol. Rather, that academic generation more clearly than those before faced squarely the still unresolved issue whether extramental species were physically of the same nature (*eiusdem nature*) as the objects that generated them, or had instead only a "diminished being" (*esse diminutum*) or "intentional being."³¹ Scotus may have been the first to recognize the equivocal use of *intentio* that had crept into the discussion,³² but the clearest attempt at Paris to unravel the confusion in the years during which Aureol was developing his own view was probably Durand's:

'Intentional being' can be accepted two ways. [It can be understood] one way as distinct from real being (*esse reale*), and in this way those things are said to have intentional being which do not exist except through an operation of the intellect, such as 'species,' 'genus,' and logical intentions [i.e. first and second intentions]. And this is the proper way of accepting 'intention' and 'intentional being;' and [understood] this way, light (*lumen*) in the medium or the species of color do not have intentional being, because those things which have real origins independently of any operation of the intellect have real and not intentional being; and light (*lumen*) and the species of color in the medium are such things ... In another way something is loosely (*large*) said to have intentional being because it has a weak being (*esse debile*) ...³³

Where Durand and his contemporaries were explicit in contrasting intentional existence "properly," or strictly speaking, with what exists

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... idcirco duplex est genus intentionum, quia quaedam sunt primo ordinis videlicet conceptus qui formantur de rebus, quaedam vero secundi, videlicet conceptus qui formantur circa primos conceptus."

³⁰ This may lie behind Prezioso's erroneous claim that Aureol rejected intelligible species, an error that others have perpetuated as, e.g., Gedeon Gál, "Quaestio Ioannis de Reading," p. 68. For Aureol's views, see also below, at nn. 42–47.

³¹ Thus, for example, Hervaeus argued (principally against Henry of Ghent) at II *Sent.*, d. 13, q.2 "Utrum lumen habeat esse reale in aere" [Paris, 1647: 241–43] that *lumen*, as the species of light (*lux*) rather than intentional existence in the medium, is a quality having real existence: "ergo lumen ... est in tertia specie qualitatis (p. 242)."

For Durand's discussion, see n. 33 below.

³² Above, chapter III, at n. 27.

³³ Durand, II *Sent.*, d.13, q.2 "Utrum lumen habeat esse reale an intentionale in medio" [Venice ed. 1571, fol. 155rb-va]: "6. Responso. Esse intentionale potest dupliciter accipi. Uno modo prout distinguitur contra esse reale, et sic dicuntur habere esse intentionale illa que non sunt nisi per operationem intellectus, sicut genus et species et logicae intentiones. Et iste est proprius modus accipiendi intentionem et esse intentionale; et isto modo lumen in medio vel species coloris non habent esse intentionale, quia que sunt a principiis realibus circumscripta operatione intellectus habent esse reale et non intentionale; sed lumen et species coloris in medio sunt huiusmodi, ergo etc. Alio modo dicitur

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independently of mental activity, Aureol usually implies such a distinction. But at least twice he, too, states it explicitly, as at Book II, distinction 13, the *locus classicus* for discussing species *in the medium*. There, the report of Aureol's Paris lectures records:

Light (*lumen*) in the air and, similarly, the [sun's] ray, have truly real being rather than intentional being properly [speaking] ... One way of distinguishing intentional being is by opposition to real being (*esse reale*), and in this way [of speaking] intentional being is nothing other than apparent being [which is] not [really] existing. In this way it is appropriate to say that a color in the rainbow has intentional being; similarly concerning the doubling of a candle [etc.].³⁴

Aureol is equally explicit when, in discussing first and second intentions in distinction 23 of the later *Scriptum*, he echoes Durand:

Furthermore, just as the intention or 'intentional being' behaves in its characteristic way in the sense, so does it also in the intellect. But those who ask concerning the colors which are in a dove's neck, an image which appears in a mirror, or a candle appearing somewhere other than its location, whether these have real being or only intentional being, mean to ask whether these have only objective and fictitious or apparent being, or whether they have real and fixed being externally in the nature of things, independent of any apprehension. From which it is clear that [in the senses] intentional being is nothing other than objective (*obiectiva*) vision or appearance; hence, in the intellect it must be nothing other than an objective concept.³⁵

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aliquid habere esse intentionale large, quia habet esse debile. Sed habere esse debile adhuc tripliciter ..." Cf. also Jakob of Metz (quoted in Decker, *Jakob von Metz*, p. 495–6, nn. 8–9) and Hervaeus Natalis, II *Sent.*, d.13, q.2 [Paris, 1647: 242].

³⁴ Aureol, II *Rep. Paris.* d.13, q.un. (Florence, fol. 66va–vb): "Secunda propositio est quod lumen in aere et radius similiter habent esse vere reale et omnino proprie <loquendo non> esse intentionale. Ubi considerandum quod 'esse intentionale' uno modo condividitur ex opposito contra 'esse reale,' et hoc modo 'esse intentionale' nihil aliud est quam 'esse apparens' non existens, quomodo convenit dici quod color in yride habet 'esse intentionale,' similiter dupleitas candelae que apparet alicui cancellatis oculis; similiter de circulo apparente in aqua mota per baculum. De omnibus talibus et similibus solet queri utrum habeant esse reale vel intentionale—hoc est, esse apparens et iudicatum per virtutem aliquam apprehensivam ... Hoc idem dicendum est de collo columbe et quorundam pannatorum sericorum qui in diversis sitibus apparent diversi colores; colores enim illi diversi non habent esse nisi apparens et iudicatum per visum. Non enim quia oculus meus sit in alio et alio situ, sit alius et alius color in obiecto: oculus enim non causat realiter colorem in obiecto. Non sunt igitur colores huiusmodi nisi quedam apparentie obiective facte quidem mediante impressione facta in sensu a re extra, qua facta res apparet aliter quam est—et ideo visiones multe possunt esse false et possunt (66vb) esse de re que non est." Aureol repeats several of these examples elsewhere, including at I *Scriptum* d.3, s.14 (n. 20 above).

³⁵ I *Scriptum* d.23 [ed. Pinborg, "Brito on Universals," 133–34]: "Preterea, sicut se habet suo modo intentio et esse intentionale in sensu, sic se habet in intellectu. Sed quaerentes de coloribus iridis, aut de coloribus qui sunt in collo columbae, aut de imagine quae apparet in speculo, aut de candela apparente extra situm, utrum habeant esse reale aut

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The examples Aureol employs are the clue to the origins of his notion of "apparent being." Of all the synonyms he proposed for intentions, this (as his medieval readers recognized) was most clearly his own. Before him there was, after all, no technical use of the term "apparent being," to designate a purely cognitive entity, as there was for an entity "objectively in the gaze (*prospectu*) of the intellect," in the epistemology of Hervaeus and others.³⁶ The term was evidently inspired by Aristotelian and perspectivist mention of "what appears,"³⁷ perhaps especially by Roger Bacon who, in inquiring into the causes for the rainbow, was like other perspectivists concerned to account both for the mutability of its location vis-à-vis the observer's position, and the nature of its colors. Bacon concluded that both the rainbow's location and its colors, like the location of images in mirrors, are appearances and hence:

From this it is clear that there will be nothing where there is a rainbow except the appearance of colors, and [that appearance] will not be there except when [the rainbow] is. As has been said, the rainbow differs according to the difference in observers (*aspicientium*), but the observation (*aspectus*) does not make the colors, for vision cannot create colors in a cloud, as is clear.³⁸

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intentionale tantum, intendunt quaerere utrum habeant esse obiectivum tantum et fictivum seu apparens, aut habeant esse reale et fixum extra in rerum nature absque omni apprehensione. Per quod patet quod esse intentionale non est aliud quam visio aut apparitio obiectiva. Ergo in intellectu erit aliud quam conceptus obiectivus?"

³⁶ Hervaeus, *II Sent.*, d.9, q.1, a.2 (p. 229): "Si dicas, quod ita est in re intellecta ... non valet, quia aut proponitur ad modum, aut hoc quod obiective sit in prospectu intellectus ... impossibile est aliquid intelligere, et non habere in prospectu suo aliquam rem intellectam;" *II Sent.*, d.17, q.2, a.3 (p. 255): "ad hoc quod obiectum sit in prospectu intellectus obiective sufficit actum intelligendi esse realiter in intellectu, quia ad hoc sequitur obiective rem intellectam esse in intellectu." Cf. also Jakob of Metz, "Sciendum igitur quod omne, quod intelligitur, est obiective in intellectu, ut color in visu, quia in prospectu visus" [*I Sent.*, d.25, q.1, quoted in Decker, *Jakob v. Metz* p. 496, n. 10].

I have not succeeded in finding a precedent for Aureol's term "esse apparens," except as in nn. 38–40 below. See chapter XI below for its later attribution to him.

³⁷ Aureol may have been influenced among others by Alhazen, who linked *intentiones quae apparent* with the terminology of *intuitio* (chapter I, nn. 36, 69) in a passage of the *De aspectibus* that, to judge by *I Scriptum* d.2, s.10 [II: 556–57, 558, para. 118, 124] Aureol knew. On earlier uses of *apparentia*, cf. H. Roos, "Zur Begriffsgeschichte des Terminus 'apparens' in den logischen Schriften des ausgehenden 13. Jahrhunderts," in *Virtus Politica*, Festgabe zum 75. Geburtstag von Alfons Hufnagel (1974), 323–33. Another possible source is Godfrey of Fontaines, who mentions (*Quodl.* VIII, q.2 [IV: p. 30]) that, given an object and the operation of the will, "fit *apparentia* obiecti in intellectu;" and who elsewhere (*Quodl.* VIII, q.7 [IV: pp. 75–76]) notes that "evidens et apparens, non evidens et non apparens sunt contradictoria."

³⁸ Bacon, *Opus maius* pt.6, c.8 [II: 190–91]: "Sed tunc patet per hoc, quod nihil erit in loco iridis nisi apparentia colorum, et non erit nisi quando apparet. Nam dictum est quod secundum diversitatem aspicientium diversificatur iris. Sed aspectus non facit colores. Visus enim non potest creare colores in nube, ut patet; quare nihil erit nisi per apparentiam." The entire discussion of the rainbow and other "apparentiae" occupies pt.6, c.2–12 [II: 172–201]. Bacon also refers to such extramental appearances in *De mult.*

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Although Bacon's discussion is the most probable source for Aureol's notion of the "apparent being," there remain crucial differences dividing their understanding of appearance. For Bacon, the phenomena he so labels arguably are *extramental*,³⁹ and their causes are to be analyzed in terms of the radiation of light and defects of sensitive vision.⁴⁰ But this, for Aureol, implies precisely the ontological confusion to be avoided; thus his insistence that these "appearances" have no extramental existence, and are not to be explained in terms of defective cognitive faculties.⁴¹ If the extent to which Bacon thinks that these appearances are to be identified with visible species is not clear from his treatment, Aureol explicitly excludes such identity.

For Aureol, however, to deny that species are intentional entities is not to dispute the species' *actual* existence. On the contrary, he insists at several junctures upon their real existence. Thus, he asserts, species multiply in an instant from the sun "not only through the medium, but also in the exterior senses and in the interior senses really (*subiective*) existing in the brain."⁴² These species, however, are not intentions, but quali-

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specierum I, iii (p. 54). Other "experiences" to which Aureol appeals can also be found in the *Opus maius* 5.1, d.5, c.1 [II: 31] particularly: "Et iterum nos videmus, quod secundum diversitatem casus lucis ejusdem super eandem rem mutatur aspectus, et apparet visui color diversus, ut in collo columbae ..."

It is also possible that Aureol knew other discussions of whether the colors of the rainbow had "real" or only "apparent being," a debate to which Bacon, Albertus Magnus, Thomas Aquinas, and Peter of Auvergne contributed before it culminated in the treatises of the Dominican, Theodoric of Freiberg. Probably at Paris while Henry of Ghent was master regent, and evidently at Toulouse when commissioned by the Dominican Master General to compose the *De iride*, Theodoric wrote the latter work and its companion, *De coloribus*, between 1304–1311; see William Wallace, *The Scientific Methodology of Theodoric of Freiberg. A Case Study in the Relationship Between Science and Philosophy* (Fribourg, Switzerland: 1959), pp. 10–17, 133–69.

³⁹ This seems to be implied by Bacon's phrase "nihil erit in loco iridis nisi apparentia." That this discussion is among Aureol's sources is further suggested by his argument (echoing Bacon) that sight does not create extramental colors, above n. 34.

⁴⁰ Bacon, *Opus maius*, pt.6, c.12 [II: 196–97]: "... ubique est aptitudo ut fiat iris, sed actualiter non est nisi in stillicidiis a quibus reflexio venit ad oculum; quia apparentia colorum sola est, quae apparentia venit ex fantasia et deceptione visus, ut dictum est. Et ideo nusquam in nube rorida est coloris veritas, nec apparentia nisi in stillicidiis a quibus fit ad visum reflexio ... quod colores ubique apparere possumus imaginari ex duabus causis, uno modo quod color esset fixus, sicut in aliis rebus; et faceret speciem a se ad oculum, et tunc ubique esset, et sic ubicunque essent <<aspicientes>>, videret colorem. Sed sic non est hic, quia non est verus color, sed solum ex visus fantasia; et ideo causa apparentiae est solius visus erroneum iudicium, et ideo non apparet nisi in loco a quo ad oculum fit reflexio." Here Bacon is mostly paraphrasing Alhazen. Compare this reference to what "esset fixus" in extramental reality to Aureol's distinction of intentional being from what has "esse fixum" above, n. 35. This terminology is uncommon.

⁴¹ As above, nn. 30–35.

⁴² II *Rep. Paris*. d.13, q.un. (Florence, B.N. conv. soppr. A.III.120, fol. 66vb): "Ideo aliter arguo contra opinionem, quia tamen species solis vere multiplicetur non solum in

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ties;⁴³ and even if they may enable perception to occur, because the external sense "puts the thing (*res*) in intentional being, which same [intentional being] the imagination has," Aureol argues, "this cannot be a species. For if it were, then the imagination would not focus upon (*cadere super*) the thing, but upon the species only; thus, it would be a reflective power ..."⁴⁴

Elsewhere, in the course of expounding intuitive and abstractive cognition, Aureol again defends the hypothesis of species against the attack of his Carmelite contemporary, Gerard of Bologna, whose view Aureol describes as an "incompetently offered definition." According to Aureol, Gerard defined intuitive cognition as "that cognition by which the thing is known altogether immediately; not by the mediation of *species*, or exemplar images, or by any object terminating in the thing, other than the thing itself."⁴⁵

Gerard's position is historically interesting not least as the step for which among succeeding scholastics Ockham would receive almost exclusive credit. Aureol takes issue with the elimination of species in the senses on two counts. In the first place, he argues,

The vision, or intuition, that happens in dreams occurs by the mediation of species which are drawn from the imagination to the eye; and this vision does not, in actual fact, terminate in the presentiality of a thing, since the

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medio sed in sensu exteriori et in sensibus interioribus existentibus subiective in cerebro ..." He argues for instantaneous propagation of species (against the view that time is required) *ibid.*, fol. 67ra–rb: "Tertia propositio est quod radius et lux multiplicantur a sole in instanti. Hanc propositionem pono contra opinionem auctoris *De speculis* qui dicit quod multiplicantur in tempore ... Aristoteles autem est opinionis contrarie ... (67rb) In eodem enim instanti quo sol illuminat primam partem altera pars <medii> est summe disposita, et sol potens agere respectu eius; sed igitur prius natura aer illuminetur secundum partem propinquiore, non tamen prius tempore, sed in instanti. Unde est ymaginandum quod sol illuminat primam partem et illa illuminat partem aliam, et sic de aliis, et totum medium in eodem instanti, ita quod ibi est tantum ordo nature et agentium, non temporis." Aureol's solution here depends upon the notion of "instants of nature" developed by Scotus, and explained by N. Kretzmann, "Continuity, Contrariety, Contradiction, and Change," in *idem*, ed., *Infinity and Continuity in Ancient and Medieval Thought* (Cornell: 1982), 270–96.

⁴³ *Ibid.* (fol. 67ra): "Dico igitur quantum ad hoc quod radius et lux sunt vere forme reales: sunt enim qualitates vere de tertia specie, et sunt instrumenta forme substantialis solis in alterando et causando calorem ad educationem generabilium inferiorum." Thus, Aureol agrees with Hervaeus (n. 31 above).

⁴⁴ Above, n. 28. Aureol implies at d.27 (Borgh. 302ra) that species are passively received by the cognitive faculties, thus moving them to the acts of vision and intellection.

⁴⁵ I *Scriptum* prooem. s.2 [I: 206, para. 112]: "Ex hoc patet quod incompetens est definitio quam ponit Gerardus. Quodl. II, quaestio 6;" *ibid.*, "Non est ergo bona definitio, quam aliqui assignant de intuitiva notitia, dicendo quod est cognitio, qua cognoscitur immediate omnino, non mediante specie et exemplari imagine, vel alio obiecto ab ipsa re terminata ad praesentiam rei. Haec quidem definitio deficit propter duo." Relatively little scholarly attention has been paid to Gerard of Bologna, who taught at Paris in the same

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objects are absent. Nevertheless, as copiously declared above from the statements of the Commentator and Augustine, this is truly intuitive cognition.⁴⁶

In the second place, even if one were to deny species in the case of sight, "it does not appear that they can be denied in imagination." Taking as an instance a creator who imagines some object which he has not yet created, Aureol claims that inasmuch as there is no extramentally existing object to serve as the terminus of the act of imagining, then there must be a mental substitute for that terminus, namely a mental image or species.⁴⁷ It is not entirely clear that, in such an instance, a species additional to an "apparent being" would not in fact be superfluously posited, all the more so as the evidence offered for the former is by Aureol's own admission offered elsewhere for the latter.⁴⁸

The "Esse Apparens" and the Intellect's Proper Object

Now, we are in a position to understand why Aureol argues that the production of this "objective, apparent being" occurs not only in erroneous visions, such as his experiences exemplify, but in *all* sensitive and, by extension, intellectual vision. Indeed, Aureol insists it occurs *especially* in "true vision," because this is more perfect than erroneous vision and should not, therefore, be less able to create cognitive reality. That cognitive reality, the intention or concept, is the "objective, apparent being," and while Aureol is more explicit than some in identifying first intentions—upon which second intentions are founded—as concepts, he is hardly original in calling them "objective" (*obiectivus*) to indicate that they

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generation as Hervaeus Natalis; see B.M Xiberta, *De scriptoribus scholasticis saeculi XIV ex Ordine Carmelitarum* (Louvain: 1931), 80–87; P. Glorieux, *Litt. Quodl.* I, 128–32; II, 94–95.

⁴⁶ Ibid., "Primo quidem quia visio et intuitio, quae fit in somnis, est mediante specie et derivatur ab imaginatione ad oculum, nec terminatur ad praesentialitatem rei secundum veritatem, cum absentia sint obiecta. Et tamen haec est vere intuitiva notitia, et extitit supra multipliciter declaratum ex dictis Augustini et Commentatoris."

⁴⁷ Ibid. [I: 206–07]: "Secundo vero quia tota haec definitio competit notitiae imaginariae, quae non fit mediante aliquo exemplari, aut imagine, aut aliquo alio obiecto, quod imaginans aspicit cognoscendo. Alias Roma, imaginata a conditore Romae, non esset ipsamet Roma, sed quoddam idolum eius; nec domus, in mente artificis, esset eadem cum domo extra, cuius oppositum dicit Philosophus VII *Metaphysicae*. Unde patet quod imaginans rem aliquam in illam fertur, absque omni medio obiectivo, licet forte per speciem tamquam per medium formale, sicut et videns videt per speciem. Et, si negatur species in visu, non apparet quin possit de imaginatione negari; et tunc erit imaginatio immediata notitia lata super rem, absque omni specie, imagine, et exemplari, et quocumque medio obiectivo; et tamen non erit intuitio, quia feretur quasi modo absenti. Igitur illa definitio est incompetenter assignata."

⁴⁸ As Aureol says above n. 46 referring to a discussion based on Augustine and Aver-

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function as the objects of cognition when placed before (*obicitur*) the intellect.⁴⁹ So it is obvious for Aureol that "true" or veridical vision requires such a mental terminus of cognitive acts; but unlike false visions, however, in true vision "the image or *res* in apparent being is not distinguished [by the viewer] from the real thing, since they coincide at the same time."⁵⁰ That is, in true visions both the external thing itself and the corresponding "apparent being" are seen.

What Aureol means by this is clarified when he takes up the issue of the proper object of the intellect which, he asserts, is what is true, for "just as what is visible is the object of sight, so for the intellect is what is intelligible. It happens, however, that in the intellect there are erroneous acts, which do not retain the name of intellections, but rather, [are named] deceptions, for being in error concerning something is not called 'understanding' it, but rather 'being deceived concerning' it."⁵¹ Aureol then reminds his audience of his claim that the senses and, by extension, the intellect necessarily place the object in conceptual, intentional being, a being characterized by its capacity to serve as the object

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rees, for which see nn. 81–82 below. Some later readers attacked him on these grounds, for which see chapters V and XI below.

⁴⁹ See n. 36 above; and, for Aureol's identification of concepts with intentions, n. 29 above. In *I Rep. Paris.*, d.3, p.2, q.4 (Borgh. 123, fol. 37vb) he states: "necesse est dicere quod obiectum per actum intellectus capiat esse aliquod intentionale, cum non sit minus formativus quam sensus, unde qui negat hoc habent negare omne ens rationis, nam ens rationis est illud quod tantum habet esse obiectivum per obici actui potentie; quicquid enim est in rebus circumscripto obici est reale ..."

⁵⁰ *I Scriptum*, d.3, s.14 [II: 698, lin. 68–83], esp. "Et si dicatur quod omnes istae apparentiae sunt in erroneis visionibus, ut secundum hoc vera visio non ponat res in esse intentionali, sed erronea et falsa, hoc quidem non valet; tum quia multo fortius visio vera debet hoc facere cum sit perfectior, sed tamen non distinguitur imago seu res in esse apparenti ab esse reali, quia simul coincidunt in vera visione ..." See also d.1, s.6 [I: 366 lin. 95–367 lin. 115]; d.2, s.10 [II: 549, lin. 58–66]: "intellectus semper terminatur vel ad veritatem si sit actus rectus, nec erroneus; vel ad falsitatem si sit actus deceptorius, cum semper terminetur ad rem positam in esse apparenti ..." and d.27, q.2 (Borgh. 329, fol. 302rb): "Non est verum quod res intellecta solum denominari capiat ab intellectione sicut Caesar a pictura aut representatum a representatione quacumque; non enim parieti per picturam Caesar ipse fit presens nec obicitur sibi ... Visus enim sive res presens sit sive absens unitur realitati sui obiecti quam ponit in esse formato ... Et ideo res cui videtur cum hoc quod realiter existit, habet etiam esse iudicatum et visum, quod quidem non ponit varietatem aliquam aut distinctionem vel numerum cum realitate illa quantum (*ms.* quintum) ad aliquid absolutum, sed addit respectum illum intrinsicum et indistingubilem, qui dicitur 'apparentia obiectiva.' Non igitur terminatur visus ad rem obiectivam mediante aliquo absoluto quasi sit aliquid pallium vel medium inter visionem et parietem qui videtur ..."

⁵¹ *I Scriptum* d.2, s.10 [II: 547 lin. 3–15]: "Secunda vero propositio est quod obiectum denominative dictum respectu intellectus est verum. Ubi considerandum quod, sicut visibile est obiectum visus, sic intelligibile intellectus. In intellectu autem contingit esse actum erroneum, qui non retinet nomen intellectionis, sed potius deceptionis; errans enim circa aliqua non dicitur illa intelligere, sed potius decipi circa ea. Aliud autem actus

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of thought and by its apparent conformity to external reality.⁵² Truth, Aureol states, "is nothing other than what the intellect takes from the [extramental] thing (*res*)," namely the concepts, or *esse apparentia* of objects. After all, he insists, "we are said to 'speak' or 'conceive the truth' concerning things;" but speaking mentally or conceiving consists in forming the "apparent being" of the external object. Truth, Aureol concludes, "is nothing other than a conformity relation," that is, the kind of relation that exists between an object and its exact likeness (*similitudo*) or image. It is, of course, precisely such an image, that the intention, or thing (*res*) placed in formed being (*in esse formato posita*) is.⁵³ If truth is a relation of conformity, falsity by parity of reasoning is the absence of conformity, as occurs when an "apparent being" exists without a corresponding extramental entity.⁵⁴ Thus, the same perception (*notitia*) can be either true or false, as truth or falsity depends not on the perception but on the condition of the [extramental] object. "Consequently," Aureol concludes, "the *reality* of a vision does not require the real presence of an existent object, although the *truth* of a vision does, inasmuch as truth adds to the reality of a vision the relation of conformity to the extramental thing."⁵⁵

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est rectus et ille retinet sibi hoc nomen ... Et per consequens nihil aliud est esse falsum quam intelligibile actu deceptionis, et esse verum non aliud quam esse intelligibile actu recto."

⁵² Ibid. [II: 548, lin. 3–11]: "Quarta autem propositio est quod obiectum, ad quod terminatur actus intellectus, est verum existens in anima obiective. Supponendo namque quod infra <i.e. d.3, s.14> declarabitur, videlicet quod actus intellectus terminatur ad rem positam in esse formato et intentionali ac apparenti ..." The reference could also be to discussions at d.27 (above, n. 50) and d.9, a.1 as quoted in Vanni-Rovighi, "Intenzionalità" (p. 678): "Omnis intellectio exigit rem positam in esse intentionali."

⁵³ Ibid. [II: 548, lin. 12–25]: "Primo quidem quia veritas non est aliud quam illud quod intellectus capit de re. Sed intellectus colligit de rebus huiusmodi conceptus, puta de rosis rosam huiusmodi apparentem ... Secundo vero quia nos dicimur loqui et concipere veritatem de rebus. Sed locutio intellectus consistit in formatione huiusmodi, puta in positione rosae in esse apparenti ... Tertio quoque quia veritas non est aliud quam conformitas non-conformitas relatio, sed conformitas que est similitudo et imago, constat autem quod res in esse formato posita est similitudo, intentio et imago rei existentis extra."

⁵⁴ Ibid. [II: 548, lin. 26-p. 549 lin. 52]: "Quarto autem quia opposita apta nata sunt fieri circa idem. Nunc autem huiusmodi res formatae et apparentes, si sint apparentiae quibus non respondeat quod est extra, appellantur falsitates, errores, et deceptiones. Ergo per oppositum, si fuerint sic res extra, erunt huiusmodi apparentiae veritates. Unde apparentiae obiective quas habet intra se intellectus distinguuntur; quaedam enim sunt errores, deceptiones et phantasiae, ut cum non <<cor>> respondet eis res; quaedam vero sunt veritates, ut quando sic est in re." See also Aureol's remarks in II *Rep. Paris*. d.13, q.un. cited above, n. 34.

⁵⁵ I *Scriptum* prooem., s.2 [I: 200, lin. 106–26] esp.: "Verum et falsum insunt eidem notitiae numerali, nulla immutatione facta in ipsa, sed tantummodo re mutata ... et per consequens realitas visionis non exigit realem praesentiam obiecti existentis, quamvis exigat eam veritas visionis, pro eo quod veritas addit super realitatem visionis respectum conformitatis ad rem."

Compare the earlier prologue [Boehner, pp. 413–14]: "Sed ego concedo quod sunt

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On the whole Aureol's careful distinction between what is *real* and what is *true*, his stress on truth as the proper object of the intellect, and his location of truth in the conformity of a mental concept (the "first intention" that is the apparent being) to the extramental object, can be read as a clearer expression of notions fundamentally derived from Henry of Ghent's views on truth.⁵⁶ They part company, however, in Aureol's emphasis upon the active role of the cognitive powers in forming the concept. This, together with the distinction between the real and the true, permits Aureol's greatest theoretical clarification of the aspects of Henry's understanding of how the conformity between first intention and extramental object originates. Henry had claimed that the veridical mental similitude results from the capacity of a "true thing" to be truly represented; but if this were the case, would not "false visions" require "false objects" as their cause? Aureol escapes this consequence by holding instead that what makes the mental similitude veridical or not is the presence or absence of the represented extramental object. Put another way, distinguishing between reality and truth allows Aureol to maintain that the latter, as the object of the intellect, precisely *ipso facto* exists objectively in the mind rather than in extramental objects.⁵⁷

In discussing truth, Aureol concentrates on establishing that it involves correspondence between the [first] intentions representing particulars and the extramentally existent particulars thus represented; but he also speaks of such a relation between mental composites, that is, propositions, and extramental states of affairs. Thus, where complex knowledge is concerned, truth and falsity depend upon whether there is an extramental "composition in reality" (*compositio in re*) to which the mental proposition (*compositio*) corresponds.⁵⁸ Such mental propositions are, Aureol explains, among the second intentions or, to use his terms, "second order concepts," that the intellect forms by reflecting upon first intentions.

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falsae visiones et iudicia erronea, et ex hoc affirmo rationes et experientias, tum quia verum et falsum non diversificant speciem notitiae, quoniam dicunt conformitatem et difformitatem ad obiectum quae accidunt notitiae, immo etiam non diversificant identitatem numeralem, quia eadem aestimatio secundum Philosophum est primo vera et post falsa, nulla facta mutatione in ipsa sed in obiecto ..."

⁵⁶ See above, chapter II, at nn. 24–26, 29–31.

⁵⁷ I *Scriptum* d.2, s.10 [II: 548], "Quod verum, in intellectu existens obiective, est terminative obiectum;" *ibid.* [550 lin. 75–79]: "Ideo obiectum intellectus est propriissime verum vel veritas, quantum ad actum non erroneum; falsum autem seu falsitas quoad deceptorium actum. Et ita redit commune dictum quod verum est obiectum intellectus." See Henry of Ghent, *SQO* a.1, q.2, quoted in chapter II, n. 26.

⁵⁸ I *Scriptum*, d.2, s.10 [II: 549, lin. 47–52]: "Ex quibus colligitur quod in actu intellectus, qui est credere vel componere, falsitas est compositio cui non correspondet compositio in re, veritas autem cui correspondet; [in] intelligere vero simplicia, falsitas est ip-

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Thus, precisely as the perceptual act "places the object in formed being," i.e. creates the first intention, so the intellectual act of compounding creates the composition, or [mental] proposition. The resulting second intention as, for example, an affirmative or negative proposition, is itself a relation, because it is created by intellectual acts relating one concept to another—in this instance, by affirmatively or negatively predicating a first intention of another.⁵⁹

It should be noted that, while Aureol holds that an "apparent being" or "intention" is created in both the sensitive and intellectual faculties by their direct acts (*actus rectus*), he here restricts the formation of second intentions to the intellect, where the acts that produce them are reflected.⁶⁰ Aureol believes that the intellect is capable of three ways of acting reflexively, namely of composing and dividing intentions into propositions, and of reasoning discursively, that is, syllogistically. The intellect's fourth and direct act, Aureol says, is intuition.⁶¹

Intuitive and Abstractive Cognition

To recognize that Aureol's insistence upon the formation of an "ap-

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sa apparentia obiectiva cui res non <<cor>>respondet, sicut in umbris et somnia; ergo per oppositum, veritas erit apparentia obiectiva cui res correspondet." See Wodeham's discussion of Aureol, below, chapter X, at nn. 63–70.

⁵⁹ I *Scriptum* d.23 (Borgh. lat. 329, fol. 264ra–rb): "Secundum hoc igitur patet quod intentiones non sunt ipse actus intelligendi ... Sed est intentio ipsemet conceptus obiectivus per intellectum formatus claudens indistinguishibiliter conceptionem passivam et rem quae concipitur per ipsam. Et idem est dictum intentio quod conceptus et intentio prima idem quod conceptus primi ordinis quod intellectus format circa res non reflectendo se super suos conceptus. Intentiones vero secunde sunt conceptus secundi ordinis quos intellectus fabricat reflectendo et redeundo super primos conceptus, ut sunt universalitas, predicabilitas et huiusmodi quantum ad actum simplicem, et actualis affirmatio vel negatio unius de altero quantum ad actum componentem et dividendem, et connexio extremorum in medio quantum ad actum tertium discursivum. Sunt autem omnes intentiones huiusmodi in praedicamento relationis, sicut patet quod universalitas est relatio universalis ad particulare ... affirmatio et negatio sunt quaedam relationes; connexio etiam extremorum in medio et illatio maioris extremitatis de minori virtute medii est habitudo quaedam."

⁶⁰ Note the use in note 59, above, of the statement "intentiones vero secunde sunt conceptus ... quos intellectus fabricat reflectendo ..." That the first intentions are created by the *actus rectus*, see n. 74 below.

⁶¹ I *Scriptum* proem., s.1, q.1, a.3 [I: 165, lin. 33–45]: "Huic tamen obviare videtur quod hic distinguitur imaginari per intellectum et propositionem concepere ab ipso adherere, quasi esset alius actus adherere alicui propositioni ab actu quo concipitur, quod nimirum non videtur veritatem continere, tum quia componere, dividere, discurrere, intueri sunt quatuor actus intellectus, nec videtur quod adherere sit quintus actus ... Si igitur aliqua propositio affirmative concipitur per intellectum, videtur quod ille adhereatur ... Tum etiam quia superius dicebatur quod certitudo et adhesio non est aliquid aliud quam intelligere et concipere."

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parent being" rests upon explaining the formation of concepts,⁶² is not to deny that the claim arose from his theory of sense-perception. That he took vision as the paradigm of perception was, of course, neither unusual nor controversial; but for his contemporaries the role he assigned to such phenomena as illusions, afterimages, mirages, dreams, and hallucinations, was both. Henry of Ghent—and Scotus in responding to him—had treated these as instances of aberrant perception and hence *not* the primary phenomena to be explained by a theory of perception. Aureol, on the contrary, took them not to be merely secondary phenomena for which a theory, structured on more primary ones, must also account, but instead derived his theory of perception from a consideration of these phenomena. Elsewhere admitting that this had been his procedure, he foresaw and attempted to answer the objection to it:

Perhaps it will be said against these experiences first that such visions are false, deceptive, and erroneous; and that one should not argue from errors and deceptions to true visions. Second, it may be argued that these are not visions [at all], but judgments made by the common sense as a result of which we judge that we are seeing.⁶³

That is, reversing the order of objections, it must be established that these experiences are *among* the phenomena that a theory of perception must consider; then, that one can legitimately proceed as Aureol had, in fact, done. To the first objection, Aureol responds that whether true or false, these phenomena are in any event real visions, since "in the faculty of vision, there is no act that does not participate in the specific nature (*ratio*) of vision."⁶⁴

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This enumeration of four intellectual acts helps to explain Aureol's objection to the identification of species and intentions above, n. 28, as entailing that *all* acts of the intellect would be reflexive.

⁶² Aureol is explicit concerning a further motivation for positing the formation of the intentional entity: "Unde patet, *quod non potest evitari opinio Platonis*, nisi ponendo, quod supra frequenter dictum est, scilicet, quod res extra particulariter existentes accipiunt per operationem intellectus quoddam esse intentionale et obiectivum, ita quod rosa, quam aspicit, qui definit aut demonstrat, non est aliud quam res particulares positae in esse obiectivo et intentionali ut intentio una et unus simplex conceptus," as quoted in Dreiling, *Konzeptualismus*, p. 82, n. 2; see also I *Scriptum* d.2, s.10 [II: 548, lin. 8–11]; I *Rep. Paris.* d.3, p. 2, q.4 (Borgh. 123, fol. 37rb).

⁶³ I *Scriptum* prooem., s.2 [I: 200, lin. 99–105]: "Sed forte dicitur contra istas experientias primo quidem quod huiusmodi visiones falsae sunt, deceptoriae et errores; et ex erroribus et deceptionibus non debet argui ad veras visiones; secundo vero quia non sunt visiones, sed iudicium sensus communis, per quem iudicamus nos videre, ut patet in II *De anima*. Unde tales ludificati non vident, sed videtur eis quod videant, sensu communi hoc iudicante." Cf. I *Scriptum* d.3, s.14 (quoted in n. 50 above); also the earlier version in Boehner, "Notitia Intuitiva," p. 413: "Sed dicitur ad omnes istas experientias quod tales actus non sunt intuitiones sed delusiones et falsae notitiae et iudicia erronea."

⁶⁴ I *Scriptum* prooem., s.2 [I: 200, lin. 106–15]: "Hae autem evasiones non impe-

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To understand why Aureol does not think that the second objection—that the problem at issue is one of judgments rather than perceptions—stands, one must appreciate his account of vision, and this in turn requires returning to the major consequence Aureol repeatedly insists would follow from the denial of the "apparent or intentional being." At distinction three, for example, he warns that,

Universally, he who denies that many things have solely an intentional and apparent being, and who thinks that everything that is seen has being externally in the nature of things, [thereby] denies any illusion (*ludificatio*), and falls into the error of saying that all things exist which appear [to exist].⁶⁵

As he interprets the "experiences" he has adduced as evidence of an "apparent being," therefore, Aureol so analyses them to establish either the non-existence or non-presence of the external object. Thus, for example, of the first concerning motion—which, unlike Ockham, Aureol conceives as a thing (*res*) rather than as a relation—he inquires where the motion is. After listing some of the obvious possibilities, he concludes that *in this instance* the motion has no extramental existence. Similarly, the second experience offers a flaming circle which appears to exist but which, Aureol claims, in fact does not. The experiences of afterimages depend upon non-present objects. In short, for Aureol these examples constitute evidence of naturally occurring cognition of an object either not present or non-existent. It should be noted, in fact, that such a distinction is not clearly inferable from Aureol's arguments; rather, he seems to conflate non-existence and non-presence.

The cognition of such non-existent or non-present objects is a topic Aureol treats most extensively in the second question of the Prologue to the *Scriptum*, where he explicitly raises the issue of intuitive cognition, to which he only refers obliquely in the third distinction.⁶⁶ Aureol assumes with Scotus that there are two modes of cognition, intuitive and abstrac-

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diunt demonstrationes praedictae. Prima non evadit, sed potius confirmat; nullus enim actus est in potentia visiva, qui non participet rationem specificam visionis. Sed huiusmodi actus sunt in oculo, ut expresse dicit Augustinus et Commentator: Augustinus quidem concludit 'et ipsa erat visio'; Commentator vero dicit quod 'homo sentit per quinque sensus.' Ergo huiusmodi expertae apprehensiones participant rationem specificam visionis; quare nulla visio secundum sui specificam rationem exigit rei praesentialitatem."

⁶⁵ I *Scriptum* d.3, s.14 [II: 697 lin. 57–61]: "Et universaliter qui negat multa habere esse intentionale et apparens tantummodo, et omnia quae videntur putat esse extra in rerum natura, negat omnem ludificationem et incidit in errore dicentium quod omnia sunt quae apparent."

⁶⁶ *Ibid.*, prooem. s.2 [I: 196–209]: "Primum in quo deficit opinio Scoti ... quod intuitiva notitia esse non possit, nisi re existente actu praesente." See also n. 80 below. The Parisian *reportatio* was less oblique; cf. I *Rep. Paris.* d.3, p.2, q.4 (Borgh. 37va–vb): "sed

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tive, in the senses and intellect alike.⁶⁷ Because Aureol's fourteenth-century readers also took Scotus's discussion as their starting point, they would have recognized the Scotistic background to Aureol's understanding here. But for the same reason at least at Oxford, if not also at Paris, they probably would not have recognized that perspectivist uses of the term "intuition" also lie behind Aureol's insistence that intuitive cognition occurs most identifiably in sensitive vision, and that from such vision the name has been transferred to intellectual vision.⁶⁸ Thus, he holds, it would be more precise to refer to "ocular" cognition.⁶⁹ On the other hand, abstractive cognition, which is most evident in imagination, would be more properly and less equivocally termed "imaginary" than abstractive.⁷⁰

Uncomfortable with Scotus's terminology, Aureol also rejects the Subtle Doctor's distinction between intuition and abstraction based on the presence or absence of the *object*. After all, Aureol points out, "everything that is visible is imaginable; for just as color, direction, distance, presence, and existence can be observed ocularly (*oculariter aspici*), so they can be apprehended imaginarily." What, then, is the defining difference between the two modes of cognition? According to Aureol, intuitive and abstractive cognition differ solely in the manner of knowing; that is, he says, "four conditions, lacking in the manner in which imaginary *notitia* grasps (*transit super*) the object, coincide in ocular cognition" and suffice to distinguish it from imaginary, or abstractive cognition, both in sensation and intellection.⁷¹

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sensus format mediantibus actibus suis obiecta in esse intentionale. Probo per multas experientias ... Ad hoc sunt multe alie <experientie> posite in prima questione huius primi libri ubi tractabatur de noticia intuitiva."

⁶⁷ I *Scriptum*, prooem. s.2 [I: 199 lin. 86–93; 208–09 lin. 46–86]; cf. nn. 68, 75 below. For Scotus, see above, chapter III, at n. 69–72.

⁶⁸ Ibid. [I: 204 lin. 12–29]: "Est igitur intuitiva notitia valde difficilis ad notificandum et maxime propter penuriam nominum propriorum ... Ad cuius explanationem considerandum est, quod haec omnia magis relucet in visione sensitiva, a qua nomen translatum est ad visionem intellectivam."

That Aureol's notion of intuition derives from such perspectivist sources as Alhazen and Bacon is indicated both by his explanation (n. 71 below) to what can be "oculariter aspici," terminology common to both (cf. e.g. nn. 37–38 above) and rare in discussions of Scotus's distinction, and by Aureol's frequent references to Alhazen (only a few of which have been mentioned above).

⁶⁹ Ibid. [I: 204, lin. 21–23]: "Est igitur advertendum quod notitia imaginaria, quae est maxime abstractiva, et notitia ocularis, quae est maxime intuitiva ..."

⁷⁰ Ibid. [I: 205–06, lin. 79–87]: "Alia vero, sive res sit sive non sit, non apparet res praesentialiter et actuative et existenter in rerum natura, sed quasi modo imaginario et absente. Unde magis proprie posset dici ista notitia imaginaria, quam abstractiva, tum quia Philosophus XII *Metaphysicae* et Commentator, ibidem et III *De Anima*, utuntur isto vocabulo in intellectu, vocando huiusmodi notitiam 'imaginationem per intellectum;' tum quia nomen abstractivae notitiae videtur appropriari cognitioni universalis, quae sit per abstractionem ..."

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The first of these conditions is that ocular, or intuitive cognition, acts directly and immediately, rather than discursively (*arguitive*).⁷² The second condition is what Aureol calls "presentiality;" that is, imagination, insofar as it grasps the presentiality of an object, nevertheless imagines that the object is absent. "Ocular cognition, however, bears upon the present object as present; moreover," Aureol continues, "it bears upon the absent object as present, as is clear in the case of illusions and in all the experiences [I have] adduced For although the [external] objects themselves are absent, if the vision remains in the eye, it bears upon them as present."⁷³ Third, ocular cognition is able to actualize its object; that is, of the two modes, intuition is that which produces the "apparent being." From this, the final distinguishing characteristic of ocular vision follows, namely, that "it makes [external] things that do not really exist, appear as really existing."⁷⁴ *Mutatis mutandis*, the same criteria distinguish intellectual intuitive from intellectual abstractive cognition.⁷⁵

While at first glance this treatment of intuitive and abstractive cognition seems remote from Scotus's, in fact the warrant for such a delineation of abstractive and intuitive cognition lies in Scotus's own description

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⁷¹ Ibid. [I: 204 lin. 21–29]: "Est igitur advertendum quod notitia imaginaria, quae est maxime abstractiva, et notitia ocularis, quae est maxime intuitiva, non differunt in aliquo ex parte obiecti; omne namque visibile imaginabile est; color enim, rectitudo, distantia, praesentialitas et existentia, sicut possunt oculariter aspici, sic possunt imaginarie apprehendi. Differunt ergo solum ex parte modi cognoscendi. Quatuor enim conditiones concurrunt in modo quo transit ocularis notitia super obiectum, et illae quatuor deficiunt in modo quo imaginaria cognitio transit super ipsum."

⁷² Ibid. [lin. 30–36]: "Prima quidem conditio est rectitudo; imaginatio enim non transit nec apprehendit rei existentiam immediate, sed quasi arguitive ex causa vel effectu vel signo illius, ut patet de astrologo, qui existens in camera, imaginatur eclipsis actualitatem propter calculationem . . . Ocularis autem notitia non arguitive, sed directe et immediate transit super existentiam rei."

⁷³ Ibid. [lin. 37–46]: "Secunda vero conditio est praesentialitas. Imaginatio namque quantumcumque transeat super praesentialitatem rei . . . tamen ipsam imaginatur ut quoddam absens quantum ad modum tendendi, ut quasi modo absenti feratur super praesens. Ocularis autem notitia fertur super praesens modo praesentiali, immo et super absens modo praesentiali, sicut patet in ludificatis et in cunctis experienciis superius inductis. Quamvis enim obiecta sint absentia, si visio sit in oculo feretur super ea modo praesentiali, ut patet."

⁷⁴ Ibid. [I: 204 lin. 47–p. 205 lin. 66]: "Tertia quoque conditio est actuatio obiecto . . . Ocularis autem notitia ita habet annexam actuationem quod obiectum facit apparere in sua actualitate, esto etiam quod in actu non sit, ut patet in ludificatis. Quarta vero conditio est positio existentiae, et quasi redit in idem. Ocularis enim notitia et res illas, quae realiter non existunt, facit apparere ut realiter existentes . . ." It should be noted that Aureol asserts, in *II Rep. Paris.*, d.13 (fol. 66va) that the other external senses also place their proper objects in conceptual, apparent being.

⁷⁵ Ibid. [I: 205 lin. 67–73]: "Transferendo itaque ista ad intellectum, ibi sunt isti duo modi cognitionis. Primus videlicet qui directe apparere facit rei praesentialitatem, actualitatem et existentiam, immo non est aliud illa cognitio nisi quaedam praesentialis et actuativa apparitio et directa existentia rei; et iste modus est intuitivus. Secundus vero,

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of them in his *Quodlibetal Questions*:

One cognition is *per se* of existence, and it attains the object in its own actual existence. An example is vision of color and, commonly, exterior sensation. The other also is cognition of an object, but not as an existent *in se*, for either the object does not exist, or at least the cognition is not of it as actually existing: an example is the imagination of color ...⁷⁶

Nowhere in Scotus's œuvre did he explicitly and unequivocally indicate that he had intended in this passage not merely to describe by analogy, but in fact to identify intuitive and abstractive cognition as, respectively, perception and imagination (*imaginatio*).⁷⁷ Nevertheless, this seems to have been Aureol's interpretation of Scotus's distinction, and was in any event the understanding Aureol himself consistently employed. Moreover, his terminology was idiosyncratic when he developed it, not only in speaking of "ocular" cognition but, as Aureol himself acknowledged, in referring to *intellectual* imagination, inasmuch as the standard fourteenth-century referent of the term "imagination" was a faculty of the sensitive soul.⁷⁸ If he moved from description by analogy to *identifying* intuition with visual or, in his terms, "ocular" perception, and abstraction with imagination, Aureol departed further from Scotus in insisting that, *qua* sensitive and intellectual qualities, neither intuitive nor abstractive cognition could be defined on the basis of the object (*ex parte obiecti*). This is because, as qualities rather than relations, neither required for its occurrence the presence of an extramental object as one of the termini of a relation.⁷⁹

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qui non directe ex se, nec praesentialiter nec actuative facit res apparere; et hic est abstractivus."

⁷⁶ See above, chapter III, at n. 72.

⁷⁷ See above, chapter III, at nn. 60–67, 73.

⁷⁸ Although at odds with the usual psychological vocabulary, Aureol's usage is consonant with the terminology employed from the late thirteenth century on to distinguish what obtains in nature (*in veritate rei*) from imaginary cases (*secundum imaginationem*). This may be why (as at n. 70 above) Aureol repeatedly stresses that, in referring to intellectual imagination, he appropriates the language of Averroes; see, for example, I *Scriptum* prooem., s.1 [I: 164, lin. 4–10]: "Omnis enim habitus, qui facit aliquid imaginari melius per intellectum absque omni adhesionem, est habitus declarativus. Additur autem hic 'imaginari per intellectum' ut sit conformis loquendi modus modo Commentatoris XII *Metaphysicae* et in *De anima*, qui dicit imaginationem per intellectum ad differentiam imaginationis, que est sensus interior ..." Again [ibid., p. 165, lin. 33–45], quoted above, n. 61, which also implies that Aureol considers the three reflexive acts all to be abstractive, i.e. imaginative, cognition. I am grateful to Stephen Brown for drawing these passages to my attention.

⁷⁹ See n. 71 above, n. 85 below, and I *Scriptum*, prooem. s.2 [I: 202 lin. 173–98]: "Ergo impossibile est quod absolutum intuitivae notitiae et respectus eius ad actualitatem rei sint eadem res ... absolutum intuitivae notitiae est quaedam res de praedicamento qualitatis secundum sic ponentes, et per consequens non dependet ab obiecto, nisi effective tantum ... supponit <<opinio Scoti>> quod intuitiva notitia sit mere denominatio relativa et non aliquid absolutum, cuius tamen oppositum dictum est."

There was no dispute concerning the possibility of an abstractive cognition in the absence of an extramental object; but Scotus had denied the possibility, by definition, for an intuitive cognition. To this Aureol responds that there are two ways of showing that, in fact, intuitive cognitions (i.e. perceptions) can be and are brought about when the external object "is absent or not actually present."⁸⁰ First, Aureol claims, there is the evidence of experience, "to which one should adhere more strongly than to any logical reasons, since scientific knowledge (*scientia*) has its source in experience ... Now experience teaches, in fact, that the intuitive cognition which is in the sense—or intuitive vision—does not *necessarily* require the presentiality of a thing (*res*)."⁸¹ That is, through strictly natural causes one experiences afterimages, dreams, mirages, hallucinations, and illusions. Drawing his description of such *experientiae* from Augustine, Averroes, and Alhazen,⁸² Aureol here concludes, as in his treatment of the third distinction, where he introduced similar experiences, that "sensitive intuition can be separated from the real presentiality of an object," so, by extension, can intellectual intuition.⁸³ In intuitive cogni-

⁸⁰ Ibid. [I: 198 lin. 37–39]: "Dicendum est quod intuitiva notitia fieri potest re absente nec actualiter praesente; quod quidem potest duplici via declarari."

⁸¹ Ibid. [I: 198 lin. 40–199 lin. 85]: "Prima siquidem via experientiae, cui adhaerendum est potius quam quibuscumque logicis rationibus, cum ex experientia habeat ortum scientia ... Nunc autem docet experientia quod intuitiva quae est in sensu et visio sensitiva non necessario coexistunt rei praesentialitatem. Et sunt ad hoc experientiae quinque. Prima quidem in visionibus derelictis ex forti visibili, quam ponit Augustinus XI *De Trinitate* cap. 2, qui ait quod 'plerumque cum diu solem attenderimus vel quaecumque luminaria, et deinde oculos clauderimus, quasi versantur in conspectu quidam colores lucidi ...' Secunda vero est in somno et somniis, quam ponit Commentator ... Tertia quoque experientia in timentibus apparet, qui sonos audiunt et terribilia vident, dissoluti timore, teste Commentator ... Quarta autem est in ludificatis, de quibus constat et notum est omnibus, quod vident ea quae non sunt, ut castra, canes et lepores et similia. Ultima vero est in habentibus oculos molles, in quibus cum viderint rubeum derelinquitur visio rubei, ita ut rubeum appareat eis omne quod vident."

⁸² Compare the passage cited in the preceding note to the earlier text [Boehner pp. 411–13] in which the second, "a priori" argument of the *Scriptum* is presented as the first argument, while the appeal to experience—or, as Aureol states, "what occurs in nature"—follows. There we find the first, second, and fourth experiences of the *Scriptum* and a further experience from Alhazen not found in the later prooemium: "Probatur primo per experientiam quam ponit Alhacen primo *Perspectivae* capitulo quinto, quod existenti in camera <<obscuritur>> aspicienti caelum per aliquod foramen diu, cum post deflexerit oculum ad obscurum apparebit sibi forma lucis et foraminis; et ibidem deducit hoc idem fortiter aspiciente solem vel aliud forte visibile." (Boehner's text corrected from Vat. Borgh. lat. 123, f. 4vb).

⁸³ I *Scriptum* prooem. s.2 [I: 199 para. 87]: "Ex hiis ergo experientiis potest probari intentum; non plus enim exigit intuitiva notitia intellectus rei praesentialitatem quam intuitiva, quae est in sensu. Quod patet ex hoc quod nomen intuitivae notitiae derivatum est a sensu ad intellectum; et iterum, intellectus est abstractior et magis independens quam sensus. Sed probatum est multiplici experientia quod intuitiva separari potest a reali praesentialitate obiecti; ergo multo fortius intuitio intellectus poterit separari."

tions, therefore, the extramental thing appears presently and actually to exist "whether it does or not."⁸⁴

Inasmuch as Aureol has asserted not merely the logical possibility of intuitive cognitions in the absence of a present, extramental object but also their actual occurrence *de facto*, clearly he should hold that God, at least by his absolute power (*de potentia Dei absoluta*) could also cause such cognitions. Indeed, this is Aureol's second line of argument. Proceeding, as he remarks, from the *a priori* principle that God is able to do whatever does not imply a contradiction, Aureol notes first that if one terminus of a relation is destroyed, then the destruction of the relation is entailed. Nevertheless there is, of course, no logical contradiction involved in holding that the other terminus can continue independently to exist. "Now," he argues, "intellectual and sensitive vision—as well as, universally, *all* intuitive cognition—is something absolute, grounding a relation to a thing intuitively known." Hence, if the external thing (*res*) "does not exist in presentiality," the relation is destroyed; but there is no logical contradiction involved in holding that the intuitive cognition, as the other terminus, can continue to exist. Thus, Aureol concludes, "God could conserve such an absolute intuition when the relation has been destroyed and the [extramental] thing does not exist in presentiality."⁸⁵

The capacity of intuitive cognitions, that is, perceptions to occur or persist in the absence of an extramental object underlies a latent difficulty in Aureol's theory, namely that he seems not to indicate how the non-veridical visions of his "experiences" are to be discriminated from veridical (in his terms, "true") visions. Moreover if, unlike Aureol, one construes such experiences as instead the result of faulty judgment, the difficulty becomes one of establishing correct existential judgments.

⁸⁴ Ibid. [I: 205 lin. 77–79]: "Sed una apparitione apparent res praesentialiter et actualiter et existenter in rerum natura, sive sit sive non sit; et hoc est intuitio."

⁸⁵ *Scriptum* prooem. s.2 [I: 200 lin. 94–202 lin. 173]: "Praeterea, potentior est Deus quam sit ars vel natura; sed per artem fit visio absque praesentialitate visibilis, ut patet in ludificatis, et per naturam in somniantibus, timentibus, et infirmis ut supra ... Ergo Deus multo fortius hoc facere potest ... Secunda via vero procedit a priori. Certum est enim quod Deus potest facere quidquid non implicat contradictionem, et conservare fundamentum relationis, corrupto termino et transeunte respectu ... Sed visio intellectiva et sensitiva et universaliter omnis intuitiva notitia est aliquid absolutum, fundans respectum ad rem intuitive cognitam. Ergo Deus poterit conservare intuitionem huiusmodi absolutam, corrupto respectu et rei praesentialitate non existente. Nec valet quod aliqui dicunt huiusmodi respectum esse idem realiter cum illo absoluto et differre tantum formaliter, et per consequens non posse ab invicem separari, cum sint eadem res ... Sed intuitiva notitia secundum realitatem absolutam est independens ab omni alio extra se formaliter, etsi effective dependeat a Deo et ab obiecto. Secundum id autem quod est in ea respectus ad obiectum intuitum, est res dependens realiter ad obiectum tamquam ad terminum, cum omnis respectus quo ad sui realitatem egeat termino."

Taken together, then, these issues implicitly presented grounds for a skeptical epistemological stance vis-à-vis natural cognition, at the levels of perception and judgment. Further difficulties were posed by the possibility of divine intervention invoked in Aureol's *a priori* argument for intuitive cognition of a non-existent.

Nevertheless, although implicit, the appositeness of the discussion to the problem of certitude was not, in Aureol's commentary, explicit. Perhaps because his concern was to draw a distinction between truth and reality, he seems not to have seen the necessary creation of an "apparent being" as affecting the issue of whether certitude in the normal course of natural cognition can be established. Nor does he mention the issue in his *a priori* argument. Here, at least, the reason for what several of his medieval readers construe as an omission is inferable from Aureol's line of reasoning: the argument is introduced to show that intuitive cognition is not a relation but an absolute. To this end, he simply applied a standard criterion for determining whether there was any identity (formal, real, intentional) between two things—here intuitive cognition and its relation to an extramental object—such that the destruction of one destroyed the other.⁸⁶

Whatever Aureol intended, however, his contemporaries and succeeding generations of scholastics understood him to have argued that, even if one could dispose of the indications that there occur intuitive cognitions of non-existents naturally, one must nevertheless grant the possibility of their supernatural causation. How any given reader responded to those arguments depended especially upon whether he appreciated that Aureol had not claimed with Scotus that intuitive cognition was the foundation of existential certitude. Thus, if Aureol was insouciant with regard to the difficulties he had posed for an analysis of the grounds of human certainty in this life (*in via*), the existence of which certitude he assumed, his fourteenth-century readers found his discussion extremely provocative, as shall be evident in what follows.⁸⁷

⁸⁶ That is, if such an identity obtains, then a logical contradiction is involved in actually separating intuition from the relation, i.e. from itself. From at least the mid-thirteenth century, most scholars accepted a distinction between *potentia Dei absoluta* and *potentia Dei ordinata*, the former commensurate with logical possibility and the latter, a subset of the former, comprising physical possibility. This distinction could therefore be employed to distinguish logical and physical possibilities. For the development of the distinction, see: W.J. Courtenay, "Nominalism and Late Medieval Religion," pp. 37–43.

⁸⁷ Aureol himself seems to have thought it obvious that we do correctly discriminate truth from falsity, and that we do have certitude; his view of certitude admits of degrees but not of skepticism. See, e.g., *Scriptum*, proem., s.1 [I: 134–36 lin. 2–32]. Thus Prezioso's interpretation which, inspired by Michalski's conviction that "la théorie de l'esse obiectivum ... a conduit au phénoménisme," has become the basis for much subsequent discussion of Aureol as an initiator of fourteenth-century skepticism, is unwarranted. See Michalski, "Sources du criticisme," p. 47; Prezioso, "La teoria dell'essere apparente," and "L'intuizione del non-esistente."

Chapter Five— William of Ockham

The fourteenth century's most notorious philosopher and theologian was born in the English village of Ockham in or near the year 1285.¹ We do not know when William became a Franciscan, but this surely occurred before he began his university-level studies which, therefore, he pursued at a series of increasingly selective *studia* located at those English Franciscan convents designated as centers of advanced learning.² Perhaps William of Ockham's talents had brought him to the Oxford convent as early as 1315. Whenever he arrived, as a student of theology participating in the intellectual life of the University and preparing for his stint as commentator on the *Sentences*, he was enabled to study at first hand such interpretations of Scotus's views on cognition as John of Reading and Richard Campsall were developing in their lectures during the latter half of the decade.³

On the available evidence, it appears that Ockham's turn as the Franciscan bachelor of the *Sentences* began in the fall of 1317 and lasted for the statutory two academic years, at the end of which (in 1319) the complete *Reportatio* could begin to circulate, thus making his views available to those who were not present at the lectures themselves.⁴ Presumably it was

¹ References to Ockham are to the critical edition, *Guillelmi de Ockham Opera philosophica et theologica ad fidem codicum manuseriptorum edita* (St. Bonaventure, N.Y.: 1967–85), especially to the *ordinatio* of I *Sentences* in G. Gál, S. Brown, G. Etzkorn, and F. Kelley, eds., *Opera Theologica. Scriptum in Librum Primum Sententiarum. Ordinatio*, [OTh vols. I–IV (1967–79)]; the *Reportatio* of II–IV *Sentences* in G. Gál, R. Wood, G. Etzkorn, F. Kelley, and R. Green, eds., *Opera Theologica. Quaestiones in secundum, tertium, et quartum Sententiarum*, [OTh vols. V–VII (1981–84)]; the *Quodlibetal questions* in Joseph C. Wey, ed. *Opera Theologica. Quodlibeta septum*, [OTh vol. IX (1980)]; and Ph. Boehner, G. Gál, S. Brown, eds. *Opera Philosophica. Summa Logicae* [OPh vol. I (1974)]. For the date and place of Ockham's birth, see S. Brown and G. Gál, intro. to I *Ord.* [OTh I: pp. 34*–35*]; E.A. Moody, "William of Ockham," *Encyclopedia of Philosophy* vol. 6, pp. 306–17, gives the date of ca. 1285, which has become conventional. For Ockham's death, see G. Gál, "William of Ockham died 'Impenitent' in April 1347," *FrSt* 42 (1982), 90–95.

² On early fourteenth-century Franciscan education in England, see: W.J. Courtenay, *Adam Wodeham*, pp. 45–53; Joanna Cannon, "Inghilterra," in *Le scuole degli ordini mendicanti (secoli XIII–XIV)* (Todi: 1978), pp. 93–126.

³ For the dating of Campsall's and Reading's *Sentences* lectures, see below, chapter VI; for Ockham's knowledge of the positions maintained by scholars at Oxford in the period between Scotus and himself, see: S. Brown, "Sources for Ockham's Prologue to the *Sentences* [I]," *FrSt* 26 (1966), 36–65; II, *FrSt* 27 (1967), pp. 39–107.

⁴ S. Brown and G. Gál [OTh I: p. 35*–36*]; idem, intro. to *Summa Logicae* (OPh I: 56*).

only after the required stint as opponent and respondent in disputations and after delivering cursory lectures on the Bible that Ockham was sent by his order to the London convent about 1320. There, for the next four academic years, he taught logic and physics, worked on the revision of his *Sentences* lectures into an *Ordinatio*, participated in Quodlibetal disputations with his confrère Walter Chatton, wrote the *Summa logicae*, and waited to be sent by his order back to Oxford to undertake the duties of a regent master.⁵

If Ockham's title as "the Venerable Inceptor" is any guide, his order had promoted him to the magisterium shortly before he left for Avignon to defend himself against the process initiated at the instigation of a former chancellor of Oxford, John Lutterell. Two panels were convened to examine Ockham's *Sentences* commentary at Avignon in the years 1324–26, but neither reached the decision to proceed to the issuance of a list of condemned propositions. The result was not changed when the list was submitted to the Cardinal and master of Theology, Jacques Fournier, soon to become Pope Benedict XII. Where heresy was concerned, Fournier was an experienced judge, yet he, too, chose not to issue any condemnation of Ockham's theological teaching. This amounted to an acquittal and resulted, however grudgingly, in *de facto* approval of Ockham's *Sentences* commentary. Nevertheless, by the time of the final resolution, Ockham had become embroiled in other disputes at the papal curia, and whatever plans he had made to return to Oxford to serve as regent master were permanently postponed.⁶

So far as we know, none of the principals in the Avignon investigation communicated the process or its outcome to scholars at London or Oxford.⁷ The events at Avignon do not appear to have affected the intellec-

⁵ S. Brown and G. Gál [OPh I: 53*–56*]; S. Brown, "Walter Chatton's *Lectura* and William of Ockham's *Quaestiones in Libros Physicorum Aristotelis*" in W.A. Frank and G.J. Etzkorn, eds., *Essays Honoring Allan B. Wolter* (St. Bonaventure, N.Y.: 1986), pp. 81–115, esp. 92–93.

⁶ See Jürgen Miethke, *Ockhams Weg zur Sozialphilosophie* (Berlin: 1969), pp. 29–34. In addition to Miethke (pp. 46–74), the following have discussed Lutterell's role: A. Pelzer, "Les 51 articles de Guillaume Occam censurés en Avignon, en 1326," *Revue d'histoire ecclésiastique* 18 (1922), 240–70; J. Koch, "Neue Aktenstücke zu dem gegen Wilhelm Ockham in Avignon geführten Prozess," *RTAM* 7 (1935), 353–80, 8 (1936), 79–93, 168–97; F. Hoffmann, *Die Schriften des Oxforder Kanzlers Johannes Lutterell*, in *Erfurter Theologische Studien* 6 (1959); Brampton, "Personalities at the Process Against Ockham at Avignon, 1324–26" *FrSt* 26 (1966), pp. 4–25. For Fournier, see also Tachau and Courtenay, "Ockham, Ockhamists, and the English-German Nation at Paris, 1339–1341," *History of Universities* 2 (1982), 53–96, esp. pp. 76–77.

⁷ Although Lutterell's articles were copied into a Basel manuscript (dated 1343) which contains Ockham's *Summa logicae* [OPh I: 16*], I have yet to discover any reference to those articles in a *Sentences* commentary prior to that date. Inasmuch as the theolo-

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tual milieu of Oxford except insofar as they indirectly removed one of the century's great scholars from the lecture halls. When Ockham left England, however, there remained behind him scholars who had been present at his lectures, as well as copies of most of his written œuvre.⁸ Of these, the most important for subsequent discussions of epistemology was the *Sentences* commentary, for although Ockham alluded to and, indeed, depended upon his understanding of cognition and the concomitant rejection of species in his logical treatises and *Physics* commentaries, the only extensive delineation of and arguments for his own theory of knowledge were in the theological works.⁹

Apprehension and Judgment

Ockham's theory of cognition has the superficial aspect of being another modification of the Subtle Doctor's: like his contemporaries, Ockham adopted a dichotomy between sensation and intellection, and posited for each intuitive and abstractive modes of cognition.¹⁰ Yet despite

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gians lecturing on the *Sentences* at London, Oxford, and Paris often reached the same conclusion as had Lutterell concerning the pernicious consequences that would ensue from the view he attributes (in his article 2) to Ockham, it is particularly noteworthy that none of these opponents mentions Lutterell, his article, or these condemnations. The failure to obtain Ockham's censure seems to have marked the end of the matter in contemporary eyes. For Lutterell's article, see below, chapter VII, at n. 94.

⁸ These include Walter Chatton (chapter VII below); Adam Wodeham (chapter X below); possibly Hugh Lawton (chapter VIII below).

⁹ Among the theological works, we also include the *Quodlibetal questions*; nevertheless, it is not clear that it was known to English authors, for neither Holcot, Crathorn, nor Wodeham evince any awareness of Ockham's eventual abandonment of his initial understanding of concepts (as "ficta") for the alternative view that Chatton urged upon him, a change only definitive in the *Quodlibetal questions*. Wodeham was also evidently unaware of Ockham's shift on the object of assent (see n. 13 below). These instances support the suggestion of the editor, Joseph Wey, that Ockham took the manuscript with him to Avignon and there completed his revisions of it; cf. Wey, intro. to Ockham, *Quodl.* [OTH IX: 36*–41*].

¹⁰ The literature on Ockham's theory of intuitive cognition is extensive, the two most comprehensive studies to date being those of S. Day, *Intuitive Cognition* and G. Leff *William of Ockham: the metamorphosis of scholastic discourse* (Totowa: 1975), both of which the present work is intended to revise. All who work on Ockham's epistemology must be indebted to Ph. Boehner for his early efforts to read the Venerable Inceptor carefully, as revealed, e.g., in his "The Notitia Intuitiva of Non-Existents According to William Ockham: With a Critical Study of the Text of Ockham's Reportatio and a Revised Edition of Rep. II, Q.14–15," *Traditio* 1 (1943), 223–75. Recent discussions of particular interest are: T.K. Scott, "Ockham on Evidence, Necessity, and Intuition," *Jour. Hist. Phil.* 7 (1969), 27–47; Miethke, *Ockhams Weg*, pp. 163–227; Marilyn M. Adams, "Intuitive Cognition, Certainty, and Scepticism in William Ockham," *Traditio* 26 (1970), 389–98; idem, "Was Ockham a Humean About Efficient Causality?" *FrSt* 39 (1979), 5–48; John F. Boler, "Ockham on Intuitive Cognition," *Jour. Hist. Phil.* 11 (1973), 95–106; idem, "Ockham on Evident Cognition," *FrSt* 36 (1976), 85–98; Paul A. Streve-

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his indebtedness on this score to Scotus, the Venerable Inceptor sought from the very outset of the *Sentences* commentary to reorganize the discussion of cognition, as is revealed by his introduction as his principal distinction one between apprehensive (*apprehensivus*) and adjudicative (*iudicativus*) acts of the cognitive powers.¹¹

Inasmuch as we can apprehend not only incomplex objects, Ockham begins, but also "propositions, demonstrations, impossible and necessary objects," the intellect's *apprehensive* acts must occur with respect to "anything, whether complex or incomplex, which can be a terminus for an act of the intellective faculty (*potentia*)."¹² By contrast, the intellect's *adjudicative* acts occur only with respect to complex objects, that is, propositions. This is because such acts consist not only in apprehending but also in "assenting or dissenting" and, Ockham stresses, our intellects "assent to nothing except what we deem true, nor dissent [from anything] except what we esteem false."¹³ By stressing the act of intellectually assenting to what is true or dissenting from what is false as integral to scientific knowledge, Ockham reveals that the restriction of his initial discussion to the intellect is far from incidental. Rather, on his view, only this faculty is capable of the adjudicative acts requisite to scientific knowledge (*scientia*), the immediate objects of which are propositional.¹⁴ His initial definition

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ler, "Ockham and his Critics on: Intuitive Cognition," *FrSt* 35 (1975), 224–36; Stephen Read, "The Objective Being of Ockham's *ficta*," *Philosophical Quarterly* 27 (1977), 14–31; Julius R. Weinberg, "The Problem of Sensory Cognition;" Alessandro Ghisalberti, "L'Intuizione in Ockham," *Rivista di filosofia neo-scolastica* 70 (1978), 207–26; R.G. Wengert, "The Sources of Intuitive Cognition in William of Ockham," *FrSt* 41 (1981), 415–47; A. Stephen McGrade, "Seeing Things: Ockham and Representationalism," paper presented at the Seventh International Conference on Medieval Philosophy (S.I.E.P.M.), Belgium, August 1983.

¹¹ Ockham, I *Ord.* prol. q.1 [OTH I: p. 16 lin. 3–18]: "Ad declarandum primae conclusionis primo praemittam aliquas distinctiones et conclusiones praeambulas ... Est igitur prima distinctio ista quod inter actus intellectus sunt duo actus quorum unus est apprehensivus ... Alius actus potest dici iudicativus ..."

¹² Ibid. [OTH I: p. 16 lin. 6–12]: "unus <actus> est apprehensivus, et est respectucuiuslibet quod potest terminare actum potentiae intellectivae, sive sit complexum sive incomplexum; quia apprehendimus non tantum incomplexa sed etiam propositiones et demonstrationes et impossibilia et necessaria et universaliter omnia quae respiciuntur a potentia intellectiva."

¹³ Ibid. [OTH I: p. 16 lin. 12–18]: "Alius actus potest dici iudicativus, quo intellectus non tantum apprehendit obiectum sed etiam illi assentit vel dissentit. Et ista actus est tantum respectu complexi, quia nulli assentimus per intellectum nisi quod verum reputamus, nec dissentimus nisi quod falsum aestimamus. Et sic patet quod respectu complexi potest esse duplex actus, scilicet actus apprehensivus et actus iudicativus ..." See, however, III *Quodl.* q.5, [OTH IX: 232–37] for Ockham's later modification of this position to admit (as Chatton had urged) that, loosely speaking, we may be said to assent that "thus it is in reality" as a proposition signifies. I am grateful to A. Stephen McGrade for directing me to this passage.

¹⁴ Ibid. [OTH I: p. 5 lin. 18–p. 7 lin. 15]; prol. q.2 [OTH I: p. 76 lin. 12–p. 78 lin.

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of adjudicative and apprehensive acts, which he also distinguishes from cognitive habits,¹⁵ is thus deceptively straightforward, for it both conceals his wide reading of his predecessors and encapsulates his intricate resolution of their struggle to demarcate the roles of sensitive and intellectual faculties in attaining knowledge.

If the locus of adjudicative acts is the intellect, both intellectual and sensitive faculties are capable of apprehensive cognitions, which Ockham distinguishes further into the two familiar modes, intuitive and abstractive.¹⁶ Although Ockham does not employ the term "abstractive cognition" as had scholars before him, he nevertheless treats the experience of sensitive and intellectual abstractive cognition as obvious and, therefore, not in need of proof. Directing his attention instead to the delineation of intuitive cognition, and to the establishment of the fact of its occurrence in *both* the senses and the intellect, Ockham defines abstractive cognition almost exclusively in relation to it.¹⁷ Thus, in the Prologue to his *Ordinatio*, Ockham accepts with qualification the description of abstractive cognition as "indifferent to existence;"¹⁸ it is that cognition "by virtue

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12; p. 87 lin. 20–p. 91 lin. 11]; prol. q.9 [I: p. 266 lin. 17–22]; III *Rep.* q.2 [OTh VI: p. 85 lin. 1–p. 86 lin. 3]; and elsewhere in the *Sent.*, passim; V. Richter and G. Liebhold, eds., *Expositio in libros Physicorum Aristotelis* prol. [OPh IV: p. 11 lin. 9–26].

¹⁵ I *Ord.* prol. q.1 [OTh I: p. 17 lin. 3–6]: "Secunda distinctio est quod sicut respectu complexi est duplex actus, sic respectu complexi est duplex habitus correspondens, scilicet unus inclinans ad actum apprehensivum et alius inclinans ad actum iudicativum." Ockham does not explicitly indicate, for example, his indebtedness to Olivi, who had insisted upon mental assent or dissent as the critical ingredient of scientific knowledge; see above chapter II at n. 81.

¹⁶ Most extensively at I *Ord.* prol. q.1 [OTh I: p. 15 lin. 13–17; p. 25 lin. 15–17 (quoted n. 43 below); p. 30 lin. 5–p. 33 lin. 12; p. 65 lin. 10–12]; II *Rep.* q.12–13 [OTh V: p. 256 lin. 10–p. 257 lin. 23; p. 284 lin. 1–p. 285 lin. 6]; q. 14 [OTh V: p. 316 lin. 1–p. 330 lin. 8]; I *Quodl.* q.14 [OTh IX: 78–82]; q.15 [OTh IX: 83–86]; II *Quodl.* q.12 [OTh IX: 165–67]; V *Quodl.* q.5 [OTh IX: 495–500]; VI *Quodl.* q.6 [OTh IX: 604–07].

¹⁷ See, e.g., II *Rep.* q.12–13 [OTh V: p. 256 lin. 10–p. 257 lin. 20]: "... quaedam est cognitio intuitiva, et quaedam abstractiva. Intuitiva est illa mediante qua cognoscitur res esse quando est, et non esse quando non est. Quia quando perfecte apprehendo aliqua extrema intuitive, statim possum formare complexum quod ipsa extrema uniuntur vel non uniuntur; et assentire vel dissentire ... sciendum tamen quod licet stante cognitione intuitiva tam sensus quam intellectus respectu aliquorum incomplexorum possit intellectus complexum ex illis incomplexis intuitive cognitis formare modo praedicto et tali complexo assentire, tamen nec formatio complexi nec actus assentiendi complexo est cognitio intuitiva ... Et tunc, si ista duo, abstractivum et intuitivum, dividant omnem cognitionem tam complexam quam incomplexam, tunc istae cognitiones dicerentur cognitiones abstractivae; et omnis cognitio complexa <diceretur> abstractiva, sive sit in praesentia rei stante cognitione intuitiva extremorum sive in absentia rei, et non stante cognitione intuitiva." There is, of course, no reason to expect Ockham not to treat abstractive cognition as obvious, as there was no historical precedent for altogether denying "abstractive" cognition.

¹⁸ On first reading, Ockham seems to deny this at I *Ord.* prol. q.1 [OTh I: p. 33 lin. 16–20]: "notitia intuitiva et abstractiva non differunt quia abstractiva potest indifferenter

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of which one cannot know whether a thing is or not."¹⁹ This mode of cognition is called "abstractive," Ockham says, either because "it is nothing other than the cognition of some universal abstractable from many [singulars]," or because it "abstracts from existence and non-existence, and from other conditions which contingently happen to or are predicated of a thing."²⁰ Scotus would have been readily recognizable to Ockham's contemporaries as the unacknowledged source for these explanations of the application of the label "abstractive" to this mode of cognition,²¹ but they would also have recognized that Ockham's adoption of the first definition, here implicit and elsewhere explicit, signals a departure from Scotus. For Ockham, the term "abstraction" refers to a conceptual, rather than a perceptual and apperceptual process.²²

Ockham's divergence from Scotus's understanding of intuitive and abstractive cognition extends much further, as Ockham himself indicates when he catalogs five errors in the Subtle Doctor's description of the dichotomy. In the first place, Ockham holds, an intuitive cognition cannot be distinguished from an abstractive one on the basis of the presence of the object, for an object is not *required* as a *terminus* for the act of intuitive cognition.²³ To establish this conclusion, Ockham relies on Scotus's

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esse existens et non existens, praesentis et non praesentis, intuitiva autem tantum existens et praesentis realiter. Quam differentiam ponunt aliqui <i.e. Scotus> ubicumque loquuntur de ista materia." As his response indicates, however, what Ockham denies is not that abstractive cognition is indifferent to existence and non-existence; rather, Ockham denies that this *sufficiently* distinguishes abstraction from intuition, which can also be indifferent to existence under precise conditions. Thus, at the point where Ockham stresses this claim, he repeats that abstractive cognition "nec respicit existentiam nec non-existentiam" (see below, n. 25).

¹⁹ Ibid. [OTh I: p. 32 lin. 4–11]: "Notitia autem abstractiva est illa virtute cuius de re contingente non potest sciri evidentur utrum sit vel non sit. Et per istum modum notitia abstractiva abstrahit ab existentia et non existentia, quia nec per ipsam potest evidentur sciri de re existente quod existit, nec de non existente quod non existit, per oppositum ad notitiam intuitivam. Similiter, per notitiam abstractivam nulla veritas contingens, maxime de praesenti, potest evidentur cognosci."

²⁰ Ibid. [OTh I: p. 30 lin. 12–p. 31 lin. 13]: "Sciendum tamen quod notitia abstractiva potest accipi dupliciter: uno modo quia est respectu alicuius abstracti a multis singularibus; et sic cognitio abstractiva non est aliud quam cognitio alicuius abstrahibilis a multis ... Aliter accipitur cognitio abstractiva secundum quod abstrahit ab existentia et non existentia et ab aliis condicionibus quae contingenter accidunt rei vel praedicantur de re."

²¹ See above, chapter III, nn. 62, 71.

²² II *Rep.* q.14 [OTh V: p. 316 lin. 2–5]: "Notitia est duplex: quaedam incomplexa et quaedam complexa. Incomplexa quaedam est intuitiva, quaedam abstractiva. Abstractiva quaedam in particulari, quaedam in generali;" *ibid.*, concl. 3 [p. 317 lin. 10–17]: "Tertio dico quod <abstractiva> potest accipere a rebus notitiam universalium, quia potest abstrahere universalia a singularibus ... Et hoc potest mediante intuitiva singularium vel abstractiva incomplexa." Cf. also I *Ord.* d.2, q.8 [OTh II: p. 272 lin. 17–19].

²³ I *Ord.* prol. q.1 [OTh I: p. 33 lin. 16–20 (quoted above, n. 18); p. 35 lin. 22–p. 36 lin. 14].

own arguments in opposition to positing any form in the intellect as a prior cause of cognition, and turns Scotus's own principles against their author. Hence, the thing "existing and present in itself" cannot be necessary as an efficient cause of intuitive cognition, since whatever God effects by means of an efficient cause, he can do immediately instead. Therefore, the object need not be present and existent in-and-of-itself (*in se*) for the occurrence of an intuitive cognition. Ockham does qualify this position, however, by noting that although an intuitive cognition of an object can occur supernaturally without the object's presence and existence, it cannot so occur naturally.²⁴

Ockham disposes briefly of the possibility that an object's presence and existence (*res presens et existens in se*) is required as a material, formal, or final cause of intuitive cognition, stating that:

Intuitive cognition, necessarily and in-and-of-itself, is neither more of existence than of non-existence, nor does it more consider (*respicit*) the existence than the non-existence of a thing. Instead, it considers the existence as much as the non-existence of a thing, in the manner already declared. Abstractive [cognition], however, considers neither the existence nor the non-existence of a thing, since a judgment either that a thing exists or that it does not exist cannot be had by means of abstraction.²⁵

Second, Ockham argues, the two modes of cognition do not differ in that abstractive cognition "attains its object only in some diminished similitude." Rather, both intuitive and abstractive cognition attain the same object under the same aspect (*sub eadem ratione*).²⁶ Nor do they differ as

²⁴ Ibid. [OTh I: p. 35 lin. 3–21]: "Primum patet per principia istorum, quae credo esse vera in hac parte. Nam libro III, distinctione 14, quaestione 1, probant <Scotus> quod nulla forma est necessario praevia in intellectu, prior ipsa visione, sic: Si aliqua forma sit praevia necessario, aut se haberet ad visionem in ratione causae efficientis, aut in ratione causae materialis. Si primo modo, igitur potest fieri sine ea, quia quidquid potest Deum per causam efficientem mediam, potest per se immediate ... Ita arguo in proposito: aut illa res existens et praesens habet se in ratione causae efficientis ad notitiam intuitivam, aut in ratione causae materialis vel formalis vel finalis. Si primum, igitur potest fieri sine ea, quia quidquid potest Deus per causam efficientem mediam, potest immediate ... nec tertio modo ... nec quarto modo ..." For Ockham's qualification, see e.g., *ibid.* [p. 38 lin. 5–9]: "Ideo dico quod notitia intuitiva et abstractiva se ipsis differunt et non penes obiecta nec penes causas suas quascumque, quamvis naturaliter notitia intuitiva non possit esse sine existentia rei, quae est vere causa efficiens notitiae intuitivae mediata vel immediata, sicut alias dicitur."

²⁵ Ibid. [OTh I: p. 36 lin. 8–14]: "Et ita notitia intuitiva, secundum se et necessario, non plus est existentis quam non-existentis, nec plus respicit existentiam quam non-existentiam, sed respicit tam existentiam quam non-existentiam, per modum prius declaratum <supra n. 17; infra, n. 48>. Abstractiva autem nec respicit existentiam nec non-existentiam, quia per eam nec potest haberi iudicium quod res existit nec quod non existit."

²⁶ Ibid. [OTh I: p. 34 lin. 1–5]: "Nec, secundo, differunt quia abstractiva non attingit obiectum in se sub perfecta ratione, sed tantum in quadam similitudine diminuta;

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the result of different formal causes which move the cognitive power to act, namely the thing "in its own existence" for intuitive cognition, rather than, for abstractive cognition, the thing in some "cognizable being ... such as a species, or a representative similitude containing the thing itself of which it is a similitude."²⁷ This, Ockham notes, he has established in his arguments for the first conclusion.²⁸ The fourth objection also relies on the first: the two modes of cognition do not differ, as Scotus had claimed, in that "intuitive cognition necessarily has an annexed real and actual relation to the object itself, while abstractive cognition does not necessarily have a real actual relation to the object." The notion of a "necessarily annexed relation" is incoherent in Ockham's appraisal. For him, relations are nothing other than the *relata* and, if these are not identical, then they are separable. Hence they must be contingently rather than necessarily related to each other.²⁹ Finally, for his fifth objection, Ockham reiterates his third point, emphasizing his denial that intuitive cognition involves knowledge by means of representation.³⁰

Ockham thus argues against Scotus on several fronts. Like Aureol, Ockham recognizes that the modes of cognition must not be admitted to differ on the part of the object, if one is to preserve the claim that the two have *precisely* the same object.³¹ Ockham also alludes to his denial that cognition involves representational mediation between object and knower, by a likeness (*similitudo*) or species, an elimination that obviates the positing of its "diminished" being (*esse diminutum*).³² Moreover, and

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intuitiva autem attingit obiectum in se sub perfecta ratione, sicut dicit quidam Doctor <i.e. Scotus> *Quodlibet*, quaestione 6;" p. 36 lin. 15–p. 37 lin. 6: "Secundum patet, quia idem totaliter et sub eadem ratione a parte obiecti est obiectum intuitivae et abstractivae ..."

²⁷ Ibid. [OTh I: p. 34 lin. 6–12]: "Nec, tertio, differunt per rationes motivas formales, quod scilicet in cognitione intuitiva res in propria existentia est motiva per se obiective; in cognitione abstractiva est aliquid motivum in quo res habet esse cognoscibile, sive sit causa virtualiter continens rem ut cognoscibilem, sive sit effectus, puta species vel similitudo repraesentativa continens ipsam rem cuius est similitudo," sicut dicit idem, *Quodlibet*, quaestione 13."

²⁸ Ibid. [OTh I: p. 37 lin. 7–10]; also n. 24 above.

²⁹ Ibid. [OTh I: p. 34 lin. 13–18]: "Nec, quarto, differunt quia notitia intuitiva necessario habet annexam relationem realem et actualem ad ipsum obiectum; notitia abstractiva non necessario habet relationem realem actualem ad obiectum ..." That Ockham is concerned by the notion of relation is confirmed both by his response [p. 37 lin. 11–14] and by his amplification of it in a *Quodlibetal* question dealing explicitly with whether relations are distinct from their *relata*, VI *Quodl.* q.19 [OTh IX: pp. 652–55, esp. p. 652 lin. 7–9]. For Ockham's views on relations see also, e.g., IV *Quodl.* q.28 [OTh IX: p. 444]; VI *Quodl.* q.16 [OTh IX: pp. 639–46]; q.17 [OTh IX: pp. 646–48]; q.18 [OTh IX: pp. 649–51]; q.20 [OTh IX: pp. 656–62].

³⁰ I *Ord.* prol. q.1 [OTh I: p. 34 lin. 19–p. 35 lin. 2; p. 38 lin. 1–3].

³¹ Ibid. [OTh I: 64 lin. 19–p. 65 lin. 9]; for Aureol, see above, chapter IV, at n. 71.

³² See below, at nn. 78–79.

again in common with Aureol, Ockham is concerned to establish that cognitions are not relations to the object, but absolutes. If they were not, then any scientific knowledge ultimately grounded on such cognitions would not be independent of the existence of their objects. Sensible objects are, after all, mutable and contingent in a manner Ockham alleges scientific knowledge is not.³³

Further, where Scotus had not unequivocally assigned a causal relationship between the intuitive and abstractive modes of cognition, Ockham proceeds to do so.³⁴ Just as judgment is "specifically and really distinct from" and presupposes apprehension, so that mode of apprehension unconcerned with existence, namely abstractive cognition, is distinct from and presupposes that which is, even if the two can occur at one and the same time (*simul et semel*).³⁵ Hence, for both Franciscans, intuitive cognition is the non-complex knowledge by means of which man achieves existential knowledge.³⁶ But Ockham moves beyond Scotus by asserting that intuition does so by providing the *evidence* of existence or non-existence upon which evident judgments are based,³⁷ as it "is that [cogni-

³³ See, e.g., I *Ord.* d.17, q.6 [OTh III: p. 502 lin. 7–17]. There are indications that Ockham changed his mind on this point; cf. the earlier III *Rep.* q.7 [OTh VI: p. 195 lin. 1–19].

³⁴ For Scotus, see above, chapter III, at nn. 72–75.

³⁵ II *Rep.* q.12–13 [OTh V: p. 257 lin. 21–p. 258 lin. 10]; q.14 [OTh V: p. 316 lin. 14–p. 317 lin. 9; p. 328 lin. 19–p. 329 lin. 14; p. 333 lin. 5–p. 337 lin. 10]; q.17 [OTh V: p. 385 lin. 1–p. 387 lin. 2]; I *Ord.* prol. q.1 [OTh I: p. 58 lin. 24–p. 60 lin. 7]; d.2, q.9 [OTh II: p. 313 lin. 20–p. 314 lin. 11]; d.3, q.1 [OTh II: p. 389 lin. 11–13]; d.3, q.2 [OTh II: p. 403 lin. 5–6]; d.3, q.6 [OTh II: p. 492 lin. 16–17; p. 494 lin. 14–17].

³⁶ In addition to the passages cited below, in nn. 48–71, see: I *Ord.* d.30, q.3 [OTh IV: p. 360 lin. 11–17]: "dico quod Philosophus accipit ibi 'scibile' pro illo quod non potest sciri nisi ipsum existat, et ideo proprie loquitur de notitia intuitiva;" d.35, q.5 [OTh IV: p. 502 lin. 5–18]. Ockham mentions other characteristics of intuitive cognition as, e.g., at I *Ord.* d.3, q.5 [OTh II: p. 478 lin. 19–p. 479 lin. 3]: "... notitia rei intuitiva potest esse distincta ... quia res simplex intuitive cognita necessario distincte cognoscitur." For Scotus, see above, chapter III, at nn. 71–72.

³⁷ I *Ord.* prol. q.1 [OTh I: p. 31 lin. 10–p. 32 lin. 3]: "notitia intuitiva rei est talis notitia virtute cuius potest sciri utrum res sit vel non, ita quod si res sit, statim intellectus iudicat eam esse et evidenter cognoscit eam esse, nisi forte impediatur propter imperfectionem illius notitiae ... Similiter, notitia intuitiva est talis quod quando aliqua res cognoscuntur quarum una inhaeret alteri vel una distat loco ab altera vel alio modo se habet ad alteram, statim virtute illius notitiae incomplexae illarum rerum scitur si res inhaeret vel non inhaeret, si distat vel non distat, et sic de aliis veritatibus contingentibus, nisi illa notitia sit nimis remissa, vel sit aliquod aliud impedimentum ... Et universaliter omnis notitia incomplexa termini vel terminorum ... virtute cuius potest evidenter cognosci aliqua veritas contingens, maxime de praesenti, est notitia intuitiva." This amplifies the definitions offered at the beginning of the question [p. 6 lin. 10–p. 7 lin. 3]. See also III *Rep.* q.6 [OTh VI: p. 195 lin. 1–19]; IV *Rep.* q.14 [OTh VII: p. 303 lin. 13–15]: "Sed evidens notitia complexa causatur ex notitia terminorum intuitiva, sicut in propositione contingente evidenter nota; vel abstractiva, sicut in propositione per se nota." This central function of evident cognition has, since Boehner, been the focus of much debate, and

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tion] by means of which a thing (*res*) is known to be when it is, and not to be when it is not.³⁸ The resultant evident judgments Ockham believes to be infallible regarding the existence of the objects that we notice.³⁹ Although scholars before him had argued whether scientific knowledge is characteristically *evident*, their use of that term had remained relatively untechnical by comparison to Ockham's. As he defines evident cognition (*notitia evidens*), however, it is precisely "the cognition of some true proposition (*complexum*), the sufficient mediate or immediate cause of which is a non-complex cognition of its terms."⁴⁰ Thus, because like scientific knowledge (*scientia*), understanding (*intellectus*), or wisdom (*sapientia*), evident cognition is had with respect to complex objects, that is, propositions, it is specific to the intellect.⁴¹

Nevertheless, except with regard to propositions known *per se* and assented to on that basis, sensitive intuitive cognitions are necessary to ground such evident judgments, since "in this life (*pro statu isto*), contingent truths concerning sensible objects can only be known when they are before the senses (*sub sensu*)."⁴² Still, sensitive intuitions are not sufficient; in addition, there must be intellectual intuitive cognitions, because as an intellectual operation, judgment cannot have as its immediate proximate cause an act of the sensitive part of the soul.⁴³ Moreover, an intel-

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is most fruitfully treated by Scott, "Ockham on Evidence," especially pp. 38–43; Streveler, "Ockham," p. 226; and Adams, "Was Ockham a Humean?" pp. 41–43.

³⁸ In addition to n. 37 above, see below n. 48.

³⁹ See, e.g., II *Rep.* q.12–13 [OTh V: p. 286 lin. 16–p. 287 lin. 7]; III *Rep.* q.9 [OTh VI: p. 295 lin. 1–20]: "... non tamen potest habere simul notitiam evidentem circa conclusionem et habitum erroris. Et hoc, quia habitus principii inclinatur ad actum scientiae mediate et habitus scientiae immediate, et quia notitia evidens circa idem obiectum et error opponitur." Adam Wodeham also commented on Ockham's understanding of evident cognition as infallible; see below, chapter X.

⁴⁰ I *Ord.* prol. q.1 [OTh I: p. 5 lin. 18–21]: "... notitia evidens est cognitio alicuius veri complexi, ex notitia terminorum incomplexa immediate vel mediate nata sufficienter causari;" for the building of scientific knowledge (as evident cognition of necessary propositions) upon premises known evidently, see: prol. q.2 [OTh I: p. 87 lin. 20–p. 96 lin. 17]; V *Quodl.* q.2 [OTh IX: pp. 481–87]; also n. 37 above.

⁴¹ *Ibid.* [OTh I: p. 6 lin. 5–9]; prol. q.8 [OTh I: pp. 222–23].

⁴² I *Ord.* prol. q.1 [OTh I: p. 27, lin. 10–18]: "Per hoc patet ad omnes auctoritates quod tales veritates contingentes non possunt sciri de istis sensibilibus nisi quando sunt sub sensu, quia notitia intuitiva intellectiva istorum sensibilibus pro statu isto non potest haberi sine notitia intuitiva sensitiva eorum. Et ideo sensitiva non superfluit, quamvis sola notitia intuitiva intellectiva sufficeret, si esset possibile eam esse naturaliter pro statu isto sine notitia intuitiva sensitiva, sicut est in angelis et in anima separata, ubi ad notitiam evidentem talium veritatum non requiritur aliqua notitia intuitiva sensitiva." Cf. also *ibid.* [p. 25 lin. 12–13; p. 67 lin. 11–20]; I *Ord.* d.3, q.6 [OTh II: p. 494 lin. 19–p. 495 lin. 4; p. 515 lin. 3–8, lin. 19–p. 516 lin. 2; p. 518 lin. 2–p. 519 lin. 16]; IV *Rep.* q.14 [OTh VII: pp. 278–79]; I *Quodl.* q.15 [OTh IX: pp. 83–86].

⁴³ I *Ord.* prol. q.1 [OTh I: p. 22 lin. 4–15; p. 25 lin. 15–p. 26 lin. 17]: "Ad notitiam alicuius veritatis contingentis non sufficit notitia intuitiva sensitiva, sed oportet ponere praeter illam etiam notitiam intuitivam intellectivam. Et ideo si intellectus habens noti-

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lectual intuitive cognition is also required to produce evident judgments concerning the existence of purely intelligible objects as, for example, the soul's own acts.⁴⁴ Such intuitive cognitions, by means of which an object's existence or non-existence is known are, Ockham says, "perfect" intuitive cognitions. Like Scotus, he also posits an imperfect intuitive cognition, "through which we judge a thing sometime to have been or not to have been, and this is called 'recordative cognition.'"⁴⁵

By the time Ockham revised his *Sentences* lectures into an *Ordinatio*, his positing of an *intellectual* intuitive cognition in this life (*in via*) had been criticized as an unwarranted innovation. In his own defense, he reminded his critics that Scotus himself had held this view. If Ockham expected such a defense to carry weight, he must have been responding to an attack from a Scotistic quarter—or, more precisely, from those who considered themselves to have adopted Scotus's epistemology more strictly than he.⁴⁶ That Ockham continued to treat *sensitive* intuitive cognition as relatively uncontroversial suggests that the equation of intuition with sensation, and specifically with visual perception, had become general.⁴⁷

Ockham's Definition of Intuitive Cognition

The issue of intellectual intuitions in this life, however, was not the sole aspect of Ockham's account that would prove controversial, for at least as much dispute was to be provoked by his distinctive formulation of intuition as "that cognition by means of which a thing is known to be when it is, and that it is not when it is not."⁴⁸ On its face, this wording would

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tiam incomplexam extremorum, vel significatorum per extrema, illius veritatis, assentit illi quando extrema, vel significata extremorum, sentiuntur, et quando non sentiuntur non assentit, oportet quod aliam notitiam incomplexam habet ... Similiter patet prius quod nullus actus partis sensitivae est causa proxima et immediata respectu alicuius actus iudicativi ..."

⁴⁴ Ibid. [p. 28 lin. 5–p. 30 lin. 4; p. 39 lin. 18–p. 44 lin. 6].

⁴⁵ II *Rep.* q.12–13 [OTh V: p. 261 lin. 6–p. 267 lin. 10 (quoted in part below, n. 86)]; but see also IV *Rep.* q.14 [OTh VII: p. 294 lin. 15–p. 297 lin. 9; p. 312 lin. 1–20]. The last of these probably preserves the earliest expression of Ockham's views, according to the chronology proposed by Boehner, "Notitia intuitiva ... According to Ockham," and augmented by Gál, in the introduction to OTh I (pp. 26*–36*). Ockham seems to have moved away from this acceptance of "imperfect" intuitive cognition by the time of his *Ord.* revision and *Quodl.*, though he may never have abandoned it entirely.

⁴⁶ I *Ord.* prol. q.1 [OTh I: pp. 44–47]; for Scotus's view, which Ockham quotes extensively and accurately, see above, chapter III, at nn. 69–71. Ockham was in fact criticized by his confrères John of Reading and Walter Chatton, for which see below, chapters VI at n. 67, and VII at nn. 57–60.

⁴⁷ See John of Reading (whose discussion predates Ockham's), chapter VI below.

⁴⁸ In addition to nn. 17, 37 above, see for example: I *Ord.* prol. q.1 [OTh I: 71 lin. 16–23]: "Ad secundum: forte non est inconveniens quod res intuitive videatur et tamen quod intellectus ille credat rem non esse, quamvis naturaliter non possit hoc fieri. Et hoc sufficit ad notitiam intuitivam, quod quantum est ex se sit sufficiens ad faciendum rectum

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appear to expand the scope of intuition—that is, direct, simple, immediate, non-discursive awareness—to include awareness that an object does not exist. Such also seems to be the import of Ockham's insistence against Scotus that "intuitive cognition, necessarily ... is neither more of existence than of non-existence ... it considers the existence as much as the non-existence of a thing."⁴⁹

As Ockham indicated (but did not always keep straight) and several of his medieval readers noted, the assertion that negative existential awareness is intuitive, is *not* to be confused with the claim that there can be an intuitive cognition of a non-existent.⁵⁰ There can be, he asserts, "no intuition of a pure nothing."⁵¹ Yet Ockham's motivation in so defining intuition has, for most modern and many late medieval readers, been unclear.⁵² Of all Ockham's explanations of intuition, two passages are

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iudicium de existentia rei vel non existentia. Ad septimum dubium dico quod per notitiam intuitivam rei potest evidentiter cognosci res non esse quando non est vel si non sit. Et quando quaeritur a quo causabitur illud iudicium, potest dici quod potest causari a notitia intuitiva rei;" V *Quodl.* q.5 [OTh IX: p. 496 lin. 17–19]: "per notitiam intuitivam non tantum iudico rem esse quando est, sed etiam non esse quando non est ... Preterea, Deus per eandem notitiam videt rem esse quando est et non esse quando non est; igitur ita potest esse in proposito sine repugnantia."

⁴⁹ I *Ord.* prol. q.1 [OTh I: p. 33 lin. 16–20]; also above, n. 25.

⁵⁰ As should be clear from the preceding and following chapters, when medieval scholars before and after Ockham spoke of an "intuitive cognition of a non-existent [object]" they generally specified that they referred to the "intuitive cognition of a non-existent object *by which it is perceived as present and existing*." The italicised claim is what Ockham denies of both naturally and supernaturally caused intuitions; hence his careful wording as, e.g., in his statement of the sixth, seventh, and eighth doubts to which his position gives rise, I *Ord.* prol. q.1 [OTh I: p. 55 lin. 3–p. 57 lin. 4].

⁵¹ I *Ord.* d.3, q.2 [OTh II: p. 412 lin. 9–12].

⁵² For medieval readers' response, see e.g., chapter VII below at nn. 54–55; chapter IX at n. 13; chapter X at nn. 26–29. My reading of Ockham here is controversial, and is defended also by A. Ghisalberti, "L'Intuizione." I was originally alerted to the interest of Ockham's wording by Streveler's "Ockham on Intuition," although E. Hochstetter had earlier come to the same recognition in his *Studien zur Metaphysik und Erkenntnislehre Wilhelms von Ockham* (Berlin: 1927). The latter's discussion was dismissed by Ockham's first modern editor, Philotheus Boehner who, while recognising that Ockham understood intuition to be the means by which existential certitude is indeed achieved, nevertheless misunderstood Hochstetter's point. Thus, in 1943 Boehner insisted incorrectly that the concern to establish the "indubitable evidence" underlying "negative contingent propositions, viz. the propositions of non-existence" was "Hochstetter's problem" and not "the problem of Ockham." Boehner added that he did not "know of any text where the *Venerabilis Inceptor* formulates this problem ("Notitia Intuitiva ... According to Ockham," p. 238)." Since then, the undiminished dispute over Ockham's alleged skepticism and fideism has obscured the issue that Hochstetter (in fact following Ockham) raised. Recently, André Goddu has noted in *The Physics of William of Ockham* (Leiden: 1984) that Boehner (and following him, S. Day) failed to appreciate Hochstetter's insight (p. 33); Goddu's own analysis, which relies on possible worlds, is nevertheless also confused (his pp. 32–51). My own efforts to explicate Ockham's views have been assisted greatly by the criticisms of A. Stephen McGrade, Paul Streveler, and William Courtenay.

especially revealing of his intent. The first, supporting his insistence that intuitive and abstractive cognition are specifically distinct, ties the Venerable Inceptor's understanding of intuition, as incomplex cognition, to his reading of Aristotle. In the *Nichomachean Ethics*, Ockham finds Aristotle's reminder that knowledge, properly speaking, is only of what is necessary, because concerning contingent things "we do not know, when they have passed outside our observation, whether they exist or not."⁵³ "From these authoritative [statements]," Ockham concludes,

It is clear that, even in this life (of which the Philosopher speaks), some incomplex cognition of a sensible [object] is possible, by virtue of which one can know evidently if (*si*) [the object] is or is not. And nevertheless it is certain that concerning [what is] sensible and is able to be otherwise (*contingenti aliter se habere*), when it is outside the sense and beyond the gaze, some incomplex cognition is possible for the intellect, by virtue of which [cognition] whether [the thing] is or not cannot be evidently known (*sciri*).⁵⁴

Thus, Ockham's wording is a frank repetition of Aristotle's which, it should be noted, unambiguously refers to knowledge of existence *tout court* rather than to "[existence in the observer's] presence."⁵⁵ That is, in the case that Aristotle mentions, namely when a perceptible object is no longer present, the observer's doubt can only concern whether the object exists somewhere—not whether the object is present. On the latter the observer has no doubt: he is aware that the object is absent. Ockham is again explicit that intuitions cause negative existential judgments when he later answers a possible (or actual) objection to his position:

I say that by intuitive cognition of a thing one can know evidently a thing not to be when it is not or if it is not ... It is not absurd (*inconueniens*) that some cause with another partial cause will cause some effect, and neverthe-

⁵³ I *Ord.* prol. q.1 [OTh I: p. 23 lin. 2–14]: "Sed certum est quod intellectus potest habere notitiam incomplexam tam de Sorte quam de albedine, cuius virtute non potest evidenter cognoscere an sit albus vel non, sicut per experientiam patet; et praeter istam potest habere notitiam incomplexam virtute cuius potest evidenter cognoscere quod Sortes est albus, si sit albus. Igitur de istis potest habere duas notitias incomplexas quarum una potest esse causa notitiae evidenter illius propositionis contingentis et alia, quantumcumque intendatur, non; igitur specie distinguuntur. Confirmatur per Philosophum II *Priorum*, ubi dicit quod nullum sensibile, cum extra sensum sit, scimus. Similiter VI *Ethicorum*, cap. 4: 'Contingentia autem aliter se habere cum extra speculari fiant latent si sunt vel non sunt.'"

⁵⁴ *Ibid.* [OTh I: p. 23 lin. 14–21]: "Ex istis auctoritatibus patet quod de sensibili etiam pro statu isto, de quo loquitur Philosophus, est possibilis aliqua notitia incomplexa, virtute cuius potest sciri evidenter si sit vel non sit. Et tamen certum est quod de sensibili et de contingenti aliter se habere quando est extra sensum et extra speculari est possibilis intellectui aliqua notitia incomplexa, virtute cuius non potest sciri evidenter an sit vel non sit; igitur etc."

⁵⁵ Cf. the translation of Barnes, *Nich. Eth.* vi.3 (1139b20–23) in J. Barnes, ed. *The Complete Works of Aristotle. The Revised Oxford Translation* (Princeton: 1984) vol. II, p. 1799. So too Roger Bacon understood Aristotle's point; see above, chapter I, n. 68.

less that the [former cause] alone without the latter partial cause will cause *the opposite effect*. And hence intuitive cognition of a thing with the thing itself causes the judgment that the thing is; when, however, the thing itself is not, then the same intuitive cognition without the thing will cause *the opposite judgment*,⁵⁶

that is, the judgment that the object does not exist.

Ockham's formulation of intuition therefore seems to entail that, unless God were to intervene in the cognitive process, in the natural course of things we could not have such intuitive cognitions of non-existent objects that we could thereby see them as existing. So indeed runs Ockham's explicit argument. He thinks that we would instead see only those objects that are present before us and that there are no other objects. Because he conceives of cognitions as absolutes, however, he accepts the logical possibility that there could be intuitions of non-existent objects by God's absolute power.⁵⁷ All the same, inasmuch as apprehensive acts (including intuitions) and adjudicative acts are really distinct, if God were to conserve the intuition alone without the object, then we would not *judge* that it exists. Indeed, we would instead reach the evident judgment that the object does *not* exist.⁵⁸

Strange as this conclusion may at first seem, it is entirely consistent with Ockham's claim that for evident cognitions, intuition and object are each partial causes, such that the absence of the object produces a negative existential judgment.⁵⁹ There are, however, problems with Ockham's formulation of intuition as the means by which we are aware (*cognoscimus*) or know (*scimus*) evidently and with certitude that "a thing does

⁵⁶ I *Ord.* prol. q.1 [OTh I: p. 70 lin. 21–p. 71 lin. 9]: "Ad septimum dubium dico quod per notitiam intuitivam rei potest evidenter cognosci res non esse quando non est vel si non sit. Et quando quaeritur a quo causabitur illud iudicium, potest dici quod potest causari a notitia intuitiva rei. Et quando dicitur quod illa habet causare effectum oppositum si res sit, potest dici quod non est inconueniens quod aliqua causa cum alia causa partiali causet aliquem effectum et tamen quod illa sola sine alia causa partiali causet oppositum effectum. Et ideo notitia intuitiva rei et ipsa res causant iudicium quod res est, quando autem ipsa res non est tunc ipsa notitia intuitiva sine illa re causabit oppositum iudicium. Et ideo concedo quod non est eadem causa illorum iudiciorum, quia unius causa est notitia sine re, alterius causa est notitia cum re tamquam cum causa partiali;" cf. also p. 56 lin. 9–21. *Non-presence* is the opposite of presence, not of existence, of course; thus he should be understood as making claims concerning our awareness of existence rather than merely of presence.

⁵⁷ *Ibid.* [OTh I: p. 38 lin. 14–p. 39 lin. 6]; I *Ord.* d.2, q.5 [OTh II: p. 156]; q.6 [OTh II: p. 186].

⁵⁸ I *Ord.* prol. q.1 [OTh I: 31 lin. 13–17]: "Et eodem modo si esset perfecta talis notitia <intuitiva> per potentiam divinam conservata de re non existente, virtute illius notitiae incomplexae evidenter cognosceret illam rem non esse;" cf. also *ibid.* [OTh I: p. 55 lin. 3–15; p. 69 lin. 19–p. 70 lin. 20]; II *Rep.* q.12–13 [OTh V: p. 259 lin. 19–p. 260 lin. 12].

⁵⁹ See above, n. 56.

not exist when it does not." For a generation that had come to accept intuitions as the means by which we are aware of existence, there can have been little doubt that by such locutions as "that an object is when it is" Ockham referred to existence and not merely to presence.⁶⁰ But the most we are entitled to infer when we do not perceive an object is either its imperceptibility or its non-presence, not its non-existence.⁶¹

Can Ockham have intended that his notion of intuition be understood as a cognition that provides evidence either of existence or inherence or presence "and so on for other contingent conditions" as the case may require? This construction does not have support in Ockham's own words. Instead, at more than one juncture he indicates that cognition of such conditions as the inherence of one thing in another, or an object's position relative to another, is not simple but complex.⁶² Moreover, as he tells us, "every complex cognition of the terms [of a proposition] or of the things signified [by them] ultimately reduces to the incomplex cognition of the terms"—specifically to an intuitive cognition.⁶³ It is not obvious, then, how such a response would suffice to save Ockham from a charge that, by conflating existence and presence, he has claimed too much for intuition.

Moreover, Ockham would dispute the statement that intuitions permit us *inferences* concerning existence (or presence). Even if a reader were inclined to accept that negative existential knowledge is possible, he might still depart from Ockham by assigning its attainment to abstraction—that is, to the mode of cognition that, by common agreement, does not suffice for certitude. Yet the very point of his insistence that all adjudicative and abstractive cognitions presuppose intuitions is that the latter allow us to *know*—immediately and with certitude—that an object exists, rather than merely to infer it. Inasmuch as inferences are inherently fallible and evident judgments are not, for Ockham much is at stake if knowledge of non-existence is achieved, as he claims, "in the same way" (*eodem modo*) as knowledge of existence. After all, on his view for a singular affirmative categorical proposition to be true "it suffices and is required that the sub-

⁶⁰ Ockham frequently distinguishes existence and presence; e.g. I *Ord.* d.3, q.6 [OTh II: p. 506 lin. 20–22]; d.30, q.3 [OTh IV: p. 360 lin. 11–17 (quoted above, n. 36)]; II *Rep.* q.12–13 [OTh V: p. 259 lin. 1–p. 260 lin. 4; p. 286 lin. 10–p. 287 lin. 7]; *Dubitaciones additae* q.6, a.11 [OTh VIII: p. 290].

⁶¹ For Ockham to concede the first alternative would remove his warrant for construing intuition as sufficient to inform us concerning what exists. That he thinks intuition is sufficient to do so is indicated by his argument against mediating species on the grounds that, if they existed, we would intuit them (see below nn. 75–76).

⁶² For example, I *Ord.* prol. q.1 [OTh I: p. 22 lin. 18–p. 23 lin. 7 (see above, n. 53); p. 31 lin. 17–p. 32 lin. 3 (quoted above, n. 37)].

⁶³ I *Ord.* prol. q.1 [OTh I: p. 32 lin. 17–21].

ject and predicate supposit for the same [thing].⁶⁴ That the predicate and subject supposit for the same thing in a proposition such as "Socrates is white," is precisely what we know by intuition.⁶⁵ Hence, if Ockham is correct, then he can guarantee that the intellect has sufficient evidence for assenting to negative categorical propositions as it has for affirmative ones. At least once, he indicates that this is among the advantages he recognizes in his understanding of intuition:

If by one intuitive act I intellectually know some extremes [of a proposition] that are specifically distinct—for example, if I simultaneously see a whiteness and a blackness by a single intellectual act—and if I then form the proposition 'white is not black' by means of that intuitive cognition, here I have only two acts. One is an intuitive [act] that terminates in the whiteness and blackness; the other is a complex [act] by which white is denied of black, and [this act] terminates negatively in the copula and extremes.⁶⁶

This declaration suggests that, however problematic Ockham's formulation of intuition as the "means by which we know an object not to be when it is not," his wording is far from being carelessly ambiguous. Thus

⁶⁴ II *Summa logicae* c.2 [OPh I: p. 249 lin. 8–p. 250 lin. 17].

⁶⁵ III *Summa logicae* p.2, c.25 [OPh I: p. 550 lin. 6–24]: "Et quia, sicut patet ex praecedentibus, quaestio si est est prima quaestio, ideo videndum est prius de quaestione si est. Est autem primo sciendum quod quaestio si est terminatur per hoc quod evidenter cognoscitur quod res est. Quod fit si sciatur propositio in qua esse existere per propositionem de inesse vel de possibili praedicatur de subiecto, ideo videndum est quomodo talis propositio evidenter cognosci potest. Et oportet scire quod talis propositio dubitabilis vel habet pro subiecto nomen mere absolutum affirmativum vel habet aliud nomen pro subiecto, puta nomen negativum vel connotativum vel respectivum. Et propositio mentalis, vel vocalis tali mentali correspondens, in qua subicitur nomen mere absolutum affirmativum, nullo modo cognosci potest evidenter nisi res importata per subiectum intuitive et in se cognoscatur;" p.2, c.29 [OPh I: p. 557–60]. See also I *Ord.* prol. q.1 [OTh I: p. 31 lin. 17–p. 33 lin. 12].

⁶⁶ II *Rep.* q.12–13 [OTh V: p. 280 lin. 16–p. 281 lin. 4]: "Si quaeras utrum in prima formatione complexi sint necessario tres actus, dico quod non. Quia sive formetur complexum mediante cognitione intuitiva sive abstractiva incomplexa—et hoc sive extrema complexi distinguantur sive non—non requiruntur nisi duo: unus quo intelligo extrema solum et alius quo intelligo copulam cum extremis. Quia si intelligam aliqua extrema distincta specie intuitive uno actu—puta, si simul videam albedinem et nigredinem unico actu intelligendi—et tunc formem hoc complexum 'album non est nigrum' mediante illa cognitione intuitiva, hic tantum habeo duplicem actum: unum intuitivum terminatum ad albedinem et nigredinem et alium complexum quo negatur albedo a nigredine, qui terminatur ad copulam et extrema negative. Et tantum habeo istos duos." This passage suggests that Scotus is, at some remove, among the sources for Ockham's position, inasmuch as Scotus held that first intentions could include negations (see above, chapter III, at nn. 31–32, 37), and Ockham concurs, I *Ord.*, d.24, q.1 [OTh IV: p. 83 lin. 19–p. 84 lin. 8]: "Circumscripto omni intellectu, una res non est alia. Igitur circumscripto omni intellectu, negatio sibi competit ... circumscripto omni intellectu, Sortes vel est Plato vel non est Plato; sed non est Plato; igitur circumscripto omni intellectu, Sortes est non-Plato."

Wodeham and other late medieval readers are arguably justified in reading the Venerable Inceptor as speaking of intuitive knowledge that "an object does not *exist* when it does not." Whatever the correct interpretation should have been, this phrase was what many scholastics specified as *most* distinctive about Ockham's view.⁶⁷

Nearly as controversial in the evaluation of Ockham's early readers was his insistence upon the temporal and logical priority of intuitive cognitions.⁶⁸ If modern students of his thought have found him ambiguous or, indeed, self-contradictory on this point, the confusion in his *Reportatio* may reflect an evolution in his notion of abstractive cognition.⁶⁹ There are indications that Ockham once followed Scotus's *Quodlibetal* analogy that described abstraction as imagination, before coming to conceive of abstraction as a conceptual process.⁷⁰ Thus, it may be significant that Ockham's most exact insistence that abstractive cognition "immediately follows" intuitive cognition emerges in the question in the later *Ordinatio* devoted to an attack upon Aureol's theory.⁷¹

Even in the *Reportatio*, however, the primacy Ockham attaches to intuitive cognition is indisputable. There, having modified Scotus's theory of intuitive cognition to provide simple, direct knowledge of an object's existence as a prerequisite for all other knowledge, Ockham concluded that such direct (or immediate) contact between intuer and the intuited object would be impeded or blocked by species.⁷²

⁶⁷ Given Ockham's own rules for establishing when "esse" is interchangeable with "existere" in I *Ord.* d.36 q.un. [OTh IV: p. 538 lin. 1–p. 540 lin. 11], it is difficult to see how he could have intended his wording to be read in any other way. For Wodeham see below, chapter X at nn. 26–29. See also chapter VI, n. 30 and, in addition to authors examined in the following chapters, Petrus Plaout de Palma who, in 1391, described Ockham's view, I *Sent.* [Vatican lat. 4284, fol. 53rb]: "Alia est positio Okam ... quod notitia intuitiva est notitia simplex incomplexa virtute cuius immediate potest elici iudicium quod res est si ipsa sit vel non est si non sit. Bene ipse imaginatur quod notitia illa intuitiva est ... quedam evidentia simplex et incomplexa que immediate concurrat vel est apta nata immediate concurrere ad eliciendum iudicium de existentia rei si res sit vel ad eliciendum iudicium de non existentia rei si res non sit."

⁶⁸ See above, n. 35.

⁶⁹ As Boehner suggested, "Notitia intuitiva ... According to Ockham," pp. 226–27; see also Day, *Intuitive Cognition*, pp. 181–87.

⁷⁰ See, e.g., I *Ord.* prol. q.1 [OTh I: p. 6 lin. 23–p. 7 lin. 2]: "Si autem tantum cognosceret Sortem et albedinem existentem in Sorte abstractive, sicut potest aliquis imaginari ea in absentia eorum;" *ibid.* [OTh I: p. 24 lin. 21–24].

⁷¹ I *Ord.* d.27, q.3 [OTh IV: p. 242 lin. 8 – lin. 14].

⁷² See above nn. 26–27; the principal discussion occupies II *Rep.* q.12–13 [OTh V: pp. 251–310]; q.14 [OTh V: pp. 311–37]; III *Rep.* q.2 [OTh VI: pp. 43–97]; III *Rep.* q.3 [OTh VI: pp. 98–129]. These questions were formerly cited by scholars as II *Rep.* qq.14–18, on the basis of the Lyons edition of 1494–96. The centrality of the elimination of species within Ockham's theory is witnessed by frequent allusions throughout his œuvre. In addition to the following discussion, see e.g., *Expositio in Librum Porphyrii de Prae-*

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The Attack on Sensible and Intelligible Species

When Ockham composed his lengthy attack on species, he was one of the first scholars at an English *studium* to align himself with such diverse Parisian opponents of intelligible or sensible species as Peter Olivi, Henry of Ghent, and Gerard of Bologna. There is no evidence that either Ockham or his English audience actually knew Gerard's arguments, although they comprise the only prior refutation of species based on the requirements of intuitive cognition. By contrast, the Venerable Inceptor's reliance at various junctures on Olivi's views is unmistakable. This is all the more significant because, whether Ockham had read Olivi's *Sentences* commentary directly or knew his views only through some intermediary source, the Provençal Franciscan's commentary was evidently not widely familiar to scholars in England. Of these three notable Parisian opponents of species, then, only Henry of Ghent's arguments were well known to Oxford scholars, and this may account for the focus of Ockham's critics on those elements of his discussion which derived from that of the earlier secular scholar.⁷³ Yet, while drawing upon his arguments, the Venerable Inceptor nonetheless did not follow Henry of Ghent in worrying about the intelligible species without regard to their genesis. Instead, as the four questions of the *Reportatio* devoted to refuting arguments for species make evident, Ockham set out systematically to eliminate *all* species from his account of cognition: those in the medium, those in the senses, and those in the intellect.⁷⁴

If intuition is the means by which we know that an object exists and is present when it is, then, if species really exist, we should have intuitive cognitions of them.⁷⁵ But species, Ockham argues, are not known experientially; that is, while we are aware of the visible object when we see it, we are not aware of anything passing from it to our eyes, as Olivi had already noted.⁷⁶ Ockham implies that the error of positing species would not arise if we did not take vision as the prototypical sense, or as the only sense which perceives intuitively. Instead, he emphasizes,

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dicabilibus c.2 "De specie" [Oph II: p. 31 lin. 14–22]; I *Expositio in Librum Perihermenias Aristotelis* prooem. de natura conceptus, 5 [OTh II: p. 350 lin. 1–p. 351 lin. 14].

⁷³ See Reading (below, chapter VI) and Gregory of Rimini (below, chapter XII).

⁷⁴ Ockham evidently believed that Henry of Ghent had denied all species, and that any indications to the contrary were inadvertant slips; see IV *Rep.* q.14 [OTh VII: p. 285 lin. 5–8]: "Si dicis quod in aninia separata requiritur obiectum in se vel in specie repraesentante, contra: ille Doctor <Gandavensis> alibi negat omnem talem speciem, quamvis I *Quodlibet* q.12 ponat eam."

⁷⁵ II *Rep.* q.12–13 [OTh V: p. 268 lin. 12–19]; III *Rep.* q.2 [OTh VI: p. 59 lin. 11–15]; I *Ord.* d.2, q.8 [OTh II: p. 269].

⁷⁶ See above, chapter II, at n. 54.

I concede that there is intuitive cognition in every sense, interior as well as exterior—that is, such cognition by virtue of which, in the aforesaid way, a thing is known to be or not to be; granted, this is not ocular intuitive cognition. And in this, many are deceived: for they believe that there is no intuitive cognition unless it is ocular, which is false.⁷⁷

Even in vision, however, there is no need for a species, because intuitive cognition—whether of the senses or the intellect—does not require a "representation" or "image" of the object.⁷⁸ Far from requiring representation, in fact, cognition cannot occur via representation, in Ockham's view. Raising the objection Henry of Ghent had recognized and dismissed, and that Olivi had insisted upon, the Venerable Inceptor argues that "what is represented must be known before [it is represented]; otherwise, the representative will never lead to the cognition of what it represents."⁷⁹

For vision, Ockham insists, all that is required in the sense is an impressed quality (*qualitas impressa*) and, not being a sensible species, no intelligible species or phantasms are extracted from it. The hypothesis that qualities are impressed on the senses suffices, Ockham claims, to account for the experiential evidence of an impression made on the external senses, which permits sensation to outlast contact with the object as occurs, for example, in the perception of afterimages.⁸⁰

The act of sensation also seems to leave something in the internal senses, principally in imagination and memory, enabling them to act in the object's absence. Again, for Ockham, the impressed quality rather than a species suffices to incline the faculty to act.⁸¹ If instead a species were impressed on the interior senses, he argues, then it would be either of the same nature as the sensible object, or of a different nature. Neither

⁷⁷ II *Rep.* q.12–13 [OTH V: p. 269 lin. 1–6]: "Et ideo concedo quod in omni sensu, tam interiori quam exteriori, est cognitio intuitiva, hoc est, talis cognitio virtute cuius potest praedicto modo cognoscere rem esse vel non esse, licet non sit cognitio intuitiva ocularis. Et in hoc decipiuntur multi: credunt enim quod nulla sit cognitio intuitiva nisi ocularis, quod falsum est."

⁷⁸ *Ibid.* [OTH V: p. 273 lin. 21–p. 275 lin. 7]. The best clear presentation of Ockham's arguments against representation is A.S. McGrade's "Seeing Things."

⁷⁹ *Ibid.* [OTH V: p. 274 lin. 7–14]: "Item, repraesentatum debet esse prius cognitum; aliter repraesentans nunquam duceret in cognitionem repraesentati tanquam in simile;" d.3, q.9 [OTH II: p. 544 lin. 6–p. 549 lin. 2]. For Ockham's argument that incomplex awareness of one object cannot be caused by awareness of another, cf. also I *Ord.* prol. q.9 [OTH I: p. 240–44]; d.2, q.9 [OTH II: p. 314 lin. 3–11]; d.3, q.1 [OTH II: p. 387 lin. 1–3].

⁸⁰ III *Rep.* q.3 [OTH VI: p. 109 lin. 4–p. 113 lin. 6; p. 105 lin. 18–p. 107 lin. 7]. A comparison of Ockham's experiential examples with those of Aureol indicates that the latter was not their direct source. Much more likely is Roger Bacon, whose *Opus maius* pt.5.1, d.5, c.1 [II: 31] Ockham seems to paraphrase.

⁸¹ *Ibid.* [OTH VI: p. 114 lin. 11–19]; IV *Rep.* q.14 [OTH VII: p. 297 lin. 11–p. 298 lin. 12].

alternative is tenable; the first requires that there be "true sound, true color," and so forth in the soul as the result of sensation which, he insists, is absurd. If the object and the species were different in nature, then we should be aware of the species, which we are not. After all, he points out, we are able to discern lesser differences than that between objects differing in their nature.⁸²

To those who understand Aristotle as having explicitly posited the impression of species on the senses, Ockham responds: "I say that [the Philosopher] uses 'species' in place of 'act' or 'habit.' This is clear, because the Commentator never names the species, but where the Philosopher says 'species,' he [Averroes] always calls this 'form,' and he uses 'form' for 'intention' or 'habit.' And when he says that the intellect is the 'place of species,' it is true, because [the intellect] is the subject for intentions and habits."⁸³

Insofar as *intellectual* intuitive cognition is concerned, Ockham reiterates that "it is useless to achieve by more things what can equally well be achieved by fewer; but intuitive cognition can occur by means of the intellect and the thing seen, without any species."⁸⁴ In addition to the objections he has raised for the senses, Ockham also rejects the notion that intellectual cognition is a process of assimilation of intellect to object, an assimilation species were understood to achieve. If one assumed that cognition did require assimilation, he contends, then one could explain only the intellect's assimilation to an object's accidents, but not to its substance, via species. Intuitive cognition requires in any case no such assimilation; concomitantly, it must not occur in abstractive cognition, which requires only the intuitive cognition and the intellect for its generation.⁸⁵

⁸² III *Rep.* q.3 [OTh VI: p. 115 lin. 13–p. 116 lin. 9]: "Item, si habeat rationem obiecti terminantis sicut similitudo rei: aut est eiusdem rationis cum obiecto exteriori, aut alterius. Si eiusdem, tunc sequitur quod in anima relinquitur verus sonus, verus color, verus calor. Hoc autem est absurdum . . . Nec est ibi aliquid terminans actum alterius rationis ab obiecto exteriori, quia omnis potentia potens discernere inter minus dissimilia potest discernere inter magis dissimilia. Sed haec virtus potest discernere inter individua extra eiusdem speciei. Igitur magis potest discernere inter illud derelictum quod habet rationem obiecti terminantis per te, et obiectum extra cuius est imago, quod falsum est et contra experientiam."

⁸³ II *Rep.* q.12–13 [OTh V: p. 291 lin. 19–p. 292 lin. 6]; Ockham modified this statement in III *Rep.* q.3 [OTh VI: p. 126 lin. 2–11]: "Ad primam auctoritatem, dico quod magna aequivocatio est de specie, quia aliquando Philosophus accipit 'speciem' pro 'actu,' aliquando pro 'habitu,' aliquando pro 'individuo' eiusdem rationis quod potest dici 'forma' vel 'species.' Et ideo communiter vel semper ubi Philosophus ponit speciem, Commentator ponit formam."

⁸⁴ II *Rep.* q.12–13 [OTh V: p. 268 lin. 1–11]: "Ad cognitionem intuitivam habendam non oportet aliquid ponere praeter intellectum et rem cognitam, et nullam speciem penitus. Hoc probatur, quia frustra fit per plura quod potest fieri per pauciora. Sed per intellectum et rem visam, sine omni specie, potest fieri cognitio intuitiva, igitur etc."

⁸⁵ Ibid. [OTh V: p. 272 lin. 17–p. 273 lin. 13–20; p. 277 lin. 1–13]; cf. however II

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In turn, abstractive cognition occurring together with the intuitive cognition of an object, acts with the intellect to produce a habit "inclining [the intellect] to imperfect intuitive cognition," by which the mind judges that something has existed. Thus, for memory, and for thinking about the past, habits are sufficient. At this juncture, Ockham not only repudiates Scotus, but goes so far as to espouse Henry of Ghent's solution, arguing that because it would be superfluous to posit both habits and species, and since the former "save the phenomena" and the latter do not, the acceptance of habits entails the rejection of species.⁸⁶

Yet if, in Ockham's view, the acceptance of an account of cognition devoid of species disposes of needless psychological and epistemological complexities resulting from basing an account of sense and, thereby, intellectual perception primarily on vision, he is nevertheless aware that without the species in the medium, vision would require action at a distance. This consequence Ockham not only accepts but defends. He asserts that such action *does* occur, for instance, when the sun illuminates or heats the air near the earth without illuminating or heating the intervening heavens; or again, when magnets attract iron.⁸⁷

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Rep. q.14 [OTh V: p. 328 lin. 1–p. 329 lin. 14].

⁸⁶ *Ibid.* [OTh V: p. 261 lin. 13–18]: "Cognitio autem imperfecta est illa per quam iudicamus rem aliquando fuisse vel non fuisse. Et haec dicitur cognitio recordativa; ut quando video aliquam rem intuitive, generatur habitus inclinans ad cognitionem abstractivam, mediante qua iudico et assentio quod talis res aliquando fuit quia aliquando vidi eam," cf. also *IV Rep.* q.3 [OTh VII: p. 40 lin. 21–25]. On the production of habits in the interior senses (including the memory) and in the intellect, see: *II Rep.* q.12–13 [OTh V: p. 271 lin. 3–p. 272 lin. 10; p. 278 lin. 13–25; p. 292 lin. 20–p. 293 lin. 24]; *III Rep.* q.3 [OTh VI: p. 120 lin. 16–p. 121 lin. 14]; *IV Rep.* q.14 [OTh VII: p. 293 lin. 12–p. 297 lin. 9]. Ockham does not at this juncture describe such habits as "scientific," as had Henry of Ghent, but from Ockham's frequent indications that science, as a quality residing in the soul, is a habit, it is clear that he considers scientific habits to be among those which the intellect acquires, and thus among those which render species superfluous; see, e.g. *Expositio in libros Physicorum* prol. [OPh IV: p. 5 lin. 6–26]. For Henry of Ghent, see above, chapter II, n. 16.

⁸⁷ *II Rep.* q.12–13 [OTh V: p. 274 lin. 15–p. 275 lin. 7]; *III Rep.* q.2 [OTh VI: p. 44 lin. 1–p. 53 lin. 7]: "Hic dicitur communiter quod species sunt ponendae in medio. Et hoc probatur per rationem ... Primo sic: nihil agit in distans nisi prius agat in medium; sed sensibile distans a sensu agit in sensum, igitur prius agit in medium ... Maior probatur per Philosophum VII *Physicorum*, commento 9, ubi dicit Commentator quod movens et motum sunt simul ... Contra primam rationem probo quod non semper movens immediatum est simul cum moto, sed quod potest distare. Primo, quia sol causat lumen hic inferius iuxta terram et non medium illuminatum quod est inter solem et lumen causatum hic inferius prope terram. Igitur sol potest agere in medium distans immediate ex parte solis, et per consequens potest agere eodem modo in visum meum immediate ... et per consequens potest sol immediate agere in distans ... Tertia experientia est de magnete, qui secundum Commentatorem, commento 9, trahit ferrum distans ab eo localiter; trahit, dico, immediate et non virtute aliqua in medio vel in ferro. Igitur lapis ille agit immediate in distans, non agendo in medium." Ockham elsewhere defends solar action at a distance in *I Ord.* d.37, q.un. [OTh IV: p. 563 lin. 20–p. 566 lin. 14] where

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The recognition of the problem of action at a distance, together with the specific examples adduced, derive from Olivi's discussion, but the result is Ockham's own. Olivi, who restricted the capacity to act at a distance to faculties of the soul (*virtutes animarum*), had therefore denied that these phenomena were in fact occurrences of action at a distance. In contrast to Olivi, the point that the Venerable Inceptor seeks to establish is that material objects can and do act immediately at a distance.⁸⁸

Accepting action at a distance allows Ockham to avoid the ontological commitments entailed by adopting either the corporeal or the intentional being of the extramental species. Ockham holds that it is a contradiction to claim that any extramental thing has only "intentional and spiritual" existence, "because every entity outside the soul is a true substance or accident."⁸⁹ This elimination of species also permits Ockham to dispense with the corollary difficulty of whether species and object are of the same nature (*eiusdem nature*); he maintains instead that light and color are present in-and-of-themselves (*per se*), not accidentally (*per accidens*), in the medium.⁹⁰ That being the case, species are no more required to explain the presence of light and color in the medium than to account for the luminosity of a luminous body. This means for Ockham that the sense of vision can perceive its proper substantial object directly; moreover, because action can occur at a distance, and light and color are independent of the medium, Ockham can deny that vision necessarily requires the medium as a condition for sight.⁹¹

Taken together, Ockham's arguments reveal that his chief concern is not to apply the notorious razor to species as instances of metaphysical entities posited without necessity, although he clearly believes them unnecessary, and denies their existence frequently on those grounds.⁹² The eli-

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he remarks sharply: "Nec valet proterviendi dicere quod sol bene agit in distans sed mediate, non immediate." The most sustained attempt to date to explicate Ockham's arguments for action at a distance is André Goddu's "William of Ockham's Arguments for Action at a Distance" (unpublished paper presented at St. Bonaventure, N.Y., October 1985).

⁸⁸ For Olivi, see above, chapter II, at nn. 63–66.

⁸⁹ III *Rep.* q.2 [OTh VI: p. 60 lin. 3–22]: "Item, illa species non habet esse intentionale et spirituale, quia hoc dicere includit contradictionem, quia omne ens extra animam est vera res et verum esse reale habet suo modo, licet non ita perfectum sicut unum castrum vel domus. Et per consequens est vere substantia vel accidens. Et si sit accidens, vere informat subiectum. Igitur dicere quod est res extra animam, et cum hoc quod tantum habet esse spirituale et intentionale est dicere opposita," also p. 47 lin. 7–p. 48 lin. 15; p. 83 lin. 6–15; p. 87 lin. 8–19.

⁹⁰ Ibid. [OTh VI: p. 56 lin. 8–p. 57 lin. 16]; III *Rep.* q.4 [OTh VI: p. 140 lin. 1–5].

⁹¹ III *Rep.* q.2 [OTh VI: p. 82 lin. 13–p. 83 lin. 5; p. 86 lin. 3–p. 88 lin. 15].

⁹² As, e.g., II *Rep.* q.12–13 [OTh V: p. 256 lin. 1–9; p. 268 lin. 1–11 (quoted above n. 84)]; III *Rep.* q.2 [OTh VI: p. 59 lin. 8–14]; q.3 [OTh VI: p. 124 lin. 19–p. 125 lin. 12].

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mination of species, the insistence that "representations" of the object are needed in neither vision nor knowledge, the rejection of assimilation as a requirement of the latter, and the claim of action at a distance with the implied—if incidental—circumscription of solar influence, mark Ockham's distance from emanationist neoplatonism more generally. In this, he had moved considerably beyond Scotus who, when speaking of the generation and role of sensible and intelligible species, clearly accepted the process of abstraction from species.⁹³ Beyond Scotus's account of knowledge, the ultimate target of Ockham's lengthy refutation of species is unmistakable to anyone familiar with perspectivist treatises.⁹⁴

Still, however systematic the purpose and controversial the result, Ockham's treatment of species reflects the difficulty he and most of his late medieval sources faced in delineating the roles of intellection and sensation in cognition. In part, this was an inevitable result of the usual adherence to the Aristotelian dictum that whatever is in the intellect was first in the senses; in other words, the intellect only knows sensible things through the senses. Indeed, as noted above, Ockham was convinced that sensory awareness, while not sufficient for our knowledge of contingent reality, was nevertheless the beginning of all such knowledge.⁹⁵ As a result, however, he frequently crossed the boundary from intellection into sensation despite his own explicit distinction of the one from the other. This tendency continued to characterize Ockham's consideration of the acquisition of knowledge even when faced with the account proposed by Peter Aureol, the one contemporary who had most nearly succeeded in recognizing and preserving such bounds.

The Response to Aureol

At some point in the course of developing his epistemology, Ockham learned of Peter Aureol's theory that an "apparent or intentional" entity is produced in every instance of cognition, and he incorporated an attack

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19]. The principle of economy is not, of course, methodologically innocuous, as several philosophers of science have argued. See e.g., Mario Bunge, "The Weight of Simplicity in the Construction and Assaying of Scientific Theories," *Philosophy of Science* 28 (1961), 120–49; William G. Lycan, "Occam's Razor," *Metaphilosophy* 6 (1975), 223–37; and below, chapter VII, nn. 12–13.

⁹³ Ockham specifies Scotus as his target in II *Rep.* q.12–13 [OTh V: p. 256 lin. 1–9] and I *Ord.* prol. q.1 [OTh I: pp. 33–35].

⁹⁴ Hence, it is significant that there are parallels between Ockham's arguments and Bacon's (see above, nn. 55, 80). For citations of Alhazen, see particularly III *Rep.* q.2 [OTh VI: p. 83 lin. 19–p. 84 lin. 7; p. 95 lin. 2–p. 97 lin. 8]; q.3 [OTh VI: p. 101 lin. 8–11; p. 109 lin. 7–p. 110 lin. 6]; q.4 [OTh VI: p. 146 lin. 15–p. 147 lin. 12].

⁹⁵ See above, nn. 42–43.

upon Aureol's theory into the revision of distinction 27 of the *Ordinatio*.⁹⁶ Of Aureol's discussions of the apparent being, the Venerable Inceptor apparently knew only distinction three of the *Scriptum* which, after apologizing for any errors in interpretation resulting from the limited acquaintance he has with Aureol's work, he quotes verbatim and almost entire.⁹⁷ One should not assume from the extent and accuracy of the quotation that Ockham's apology is disingenuous.⁹⁸ Its truth is borne out by the fact that he ignores Aureol's other elaborations of the role of the apparent being. Thus, not only does Ockham's account contain inaccuracies in interpretation, but he is either unaware of or overlooks the significant difficulties that the experiential evidence adduced in support of the theory produce for his own view that intuitive cognition yields infallible existential judgments.⁹⁹ In particular, he nowhere discusses Aureol's insistence that intuitive cognition, as a result of the necessary creation of an apparent being, can and does occur naturally when the object is non-existent. Instead, Ockham treats the *esse apparens* as simply another unwarranted, superfluous mediator between object and cognitive faculty. So, in a manner presupposing the conclusions established in his earlier attack on species, he argues first against the positing of such an intentional entity; then denies Aureol's equation of his apparent entity with the mental word (*verbum*); and finally provides an alternative analysis of Aureol's "experiences."

Against the intentional or apparent being, Ockham argues first on ontological grounds. Either it has, as Aureol holds, "only an objective being, such that it nowhere has subjective being," or it must be conceded to have subjective, i.e. real, being somewhere.¹⁰⁰ If the apparent entity has only objective being, then one of two alternatives follows. Either true

⁹⁶ See the introductions to Ockham's *Ord.* [OTh I: p. 36*; OTh IV: pp. 15*–18*]; Marilyn Adams, "Ockham's Nominalism and Unreal Entities," *Philosophical Review* 86 (1977), 144–74. Ockham's discussion is in I *Ord.* d.27, q.3 [OTh IV: 228–64], "Utrum solus Filius sit Verbum."

⁹⁷ I *Ord.* d.27, q.3 [OTh IV: p. 238 lin. 4–18]: "Ista opinio quantum ad conclusionem, pro qua rationes priores sunt adductae, videtur mihi falsa. Quia tamen pauca vidi de dictis istius doctoris—si enim omnes vices quibus respexi dicta sua simul congregarentur, non complerent spatium unius diei naturalis—ideo contra opinantem istum non intendo multa arguere. Possem enim leviter ex ignorantia dictorum suorum magis contra verba quam contra mentem suam arguere. Quia tamen conclusio, sicut sonat, apparet mihi falsa, arguam contra eam, sive argumenta procedant contra mentem opinantis sive non. Possent autem contra istam conclusionem adduci aliqua argumenta quae feci, distinctione trigesima sexta istius libri, contra unam opinionem de esse cognito, quam materiam tractavi, et fere omnes alias de primo libro antequam vidi opinionem hic recitatam."

⁹⁸ See, e.g. Weinberg, "Sensory Cognition" (p. 40), who is not inclined to take the disclaimer seriously.

⁹⁹ See below, nn. 108, 139–45.

¹⁰⁰ I *Ord.* d.27, q.3 [OTh IV: p. 238 lin. 19–p. 239 lin. 1]: "Quero de illo esse appa-

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quality—which, as he had argued in rejecting species, is the *real* sensible object of the senses—could never be apprehended by the senses at all; or else in sensation two objects are apprehended, namely the "true quality" and the thing having only an objective existence (*esse obiectivum*), that is, an intramental reality. Now, as the proper and *per se* objects of the senses are *real* sensibles, such an intentional or apparent being, as a mental entity (*ens rationis*), rather than a real, extramental thing, is not apprehensible by the senses.¹⁰¹ Turning to the remaining alternative, that the apparent being somewhere—presumably within the soul—has subjective being, then it follows, Ockham argues, that the apparent or intentional being is, rather, a real being.¹⁰²

Ockham next disputes the hypothesis of an apparent being as a distinct entity *necessarily* occurring in corporeal vision. The apparent being must be, he proceeds, either really the same as the seen object, such as a white object, or not really the same. In the first case, identity precludes separate existence of the seen object and its apparent being. Clearly, however, as Aureol would concur, there is no identity.¹⁰³ Hence, Ockham continues, when two things are really distinct, at least by virtue of divine power one could be apprehended without the other. Thus whiteness, as an object *per se* of the senses, could be apprehended without the apparent being which, therefore, is superfluous for sensation.¹⁰⁴

Ockham's third line of attack raises the "third man" argument as an objection to Aureol's positing of an apparent entity additional to the extramental object. In the course of this argument, Ockham makes explicit his understanding of the apparent being as an intervening medium between object and percipient.¹⁰⁵ Moreover, he claims that what he has

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renti et intentionali, aut habet esse obiectivum tantum ita quod nullibi habet esse subiectivum, aut alicubi habet esse subiectivum."

¹⁰¹ Ibid. [OTh IV: p. 239 lin. 1–6]: "Primum non potest dari, tum quia tunc per sensum numquam vera qualitas apprehenderetur, vel in sensatione duo obiecta apprehenderentur, scilicet qualitas realis et illud habens esse obiectivum tantum. Tum quia nihil est obiectum sensus per se et proprium nisi sensibile reale. Tum quia tale non est nisi ens rationis; sed ens rationis non est per se apprehensibile a sensu."

¹⁰² Ibid. [OTh IV: p. 239 lin. 7–12]: "Secundum etiam non potest dari quia illud quod alicubi habet esse subiectivum, quando habet esse subiectivum, est vere ens reale et non tantum intentionale. Igitur si tale esse apparens et intentionale haberet esse subiectivum, vere esset ens reale;" cf. also p. 242 lin. 22–23: "Vel potest dici quod est quaedam intellectio animae habens esse subiectivum in anima distincta realiter ab omni alio obiecto animae."

¹⁰³ Ibid. [OTh IV: p. 239 lin. 13–25].

¹⁰⁴ Ibid. [OTh IV: p. 240 lin. 1–10].

¹⁰⁵ Ibid. [OTh IV: p. 240 lin. 11–p. 241 lin. 6]: "Praeterea quero: aut ipsa albedo vere apparet sensui aut non. Si non, igitur non videtur, quod est manifeste falsum. Si apparet, et praeter hoc esse apparens apparet, igitur sunt hic duo apparentia et prospecta. Ex quo arguo sic: quandocumque sunt duo apparentia alicui potentiae, qua ratione unum

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just shown is the superfluity of any "true" apparent being from which it follows, he continues, that any "false" apparent being is an equally unwarranted postulate in an account of vision.¹⁰⁶

Taken as a whole, Ockham's argumentation testifies to his increasing discomfort with a resort to images or representation at any stage of cognitive activity, a preoccupation inhibiting his reading of Aureol. The Venerable Inceptor understands the apparent being as an entity posited, like species, as a *cause* of vision—and therefore deniable on the same grounds. Aureol had indeed conceived of the intentional being produced in sensation and intellection as an image, but not as one required as a *cause* of perception, at least in the case of veridical vision. Instead, like Ockham's own "habit," the apparent being is a *product* of perception that, in the absence of an extramental object, elicits memory, or illusion, or any of the other sorts of experiences Aureol lists.

Ockham thus misreads Aureol, and we should ask how the Venerable Inceptor came to do so. The most probable reason lies in his limited acquaintance with the other relevant discussions in Aureol's *Scriptum*. In the Prooemium, for example, Aureol distinguishes between true and false visions, but this distinction, together with its attendant problems, Ockham ignores. There Aureol had claimed that in true visions, two objects are indeed apprehended in the sense: the extramental thing and the intramental intentional or apparent being, i.e. a first intention. In false visions, on the other hand, only this intention is apprehended.¹⁰⁷ In other words, two objects are apprehended in true visions, while in false visions, no real extramental object is apprehended. Hence, Aureol would presumably not have been distressed by either prong of Ockham's first argument, since Aureol's theory grants the objection; indeed, that is precisely his point. Lacking acquaintance with this explication in the Prooe-

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istorum fit in esse apparenti et reliquum. Igitur si albedo sit in esse apparenti aliquo modo distincto ab albedine, eadem ratione illud esse apparens fiet in esse apparenti aliquo modo distincto, et per consequens erit processum in infinitum in talibus, quod est manifeste inconveniens. Et si dicatur quod illud esse apparens apparet per se ipsum sine omni medio, contra: quando aliquid est aequè per se obiectum alicuius potentiae sicut aliud, si illud aliud potest apparere potentiae sine omni medio inter ipsum et actum potentiae, eadem ratione per se obiectum poterit apparere potentiae sine omni medio inter obiectum et actum potentiae ... igitur frustra ponitur tale esse apparens medium."

¹⁰⁶ Ibid. [OTh IV: p. 241 lin. 7–14]: "Praeterea, quando aliquid apprehenditur naturaliter ab aliqua potentia successive sine duobus, ita quod primo sine uno et postea sine alio, potest per divinam potentiam apprehendi sine utroque illorum, ita quod nullum eorum apprehendatur. Sed idem obiectum, scilicet albedo, primo apprehenditur sine esse apparenti vero, postea sine esse apparenti falso, sicut manifeste patet per eum. Igitur potest sine omni esse apparenti apprehendi et per consequens frustra ponitur."

¹⁰⁷ For Aureol, see above, chapter IV, at nn. 50–55.

mium to Aureol's commentary, Ockham read him instead as positing true and false apparent beings—and therefore, two superfluous entities. One result of this interpretation was that Ockham thereby diminished the likelihood that he would himself raise the issue Peter Aureol had over-looked in failing to inquire how one is to discern veridical from nonveridical visions.

The assumption of two apparent beings, true and false, signals another aspect of Ockham's limited reading of the *Scriptum*, namely, that of all the synonyms with which Aureol had endowed this image, it is not "intention," but "apparent being,"¹⁰⁸ that chiefly occupies Ockham, who takes the labels "objective" and "intentional being" to be Aureol's onto-logical categorizations. In the passage Ockham did know, Aureol justifies positing this intramental image in the intellect on the grounds that it is "more formative" than sensation. Ockham, who focuses chiefly on the latter, seems to assume that this is Aureol's sole motivation for positing the apparent being in intellection, to judge from the cursory manner of his dissent from Aureol's further claim that the apparent being is the mental word (*verbum mentale*). Aureol's identification of apparent entities with mental words, however, presupposed their identity as intentions or concepts,¹⁰⁹ and it is that identification, as we have seen, that explains Aureol's insistence upon their necessity in intellection.

Unaware of this foundation, Ockham argues briefly against the apparent being in intellection, being satisfied largely to reiterate that neither in sensitive nor intellectual intuitive cognition, nor in abstractive cognition "which immediately follows an intuitive cognition," is the object "constituted in any sort of being such as to be a mediator between the thing and the act of knowing."¹¹⁰ With some hesitation, he extends this denial of mediation to the abstractive cognition "by means of which a universal is had in the intellect."¹¹¹ Thus dispensing with the hypothesis

¹⁰⁸ Thus, Ockham quotes Aureol's association of the term "apparens" to the Greek "phanos" [OTh IV: p. 234 lin. 4–p. 235 lin. 13]: "Ex quo patet, secundum eum <i.e. Averroes> quod visio non est nisi apparitio quaedam; unde phantasia dicta est secundum Graecos a 'phanos' quod est apparitio ... Igitur necesse est dicere quod per intellectionem tamquam rei simillimam res capiat quoddam esse, ita ut esse intellectum non sit denominatio sola, sed quoddam esse intentionale diminutum et apparens, iuxta illud Commentatoris ...". Aureol's identification of the "esse apparens" and "intentio" is not explicit in this passage (from I *Scriptum* d.3, s.14 [II: 713]), and Ockham evidently does not infer any discussion of intentions from it.

¹⁰⁹ I *Ord.* d.27, q.3 [OTh IV: p. 241 lin. 15–17; p. 243 lin. 6–9]. Aureol's statements in I *Scriptum* d.3, s.14 are completely elaborated elsewhere, as in I *Scriptum* d.27, q.2; see above, chapter IV, at nn. 13, 16, 29.

¹¹⁰ I *Ord.* d.27, q.3 [OTh IV: p. 241 lin. 17–p. 242 lin. 14].

¹¹¹ *Ibid.* [OTh IV: p. 242 lin. 15–p. 243 lin. 5]: "Tertio dico quod quando est aliqua notitia abstractiva qua habetur universale in intellectu, potest probabiliter utrumque

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of an apparent being in intellection, Ockham undertakes to provide an alternative analysis of the eight "experiences" offered as evidence of its existence in sensation.

Ockham's strategy in analyzing Aureol's experiential evidence is to remove the events described from the realm of sensation by relocating them within the purview of intellectual operations. Taking up the first experience, that of a person in a moving boat, to whom the trees along the shore appear to move, Ockham insists that there is no motion, either objectively or subjectively, in the eye, since the trees have no motion. "Nevertheless," he continues, "this proposition, 'the trees move' exists objectively in the intellect, and it is certainly true that the intellect is able to form propositions and to assent to or dissent from them—which is not relevant here."¹¹² Ockham immediately poses a conceivable objection that indicates he knew the "experience" also from Scotus's discussion of the internal senses' capacity for judgment. Is it clear that it is only to the intellect, and not also to the sensitive faculty, that the trees appear to move, "inasmuch as they also seem to move to brute animals, who have no intellectual cognition?"¹¹³

Ockham's answer to the specific objection, that animals also perceive the apparent motion, is deferred temporarily, while he justifies treating such phenomena as intellectual errors, specifically as mistaken judg-

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teneri, scilicet quod aliquid est medium vel quod nihil est medium. Si ponatur medium, potest probabiliter dici, sicut dictum est prius, quod illud medium non est nisi quoddam fictum commune omnibus singularibus quod intelligitur, et tunc illa intellectione nullum singulare intelligitur. Vel potest dici quod est quaedam intellectio animae habens esse subiectivum in anima distincta realiter ab omni alio obiecto animae. Potest etiam dici probabiliter quod nihil tale est medium, sed quod tunc universale est ipsamet cognitio confusa terminata immediate ad omnes res singulares quibus est communis et universalis secundum modum quem alibi recitative declarabi. Sicut quidquid dico de tali esse ficto ponendo vel non ponendo recitative dico, quamvis hoc non explicite semper." On what Ockham does have to say "de tali esse ficto," see below, nn. 145 ff.

¹¹² Ibid. [OTh IV: p. 243 lin. 14–p. 244 lin. 4]: "Ad primum <argumentum> dico quod actus sensus exterioris non ponit res in esse intentionali, ita scilicet quod praeter actum sentiendi et rem extra sit aliquod esse intentionale medium, tamen propter hoc quod actus sentiendi ponitur in esse reali, ipsa res extra potest denominari 'sentire' sine omni sibi advenienti ... Ad primam experientiam dico quod quando aliquis portatur in aqua, nullus motus est in oculo nec obiective nec subiective, quia nullus motus est ipsarum arborum. Tamen ista propositio 'arbores moventur' est obiective in intellectu, et bene verum est quod intellectus potest formare propositiones et eis assentire vel dissentire, sed hoc non est ad propositum." It is worth observing that Ockham prefaces his discussion of the eight experiences with a further apology [p. 243 lin. 10–13]: "ex quibus responsionibus forte apparebunt aliqua contra mentem dicentis. Non tamen sum certus quia non vidi eum in aliis locis de ista materia."

¹¹³ Ibid. [OTh IV: p. 244 lin. 5–8]: "Et si dicatur quod non tantum arbores videntur moveri ipsi intellectui sed etiam sensui, in tantum quod etiam videntur moveri brutis animalibus quae nullam habent cognitionem intellectivam."

ments. If the objection's claim that "to the senses the trees seem to move" is taken to mean that some motion—either real or of another sort—is apprehended by the sense, then, Ockham asserts, the proposition is false. Only real motion, "or a motion that can be real," is apprehended by the sense; hence, no motion, real or apparent, is constituted by the sense, nor does any motion whatsoever appear to the sense.¹¹⁴

If, however, the proposition is taken to mean that "in the sense there is some apprehension or apprehensions of different objects by virtue of which [apprehensions] from the sentient [faculty] operations can be elicited similar to those operations elicited from one who sees a body [that is] truly moved," then it is true.¹¹⁵ Yet, Ockham claims, it does not thereby follow that any motion appears. Reducing Aureol's reasoning to the argument that "the trees appear to move, therefore some motion appears or has objective being," Ockham insists that this manner of arguing is no more valid than the similar "the trees appear really to move, therefore some real motion appears or has objective being," which, he emphasizes, everyone would agree is not a valid inference.¹¹⁶ Thus,

I say that when it is conceded that the trees really—or with a real motion—seem to move, it should not be conceded that some real motion appears; but it is conceded that [the sense] has apprehensions equivalent to those apprehensions by which trees are [*sic!*] truly apprehended to move, insofar as eliciting [intellectual] operations are concerned ... so no motion is intentionally in 'seen being' or 'adjudged being' by the sense, any more than it really exists, since no motion is seen.¹¹⁷

¹¹⁴ Ibid. [OTh IV: p. 244 lin. 9–15]: "Dicendum quod si ista propositio 'arbores videntur moveri sensui' sic intelligatur quod aliquis motus, sive realis sive quicumque, apprehendatur a sensu, falsa est. Quia nullus motus nisi realis, vel qui potest esse realis, apprehenditur a sensu, sicut nulla albedo nisi realis, vel quae potest esse realis, apprehenditur a sensu. Et ideo nullus motus nec realis nec apparens constituitur per sensum, nec aliquis motus quicumque apparet sensui."

¹¹⁵ Ibid. [OTh IV: p. 244 lin. 16–20]: "Si autem praedicta propositio intelligatur sic quod in sensu est aliqua apprehensio vel apprehensiones diversorum obiectorum virtute quarum a sentiente possunt elici consimiles operationes operationibus elicitis a sentiente corpus vere motum, tunc vera est propositio."

¹¹⁶ Ibid. [OTh IV: p. 244 lin. 20–p. 245 lin. 3]: "Ex hoc tamen non sequitur motum aliquem apparere, sed sequitur quod in sensu sunt apprehensiones aequivalentes quantum ad operationes eliciendas apparitioni vel visioni qua motus apparet, illo modo loquendo quo ponitur motus posse videri. Et confirmo istam responsionem, quia non plus sequitur 'arbores apparent moveri, igitur aliquis motus apparet vel habet esse obiectivum,' non plus quam sequitur 'arbores apparent moveri realiter, igitur aliquis motus realis apparet vel habet esse obiectivum,' quia est consimilis modus arguendi. Sed secunda consequentia non valet secundum omnes, igitur nec prima." Whether in fact all would concur that the second inference is invalid, when *what* is moving is not specified, is another question; see, e.g., below, chapter X, for Wodeham's views.

¹¹⁷ Ibid. [OTh IV: p. 245 lin. 3–11]: "Et ideo dico quod quando conceditur quod arbores videntur realiter vel motu reali moveri, non est concedendum quod aliquis motus

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If one were nevertheless to grant Aureol's assertion that some motion is seen in the trees, and that it is not a real motion, then it would be a motion having only objective being which, as when countering the mediation of species in the medium, Ockham asserts would be more distinguishable from a real motion than whiteness or blackness. Hence, one would no more mistake an intentional for a real motion, thereby judging that the trees really move, than one would judge the trees really white or black.¹¹⁸ Pointing instead to the one explanation for the appearance of motion Aureol had omitted, Ockham correctly notes that,

On account of the motion of the [viewer] existing on the ship, who does not move except by the ship's motion, these trees are seen at different distances and from different vantages (*aspectus*) by him on the ship. The trees therefore appear to move, such that these propositions are equivalent: 'the trees, without any mediator produced or made in any real or intentional being whatsoever, are seen successively in different distances and aspects by an eye moved with the ship's motion,' and 'the trees seem to the eye to move.'¹¹⁹

The statements' equivalence depends upon Ockham's well-known definition of local motion, as an object's presence successively in different distances.¹²⁰ As these conditions obtain in this instance, there is no reason to posit an additional intentional motion, and Ockham concludes that since from the first of these equivalent propositions it does not follow that any intentional motion appears, it likewise does not follow from the second.¹²¹

In any event, Ockham suggests, there may well be someone to whose eye the trees would not appear to move, as "many, seeing [the trees] would judge and know that they do not move ... on account of the intel-

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realis apparet, sed conceditur quod habet apprehensiones aequivalentes quantum ad operationes eliciendas apprehensionibus quibus apprehenduntur arbores moveri veraciter. Ita consimiliter est dicendum de ista 'arbores videntur moveri,' et ita nullus motus est intentionaliter, non plus quam realiter, in esse viso vel in esse iudicato per sensum, quia nullus motus videtur."

¹¹⁸ Ibid. [OTh IV: p. 245 lin. 12–18].

¹¹⁹ Ibid. [OTh IV: p. 245 lin. 18–p. 246 lin. 2]: "Quia tamen illae arbores, propter motum existentis in navi qui non movetur nisi ad motum navis, in diversa distantia et aspectu videntur ab existente in navi, ideo videntur arbores illae moveri. Ita quod istae propositiones aequivalent 'arbores, sine omni medio producto vel facto in quocumque esse reali vel intentionali, videntur successive in diversa distantia et aspectu ab oculo moto ad motum navis' et 'arbores videntur oculo moveri.'"

¹²⁰ See e.g. II *Rep.* q.9 [OTh V: 104 lin. 9–13]; I *Quodl.* q.5 [OTh IX: p. 29 lin. 10–p. 30 lin. 2]: "Dico quod motus localis est coexistentia successive, sine quiete media, alicuius continue existentis in loco diversis locis ... Sed dubium est utrum illa coexistentia sit alia res ab omnibus rebus permanentibus. Respondeo quod non, sicut de motu in libro *Physicorum* dictum est diffuse."

¹²¹ I *Ord.* d.27 q.3 [OTh IV: p. 246 lin. 2–4].

lect, which judges that trees do not move." Returning to the specific problem of explaining the alleged sensation by animals or "those lacking reason" of moving trees, Ockham remarks opaquely that this comes about because of some apprehension that "through some natural cause impedes the animal's action." How this happens, however, Ockham declines "for the sake of brevity" to pursue.¹²²

Although up to this point we can only infer which "operations" Ockham thinks are elicited by the "equivalent apprehensions," his explanation of the second and third experiences is more precise. There he indicates that the senses trigger the operation of the intellect, which constructs propositions it then assents to or rejects. That is, as Ockham says, "the intellect sometimes [comes to] believe in the truth of a proposition such as 'the circle is in the air,'"¹²³ which is, in fact, an existential judgment: the intellect judges that the circle actually exists.¹²⁴ As before, Ockham expresses his impatience with explaining *how* the equivalent apprehensions are induced,¹²⁵ but it is clear that he so labels them because he believes them introspectively indistinguishable from such apprehensions as would be caused if reality were as it is erroneously judged to be. On this he is explicit when he responds to the third example, of a stick partly submerged in water: "and in the sense there is an apprehension (or apprehensions) equivalent for causing such belief in the intellect as sensation would cause if the stick were outside the water and were fractured."¹²⁶ The analysis of the fourth experience, the appearance of two candles where one exists in actuality, yields the further casual concession

¹²² Ibid. [OTh IV: p. 246 lin. 5–11]: "Et si dicatur quod non cuilibet tali oculo videntur arbores moveri, quia multi videntes iudicant et sciunt quod non moventur, dicendum quod hoc est propter intellectum qui iudicat quod non moventur, vel si hoc contingat in brutis vel ratione carentibus, hoc est propter aliquam apprehensionem impediendam actionem alicuius causae naturalis. Qualiter tamen hoc possit fieri, declarare propter brevitatem omitto." An explanation, however, is surely required, since Ockham assumes different causes for the same phenomena; cf. Wodeham's response, below, chapter X at nn. 80–85.

¹²³ Ibid. [OTh IV: p. 246 lin. 12–14]: "Per idem dico ad secundam experientiam quod nullus circulus apparet oculo. Intellectus tamen aliquando credit istam propositionem esse veram 'circulus est in aere.'"

¹²⁴ Ibid. [OTh IV: p. 247 lin. 6–11].

¹²⁵ Ibid. [OTh IV: p. 246 lin. 14–19]: "Sed oculo nullus circulus apparet nisi aequivalenter, hoc est, habet apprehensionem vel apprehensiones aequivalentes quantum ad operationes eliciendas apprehensioni vel apprehensionibus circuli. Qualiter talem hoc possit fieri, longum foret declarare. Verumtamen ex dicendis in ista quaestione studioso poterit aliquantulum apparere."

¹²⁶ Ibid. [OTh IV: p. 247 lin. 12–17]: "Per idem ad tertiam experientiam, quod nulla fractio est per sensationem, quamvis per intellectum ista propositio credatur esse vera 'baculus est fractus,' et in sensu est apprehensio vel apprehensiones aequivalentes ad causandum talem credulitatem in intellectu qualem causaret sensatio si baculus esset extra aquam et apprehenderetur et esset fractus."

that there is here a sensation, or sensations, equivalent to those of a really existing pair of candles, insofar as eliciting "either in the intellect, or *in an exterior or interior [sensitive] power*" an existential judgment.¹²⁷

Turning to the fifth experience, Ockham first remarks impatiently that concerning the colors appearing in a dove's neck "there is great doubt whether they are subjectively," i.e. really, "in the neck of the dove, or in the air nearby—and either [view] can be held as probable." Then, lest his reader entertain any lingering doubts that Ockham considers the apparent being analogous to sensible species in the medium and in the cognitive faculties, and objectionable on the same grounds, Ockham guides him to the extended treatment in the *Reportatio*.¹²⁸

If the Venerable Inceptor has shown an absence of interest in the physical *causation*—as opposed to a causally neutral description—of the phenomena under consideration up to this point, such a bias is pronounced in the analysis of the sixth experience. Into this "experience" Aureol had condensed a discussion of the location of virtual images that had occupied three books of Alhazen's *De aspectibus*. In response, Ockham blithely asserts that "the thing itself, not an image of it, is seen in the mirror."¹²⁹ Continuing from that premise, which would have astounded any student of *perspectiva*,¹³⁰ he argues that the seen object is not, as it appears,

¹²⁷ Ibid. [OTh IV: p. 247 lin. 18–21]: "Per idem ad quartam quod est ibi sensatio vel sensationes aequivalentes, quantum ad operationes eliciendas sive in intellectu sive in potentia exteriori vel interiori, sensationi vel sensationibus duarum candelarum realiter existentium." By "interior and exterior" powers, Ockham can only mean sensitive powers, since neither he nor any other late medieval scholar ever referred to the intellect as thus bifurcated.

¹²⁸ Ibid. [OTh IV: p. 248 lin. 5–12]: "Ad quintam dico quod ubicumque fuerint illi colores, vere sunt ibi colores realiter existentes. Utrum autem fuerint in collo columbae subiective vel in aere propinquo est magis dubium, et utrumque potest teneri probabiliter. Sed de isto dicitur in secundo ubi tractabitur de speciebus que ponuntur in medio et in potentiis cognitivis. Unde idem est iudicium de illis coloribus colli columbae et de rubedine causata in pariete ex transitione radii solaris et de aliis quae ab aliquibus vocantur species." The reference "in secundo" is to the question now edited as III *Rep.* q.2; see above, at nn. 90–91.

¹²⁹ Ibid. [OTh IV: p. 248 lin. 13–14]: "Ad sextam, dico quod ipsamet res videtur in speculo et non imago ipsius."

¹³⁰ Thus, Ockham's more complete explanation, at III *Rep.* q.2 [OTh VI: p. 95 lin. 10–p. 97 lin. 17] which depends upon a lengthy quotation of Alhazen is indeed disingenuous, for although Alhazen disputed the *real inherence* of virtual images in a mirror, he did not reject their existence, as Ockham pretends. On the contrary, although medieval perspectivists did not agree on the issue of how the *apparent* location of images was to be demonstrated, they concurred in the view that the denial of virtual images (even restricted to plane mirrors) would entail several physical and epistemological absurdities. See, for example, Smith's introduction to Witelo V *Perspectiva* (pp. 51–54); Pecham, *Perspectiva communis*, pt.2, prop. 19–21, ed. and transl. David C. Lindberg, *John Pecham and the Science of Optics* (Madison, Wisconsin: 1970), pp. 168–173; Bacon, *De mult. specierum* pt.2, c.5 (pp. 133–137).

behind the mirror, although it can be judged to be there by the intellect. In the event,

Nothing imaginable is required except the thing which is intellectually known (*intelligitur*); the mirror, and other really existing things; and the judgment itself, which is neither intentionally nor really behind the mirror, but subjectively existing in the soul. And in this way, if the sense should have a judgment distinct from sensation, it could—without any mediation (*medium*)—judge that the thing is in the mirror, without causing anything, either intentional or real, other than that judgment. Nevertheless, it would really judge the thing to be behind the mirror on account of the fact that the judgment exists. Hence, these propositions would be equivalent: 'the judgment is in the eye, without anything else caused in any real or intentional being whatever' and 'the thing is judged to be behind the mirror.'¹³¹

If the examination of the first experience incorporates a refutation of Scotus, the seventh experience seems to contain a similarly unsignaled reference to Scotus's discussion of sensory illusion, when Ockham decides of afterimages that, "true things really existing remain" in the absence of the object. One may fairly assume that those "true things" are the qualities he has already defended in the *Reportatio*, since he defers any further explanation with the remark that the phenomena should be explained in the same way one would account for the appearance of stars by night and not by day.¹³² To the final experience, Ockham responds simply that its analysis can be inferred from the preceding refutations.¹³³

So far having failed to note any disturbing epistemological implications from the "experiences" themselves, Ockham turns to Aureol's claim that the repudiation of the apparent being entails the denial of any illusion (*ludificatio*). Construing this narrowly as deliberately produced delusion, Ockham counters that,

¹³¹ I *Ord.* d.27, q.3 [OTh IV: p. 248 lin. 14–p. 249 lin. 5]: "Et dico quod ipsamet res non est infra speculum, nec aliquod visum est infra speculum, tamen per intellectum potest iudicari esse infra speculum. Sed ad hoc nihil imaginabile requiritur nisi res quae intelligitur et speculum et ceterae res existentes realiter et ipsum iudicium existens subiective in anima quod nec intentionaliter nec realiter est infra speculum. Et isto modo si sensus haberet iudicium distinctum a sensatione, posset sine medio iudicare rem esse in speculo, nihil causando nec intentionaliter nec realiter nisi illud iudicium. Tamen realiter iudicaretur ipsa res esse infra speculum propter hoc quod illud iudicium est. Immo propositiones aequivalerent 'illud iudicium est in oculo, nullo alio causato in quocumque esse reali vel intentional' et 'res iudicatur esse infra speculum.'"

¹³² *Ibid.* (OTh IV: p. 250 lin. 3–7): "Ad septimam dico quod in tali remanent verae res realiter existentes. Qualiter tamen sint et ubi sint subiective, non est modo discutiendum. Quare autem nunc apparent et prius non, consimiliter debet dici quoad aliquid, sicut de stella quare apparet de nocte et non de die." For Scotus, see above, chapter III, n. 87; also his I *Ord.* d.3, p.3, q.1 [balic * III: p. 214].

¹³³ *Ibid.* [OTh IV: p. 250 lin. 8–11].

illusion can be made in many ways. Sometimes it is made by means of the nature of mirrors, for a demon who knows the nature of things can so position various mirrors in different ways that as a result, very distant objects may be seen. He can also, in various ways unknown to me, make some parts of a thing be seen, while other parts are not, so that a man may be judged to be where he is not,¹³⁴

none of which necessitates recourse to intervening mediators.¹³⁵

Having disposed both of what he considers demonic illusion and of Aureol's natural experiences, Ockham finds it obvious that the "ancient opinion" that "everything is as it appears" does not follow, as Aureol had claimed, from rejection of the apparent being.¹³⁶ At last making his theological concerns completely explicit, he insists that because the apparent being is redundant for an explanation of the phenomena, there is as a result no need to hold that the senses are formative creators of this nonexistent entity, any more than they are formative of God.¹³⁷ As the latter consequence is absurd, Ockham holds instead that, "when the senses are deceived, that is, when there is an occurrence of deception, the thing is judged to be such as it is not (*talis qualis non est*) without any medium between the thing and the act of the [cognitive] power."¹³⁸ Thus, Ockham admits existential error. In doing so, he merely makes explicit what is implied by his acceptance of "equivalent apprehensions," for if not for

¹³⁴ Ibid. [OTh IV: p. 250 lin. 12–19]: "Ad illud quod infertur quod negans tale esse apparens et intentionale negat omnem ludificationem, dicendum est quod non. Nam ludificatio fit multis modis. Aliquando enim fit per naturam <<speculorum>>. Daemon enim sciens naturas rerum potest diversa specula diversimode sibi opponere, propter quae res multum distantes videbuntur. Potest etiam diversis viis mihi ignotis facere aliquas partes rei videri, aliis non visis, propter quod potest iudicari esse homo ubi non est, et sic de aliis modis."

¹³⁵ Ibid. [OTh IV: p. 250 lin. 19–22]. Among perspectivists, Roger Bacon claimed that the science of optics had practical applications; Witelo, in *De natura demonum*, had claimed that optical means could be used to produce visions of demons, an expectation repeated by Nicole Oresme, who insisted that jugglers actually did so. Ockham's own statement thus may well have been a resort to commonplace notions. See A.G. Molland, "Roger Bacon as Magician," *Traditio* 30 (1974), pp. 445–60.

¹³⁶ I *Ord.* d.27, q.3 [OTh IV: p. 250 lin. 23–p. 251 lin. 3]: "Nec ex hoc sequitur opinio antiquorum dicentium omnia esse *sicut* apparent. Nam aliquid apparet alicui esse album quod tamen in rei veritate non est. Sed hoc non est propter aliquod medium inter ipsam rem et ipsam apparitionem." For Aureol, see above, chapter IV, n. 65.

¹³⁷ Ibid. [OTh IV: p. 251 lin. 9–11]: "Sic igitur patet ... quod sensus non est formativus rerum in quocumque esse, non plus quam est formativus Dei in quocumque esse ..."

¹³⁸ Ibid. [OTh IV: p. 251 lin. 3–8, 15–20]: "Sed ipsa apprehensione vel actu potentiae sine omni medio, apparet res esse alba quae non est. Et hoc aliquando accidit quia nescitur an albedo sit subjective in illa re vel in alia, quamvis credatur esse in illa ... Unde quando sensus decipitur, hoc est, est occasio deceptionis, res iudicatur talis qualis non est, sine omni medio inter rem et actum potentiae. Ita quando non decipitur, res iudicatur sicut est sine omni tali medio."

them, erroneous judgments would not occur.

As far as a defense of his own epistemological theory is concerned, Ockham's critique of the intentional, apparent being exposes *lacunae* in his own theory that would generally dissuade his medieval readers from adopting it.¹³⁹ Most of the problems stem from what is evidently the Venerable Inceptor's primary epistemological concern: to establish the direct, propositional nature of cognition against any theory relying upon images or representation.¹⁴⁰ Whatever the merits of this view, among its results is the treatment of sensation as ancillary. As a further effect, Ockham is uninterested in the causal issues under examination, even when extensively and explicitly probing the physics and psychology of perception. Thus, just as earlier, in extirpating species, the goal of ridding the theory of images motivates his insistence upon action at a distance, the denial that a (transparent) medium is a precondition of sight, and the substitution of "impressed qualities" for any ocular image, so here the same motivation leads to untenable physical claims, as the unqualified denial of virtual images in mirrors.¹⁴¹

Ockham's approach in analyzing each experience propositionally clarifies the assumptions of each case, but provides no means of moving from these given assumptions to the discovery of the true state of affairs. This impasse may be illustrated by considering the consequences of the solution he proposes for Aureol's first experience, that of the man to whom shoreline trees appear to move. In spite of his own avowal of motion's relativity, Ockham evidently considers unproblematic the determination of its locus. Moreover, he treats as obvious that what he construes as the true state of affairs is known, not merely believed, for after all "many, seeing the trees, would judge and *know* that they do not move ... on account of the intellect, which judges that trees do not move."¹⁴² Yet if, as he

¹³⁹ See especially chapter X, nn. 91–92, 106–108 below, for Wodeham.

¹⁴⁰ As Ockham exemplifies by his resort to the propositions that the percipient would form in each experiential instance. For differing modern views on the adequacy of Ockham's critique, cf. M. Adams, "Ockham and Unreal Entities," and Weinberg, "Sensory Cognition," pp. 46–48.

¹⁴¹ If Ockham had in mind plane mirrors, his elimination of *virtual* images—admittedly difficult to categorize ontologically in his system except as concepts or by admitting Aureol's hypothesis—nevertheless renders more difficult an explanation of the mathematical, physical, and especially epistemological data. It is all very well to admit the proposition "the thing is judged to be behind the mirror," but then the question to be answered is what causes the formation of the proposition? In order to arrive at existential knowledge of the sort that Ockham claims we in fact have, what one wants to know is not merely that the object appears to be behind the mirror, for example, but whether there is (a) an object, (b) a mirror, (c) an image and, if so, their relative positions. On his account here, Ockham cannot move from the proposition he concedes—which *assumes* the extramental existence of (a) and (b)—to one such as "there is no image."

¹⁴² See above, nn. 114, 122.

admits, existential judgments can be erroneous—that is, "the thing can be judged to be as it is not"—how are such judgments in practice to be distinguished from veridical judgments? Ockham presumably did not envision that this threatened certainty, and intended chiefly to preserve the centrality of propositional knowledge; but his medieval readers were not satisfied that Ockham had adequately protected the infallibility that he asserted of scientific knowledge. On his theory, after all, Ockham does not have open to him Scotus's route of avoiding existential error because, despite several concessions of deception in the *senses*, Ockham's express purpose is to establish that deception is intellectual. Instead, his recourse must be to intuitive cognition, causally prior to abstractive cognition as well as to evident judgments. This route is, however, also hindered by the iterated assertion that veridical and nonveridical apprehensions are "equivalent" as far as eliciting intellectual operations is concerned. If Ockham assumed that, because false judgments ensue, the initial non-veridical apprehensions were not intuitive,¹⁴³ a range of problems remains. If he has not thereby contradicted the priority of intuitive cognition, he has shifted the difficulty from judgment to that of providing some criterion for the introspective discrimination of intuitive and abstractive cognitions. Such an assumption is further objectionable insofar as it makes the nature of what is causally prior (apprehension) dependent upon its effect (judgment).¹⁴⁴

The Nature of Concepts

Such difficulties diminished Ockham's medieval readers' appraisal of his theory as one able to resolve the issues Aureol's experiences presented. Yet hasty as Ockham's composition of a rejoinder to Aureol seems to have been, for the evolution of Ockham's own views on the nature of concepts the discovery of his confrère's notion of the "apparent being" was evidently pivotal. Ockham's intense aversion to it was probably a significant factor in effecting his eventual abandonment of what modern schol-

¹⁴³ As he might, on the basis of his description of abstractive cognition; cf. nn. 19, 25 above.

¹⁴⁴ That is, if these apprehensions are instances of abstractive cognition, then Ockham's repeated assertion that the latter *require* a simultaneous or prior intuitive cognition (see above, at nn. 34–39) has been contradicted. That Ockham seems to make what is causally prior depend upon its effect was the criticism of William Crathorn, O.P. (below, chapter IX) and, more recently, T.K. Scott, "Ockham on Evidence," pp. 43–49, and M. Adams, "Intuitive Cognition, Certainty," p. 393. If the criticisms of Crathorn, Scott, and Adams are justified, this does not *ipso facto* reopen the charge of skepticism against Ockham, who seems to have missed such problems by not seeing the plausibility of skeptical arguments.

ars have generally termed his "*fictum*" for the "*intellectio*" theory. As Ockham's editors have established, this about-face was urged upon him by his colleague Walter Chatton, and Ockham acquiesced in stages.¹⁴⁵

In Ockham's earliest account of knowledge, he concurred with Scotus in distinguishing intellectual acts from their contents, whether termed "intentions," "concepts," or "terms"—the latter of which was probably the Venerable Inceptor's preferred label.¹⁴⁶ Although as late as his *Ordinatio* treatment, he still construed "first intentions" as extramental objects themselves, by the time of the *Summa logicae*'s composition Ockham had come instead to accept the more common understanding of them as the mental terms acquired through cognitions of [extramental] objects.¹⁴⁷ Moreover, even though he rejected the traditional identifica-

¹⁴⁵ The story of Chatton's dispute with Ockham on the nature of concepts has been the subject of considerable attention. The stages in Ockham's shifting views have been mapped by Ph. Boehner, "Ockham's Theory of Signification," *FrSt* 6 (1946), 143–70; idem, "The Realistic Conceptualism of William Ockham," *Traditio* 4 (1946), 307–35; G. Gál, "Gualteri de Chatton et Guillelmi de Ockham controversia de natura conceptus universalis," *FrSt* 27 (1967), 191–212; G. Etzkorn and F. Kelley, introduction to OTh IV (pp. 15*–18*). Other important studies include M. Adams, "Ockham's Nominalism;" F. Kelley, "Some Observations on the 'Fictum' Theory in Ockham and its Relation to Hervaeus Natalis," *FrSt* 38 (1978), 260–82; idem, "Walter Chatton vs. Aureoli and Ockham Regarding the Universal Concept," *FrSt* 41 (1981), 222–49.

¹⁴⁶ Cf. e.g. above, nn. 17, 37, 40; I *Summa logicae* c.2 [OPh I: p. 9 lin. 10–12]. By the time Ockham had reached d.2 in his preparation of I *Ord.*, he had begun to shift from the earlier view. Thus, at I *Ord.* d.2, q.8 he could still reject Henry of Ghent's identification of concepts and intellectual acts [OTh II: p. 268 lin. 14–16]: "Praeterea, hoc secundum omnes vocatur conceptus mentis quod terminat actum intelligendi; sed talis intellectio non terminat se ipsam." This is consistent with Ockham's own initial view, which he states as follows [OTh II: p. 271 lin. 14–p. 272 lin. 19]: "Ideo potest aliter dici probabiliter quod universale non est aliquid reale habens esse subiectivum, nec in anima nec extra animam, sed tantum habet esse obiectivum in anima, et est quoddam fictum habens esse tale in esse obiectivo quale habet res extra in esse subiectivo. Et hoc per istum modum quod intellectus videns aliquam rem extra animam fingit consimilem rem in mente ... Et ita isto modo universale non est per generationem sed per abstractionem, quae non est nisi fictio quaedam." That he construes these universals as second intentions is confirmed by his supporting arguments as, e.g. (p. 274 lin. 9–12): "Similiter, omnes quasi distinguunt intentiones secundas ab intentionibus primis, non vocando intentiones secundas aliquas qualitates reales in anima; igitur cum non sint realiter extra, non poterunt esse nisi obiective in anima."

¹⁴⁷ Compare I *Ord.* d.23 q.un. [OTh IV: p. 65 lin. 4–7]: "Dico quod intentio prima vocatur res realiter existens. Intentio autem secunda vocatur aliquid in anima rebus applicabile, praedicabile de nominibus rerum quando non habent suppositionem personalem sed simplicem;" I *Summa logicae* c.12 [OPh I: p. 41 lin. 9–p. 43 lin. 58]: "Est autem primo sciendum quod intentio animae vocatur quiddam in anima, natum significare aliud ... Illud autem existens in anima quod est signum rei, ex quo propositio mentalis componitur ad modum quo propositio vocalis componitur ex vocibus, aliquando vocatur intentio animae, aliquando conceptus animae, aliquando passio animae, aliquando similitudo rei ... Tale autem signum duplex est. Unum, est quod signum alicuius rei quae non est tale signum, sive significet tale signum simul cum hoc sive non, et illud vocatur intentio

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tion of such intentions as the sensible or intelligible species (since he denied the latter's existence), he maintained at both stages that first intentional terms—precisely because of their acquisition through intuition—signified their extramental objects naturally rather than merely by convention. Conventional signification, after all, would ultimately obtain because of voluntary imposition (*ad placitum* [*voluntatis*]), but Ockham believed the acquisition of first intentional terms to be independent of any action of the human will.¹⁴⁸ Second intentions, however, Ockham consistently explained as second order concepts, resulting from discursive processes of the intellect and naturally signifying first intentional terms.¹⁴⁹

First intentional *concepts* on Ockham's view could not have any extramental existence themselves; hence, given his understanding of the distinction between "subjective" and "objective" existence, he need not have described their ontological status in any way other than as "objectively" existing, but in his early work he seems not to have addressed the issue explicitly.¹⁵⁰ Because he was even more committed to denying the extramental existence of universal concepts, it is hardly surprising that he stressed that they, too, exist only "objectively," that is, as objects of the mind's acts. In so specifying the nature of universal concepts, of course, Ockham was unoriginal; nor was there anything especially innovative in his inclusion of universal concepts among "second intentions."¹⁵¹

Ockham's early insistence that second intentions are created (*facta*) by the intellect is therefore clearly consonant with his belief that there exist no extramental entities from which second intentions could derive as im-

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prima; qualis est illa intentio animae quae est praedicabilis de omnibus hominibus ... et sic de aliis. Verumtamen sciendum est quod 'intentio prima' dupliciter accipitur: stricte et large. Large dicitur 'intentio prima' omne signum intentionale existens in anima quod non significat intentiones vel signa praecise ..." Adam Wodeham called attention to Ockham's change of mind on first intentions; for which see Tachau, "Adam Wodeham on First and Second Intentions," *CIMAGL* 35 (1980), p. 39–40.

¹⁴⁸ See I *Summa logicae* c.1 [OPh I: p. 7 lin. 19–21]; c.11 [p. 40 lin. 49–p. 41 lin. 78]; c.12 [p. 43 lin. 40–p. 44 lin. 77]; I *Ord.* d.23, q.un. [OTh IV: p. 67 lin. 1–6]; I *Ord.* d.13, q.un. [OTh III: p. 418 lin. 25–p. 420 lin. 15].

¹⁴⁹ See e.g. I *Ord.* d.3, q.6 [OTh II: p. 515 lin. 3–8; p. 515 lin. 19–p. 516 lin. 2; p. 518 lin. 2–p. 519 lin. 6]; also I *Ord.* d.2, q.8 (above n. 146). In his *Disputed questions* Ockham is more explicit, and indicates that the process is not, strictly speaking, one of cognitive *activity*; cf. V *Quaest. variae* [OTh VIII: p. 175 lin. 402–19].

¹⁵⁰ In I *Ord.* d.2, q.8, however, when resolving a doubt raised against his initial view, Ockham does indicate that on that view whatever is in the soul has "esse obiectivum" [OTh II: p. 281 lin. 20–24; p. 283 lin. 6–15]; cf. also M. Adams, "Ockham's Nominalism," 145–46.

¹⁵¹ In fact, this was the usual understanding. In addition to the sources cited in Gál, "Chatton et Ockham controversia," pp. 193–94, see above, chapter II, for Henry of Ghent.

mediately as could first intentions.¹⁵² If not novel, however, Ockham's decision that second intentions are mental creations put him in much less extended—albeit, for Oxford audiences, influential—company.¹⁵³

Once Ockham began to reconsider his early view of universal concepts, he recognized that he still faced two alternatives: that such concepts are intellectual acts and, as qualities, exist subjectively in the soul; or, that although such concepts exist subjectively, they are nevertheless distinct from and subsequent to intellectual acts.¹⁵⁴ Ockham does not seem to have seriously entertained the second interpretation, if only because there were no major advantages to recommend it. Thus, the objections that Ockham presents in distinction 27 of the *Ordinatio* to the hypothetical "apparent being" evince his initial acceptance of Chatton's view, that concepts are identical to intellectual acts which really exist in the soul. As in other insertions into the revisions of his treatment of concepts in the *Ordinatio*, Ockham holds the curious view that both theories are tenable. Chatton's is, Ockham submits, as "probable" as his own earlier conviction that at least some concepts are the intellect's creations that exist only objectively.¹⁵⁵ Their eventual rejection is consistent with his attitude toward species and apparent being as unwarranted mediators that, if they existed, would prevent any direct contact between a percipient and the extramental object of perception. In immediacy lay reliability.

To judge from Ockham's understanding of Aureol's theory, the insistence on the creation of an entity capable of producing cognitions equivalent to veridical ones illustrated the difficulties for his own epistemology that Chatton insisted granting *ficta* entailed. The full implications of Aureol's theory are not evident in the final section of the *Ordinatio* that the Venerable Inceptor was able to revise. Did he subsequently learn that the intentions (or concepts) he accepted were encompassed in Aureol's theory by the identification of apparent beings as intentions? Such a recognition would encourage an evaluation of "mental creations having only objective being" as, at best, unhelpful terminology for the psychological reality that Ockham wished to describe. At any rate, despite his mis-

¹⁵² This explains Wodeham's assertion that Ockham had never construed concepts of singulars (that is, *first* intentions) as mental creations (*ficta*), as M. Adams notes, "Ockham's Nominalism," pp. 151–52.

¹⁵³ Henry Harclay may have been the most important to espouse such a view; cf. Gál, "Chatton et Ockham controversia." Given the similarities between Ockham's and Campsall's views on relation and on first and second intentions, the latter may also have held this view; on Campsall, see below, chapter VI nn. 20–21 and Tachau, "Wodeham on Intentions," pp. 36–39.

¹⁵⁴ I *Ord.* d.2, q.8 [OTh II: p. 291 lin. 7–22].

¹⁵⁵ Quoted above, n. 111.

givings, he at last followed Chatton's lead in identifying concepts and intellectual acts.¹⁵⁶

That such a process encouraged Ockham's final rejection of his own earlier view, still tentatively admitted in the *Ordinatio*, is suggested by his discussion of intentions in the later *Quodlibetal Questions*. After rehearsing Chatton's arguments against *ficta* as mediators,¹⁵⁷ Ockham finally specifies that both first and second intentions are intellectual acts. Really distinct from each other, both classes of intention are "truly real beings, because they are truly qualities existing in the intellect subjectively." Explaining that intellectual acts can serve as subject and predicate in mental propositions and, hence, that signification and supposition can be accounted for equally well by positing acts rather than mental creations, Ockham indicates that he has finally decided that it is superfluous to posit a distinction between cognitive acts and their contents or mental terms.¹⁵⁸

Whatever the role of Aureol's theory in the evolution of Ockham's understanding of concepts, many of his later readers were evidently unaware of his final position. Probably, as his modern editor has suggested, the Venerable Inceptor took the record of his quodlibetal disputations with him to the papal curia, and only there completed his edition.¹⁵⁹ By the time he departed for Avignon, however, his earlier views on cognition had already become one of the three or four accounts upon which his col-

¹⁵⁶ Other scholars have also suggested that Aureol's views were the catalyst for Ockham's reappraisal of the "intellectio" theory; see J. Pinborg, "Zum Begriff," p. 57; F. Kelley, "Ockham's 'Fictum' Theory," pp. 266–67.

¹⁵⁷ IV *Quodl.* q.35 [OTh IX: p. 473 lin. 84–96]; for Chatton's arguments, see below, chapter VII.

¹⁵⁸ Ibid. [OTh IX: p. 474 lin. 115–27]: "Ideo dico quod tam intentio prima quam secunda est vere actus intelligendi, quia per actum potest salvari quidquid salvatur per fictum, eo quod actus est similitudo obiecti, potest significare et supponere pro rebus extra, potest esse subiectum et praedicatum in propositione, potest esse genus, species, etc., sicut fictum. Ex quo patet quod intentio prima et secunda realiter distinguuntur, quia intentio prima est actus intelligendi significans res quae non sunt signa; intentio secunda est actus significans intentiones primas; igitur distinguuntur ... patet ex dictis quod tam intentiones primae quam secundae sunt vere entia realia, quia sunt vere qualitates existentes subiective in intellectu."

¹⁵⁹ See above, n. 9. Boehner first stated ("Realistic Conceptualism," pp. 317–19), that the transition to the "intellectio" theory was only complete with the last works written in England, i.e. the questions on the *Physics*, the *Quodlibeta*, and the *Summa logicae* (in that order, as he thought). In "Ockham's Theory of Signification," Boehner further urged that we treat the later position as Ockham's view, inasmuch as it is his most mature thought on the issue. If, however, we are to understand later scholastics' discussion of his understanding of concepts, we ought to keep the stages of his thinking clearly delineated. It is not entirely clear to me that Ockham had indeed abandoned the "fictum" theory entirely in the latest work that his readers in England seem to have known well, namely the *Summa logicae*.

leagues in England focused their attention. The alternatives they faced, and the concerns from which their critiques of Ockham stemmed, derived—as indeed did aspects of his own views—from the efforts of the preceding scholarly generation to elucidate the Subtle Doctor's notions of intuitive and abstractive cognition. Hence, any appreciation of the response to Ockham requires us to step back briefly from his debates with Chatton and to turn instead to the major interpretations of Scotus propounded at Oxford in the years that separated their lectures from his.

**PART THREE—
THE REJECTION OF OCKHAM'S THEORY OF KNOWLEDGE IN ENGLAND**

Chapter Six— Oxford between Scotus and Ockham

Modern scholars know relatively little about Oxford thought in the period between Scotus's departure for Paris and the return to England of William of Alnwick, who was closely associated with Scotus, and who oversaw the completion of some of his works.¹ Yet both because William of Ware's works were available in England, and because the early audience for Scotus's lectures included his students at Oxford, the recasting of epistemological theory in terms of intuition and abstraction may have been well entrenched before 1312. By that point exponents of Scotus could number among themselves the chancellor of Oxford in the person of a distinguished Parisian master of Theology, Henry Harclay.² Scotus's influence upon accounts of knowledge was at any rate assured at Oxford before Alnwick's somewhat later return from Paris, for even if he brought with him Scotus's autographs, the latter's views were well enough known that Oxford scholars could distinguish them from Alnwick's interpretation.³ Nevertheless, by 1316 Harclay and Alnwick had undoubtedly

¹ Within Alnwick's lifetime, scholars already credited him with the completion of the additions to Scotus's work, the *Additiones magnae*; cf. Courtenay, *Wodeham*, p. 58n. The best recent contributions to our knowledge of this period are P. Osmond Lewry, "Grammar, Logic," pp. 401–34; J.I. Catto, "Theology and Theologians," pp. 509–12; and, in the same volume of *Oxf. Hist.*, M.W. Sheehan, "The Religious Orders 1220–1370," pp. 193–224. As Catto remarks, p. 505: "Scotus ... was the first of the Oxford masters," as opposed to those whose training was primarily Parisian, "to influence thought in the older university, and the critical, independent spirit of fourteenth-century Oxford begins with him."

² Scholars interested in Harclay cannot easily take account of the largely undocumented and generally confused study of G. Cannizzo, *Il Sorgere di "Notitia Intuitiva" all'alba del pensiero moderno. Oxford/Parigi nell'Europa del primo trecento (1298–1318)* (Palermo: 1984), inasmuch as Cannizzo's speculative argument that Harclay's *Sentences* lectures preceded and influenced those of Scotus is unwarranted by any evidence she adduces. Instead, on Harclay and the relation of his thought to Scotus's, see especially the important study of Mark Henninger, "Henry of Harclay's Questions on Divine Prescience and Predestination," *FrSt* 40 (1980), 167–243. Other studies to 1978 are listed by Courtenay, *Wodeham*, pp. 56–57; since then the following useful works have also appeared: John Murdoch, "Henry of Harclay and the Infinite," in A. Maierù and A. Paravicini Bagliani, eds., *Studi sul XIV secolo in memoria di Anneliese Maier* (Rome: 1981), pp. 219–62; Richard C. Dales, "Henry of Harclay on the Infinite," *Journal of the History of Ideas* 45 (1984), 295–301; idem, "Henricus de Harclay. Quaestio 'utrum mundus potuit fuisse ab aeterno,'" *AHDLMA* 50 (1983), 223–55.

³ Alnwick was the Franciscan regent master at Oxford for a year, probably 1316–17; the suggestion that he brought Scotus's autographs with him to Oxford is Courtenay's.

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played major roles in interpreting for Oxford the Parisian debates in which they had participated; still, the impact of their own positions was evidently spotty and often difficult to determine, perhaps because both delivered their own lectures on the *Sentences* away from Oxford.⁴

Richard Campsall

At Oxford itself in the years before Ockham, there were scholars who developed interpretations of intuitive and abstractive cognition for themselves. The most important was the creation of a secular theologian from northern England who was probably the most impressive philosopher at Oxford in the years just before Ockham began his lectures on the *Sentences*. This was Richard Campsall, whose name is nearly forgotten today; indeed, before the end of the fourteenth century his fame had evidently faded, and most of his important insights were already being assigned to others—chiefly to Ockham.⁵ Among fourteenth-century Oxford authors familiar to modern scholars, Walter Chatton and Adam Wodeham perhaps presented the most extensive discussions of Campsall's views; yet even their witness to his contemporary significance has not gained him the study he merits.⁶ Thus, for example, scholars have generally appreciated Chatton's attention in his *Sentences* commentary to the views of Ockham

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This would explain how these codices reached England, where they were available to Wodeham, since we know that they were at Paris earlier, where Alnwick edited them; cf. Courtenay, *Wodeham*, pp. 44, 58. On Alnwick, see also S. Brown, "Sources II," pp. 61–107; for the ability to distinguish Alnwick's views on intuition and abstraction from Scotus's, cf. Robert Graystones (discussed below, nn. 17–19, 47 and chapter VIII), who wrote (London, Westminster Abbey 13, fol. 3vb–4rb): "dicit Scotus in suo *Quodlibet* questione 13 ... quod abstractiva fertur in rem non ut in se presens est potentie cognitive sed in aliquo alio, sive illud sit species vel aliud virtualiter continens illud vel notitia eius; intuitiva vero fertur in rem ut presens est in se ... Ex hiis dicentis ... dicunt (*margin.* Alnwick) quod neque potentie nature nec Dei potest cognitio intuitiva esse nisi obiecto presente ... Contra: Doctor <i.e. Scotus> quem iste <i.e. Alnwick> sequitur, in eadem questione in suo *Quodlibet* dicit ..."

⁴ One issue on which they were especially influential was infinity and continuity; see Murdoch, "Henry of Harclay on the Infinite;" idem, "Infinity and Continuity," *CHLMP*, pp. 564–91.

⁵ For example, his stances on simple supposition, on relation, on the principle of economy (below, n. 15), and on the correct interpretation of Aristotle's categories. The first of these is discussed in greater detail in H. Gelber, "Logic and the Trinity," pp. 185–86, 197–200, 208–09, 267; and in the second half of my "The Influence of Richard Campsall on 14th-Century Oxford Thought," in A. Hudson and M. Wilks, eds., *From Ockham to Wyclif*, Studies in Church History subsidia 5 (1987), 109–23.

⁶ The notable exceptions are Gelber's "Logic and Trinity," pp. 203–30; and her "The Fallacy of Accident and the *dictum de omni*: Late Medieval Controversy Over A Reciprocal Pair" (forthcoming). For a partial list of Adam Wodeham's references to Campsall, see also Courtenay, *Wodeham*, p. 61.

and Aureol, while failing to consider how nearly equal is the energy with which Chatton disputes Campsall, perhaps because he often appears in the commentary as an unnamed "another."⁷

Campsall's academic biography cannot be reconstructed step by step, but we can piece together a rough curriculum vitae.⁸ He was a fellow first of Balliol while studying Arts, moving in 1306 or 1307 to Merton where he must have been a master of Arts actually regent in the academic year 1307–08, to judge from a reference in April 1308. His earliest logical work, the questions on the *Prior Analytics*, evidently date from before the period of this regency. We have no evidence whether Campsall began his theological studies while fulfilling the three years as regent master of Arts required by Merton College of its fellows, but it would not have been irregular to do so.⁹ The fact that he is styled "bachelor of Theology" in papal documents from July 1317 indicates that he had already lectured on Lombard's *Sentences* by that date.¹⁰ In that or the next few years he authored the small treatise concerning future contingents, as well as the questions on universals and on matter; these, unlike his *Sentences* commentary, survive. From 1322–24 at least, Campsall was regent master of Theology. How long he taught and when he died are open questions, but he may have been dead already when Wodeham lectured on the *Sentences* at Oxford.¹¹

As the papal record of Campsall's status as bachelor of Theology demonstrates, the academic year 1316–17 was the *latest* year in which Campsall could have read the *Sentences*. In other words, he composed his commentary for an Oxford audience before Ockham, who began to teach Lombard's *Sentences* there in the next academic year.¹² Campsall may still have been serving his official stint as respondent and opponent by the time

⁷ As e.g., in the instances Gelber cites, "Logic and Trinity," pp. 197–98; and in Chatton's I *Lectura* prol. q.2, a.1 [ed. O'Callaghan: p. 236]; I *Rep.* d.23, q.un., a.2 [ed. Knudsen: p. 23], at all of which points Campsall is listed as "alii," or his opinion as that "of [Oxford] town." Among the most important studies to treat Aureol and Ockham as the most significant contemporaries to whom Chatton responded, are those of Etzkorn and Noel FitzPatrick. (For their works and cited editions of Chatton's *Sentences* commentaries, see below, chapter VII, n. 3).

⁸ See E. Synan, "Richard of Campsall, An English Theologian of the Fourteenth Century," *MedSt* 14 (1952), 1–8; idem, *The Works of Richard of Campsall*, I (Toronto: 1968), pp. 13–17; II (Toronto: 1982), pp. 3–6 [hereafter *Campsall*]; with further precision in H. Gelber, "Logic and Trinity," pp. 185–86.

⁹ Synan, *Campsall* I, pp. 14, 19; J.A. Weisheipl, "Ockham and the Mertonians," *Oxf. Hist.*, p. 614.

¹⁰ Synan, *Campsall* I, p. 15.

¹¹ *Ibid.*; idem, "Richard of Campsall," p. 3. For Campsall to have served as chancellor in 1325 he must still have been regent master. Synan indicates (*Campsall* I, p. 13) that Campsall's tombstone at Merton and the inclusion of his books in a Merton library list argue for a date of death in the decade 1350–60; but see Courtenay, *Wodeham*, p. 60, n. 64.

¹² For the dates of Ockham's Oxford lectures, see above, chapter V, nn. 4–5.

Ockham reached that stage (in 1319–20, or 1320–21, depending on where these responsibilities fell vis-à-vis the required cursory lectures on the Bible); or Campsall may already have attained the magisterium at this point. During the years for which we have evidence for Campsall's role as regent master at Merton, however, it seems that Ockham was already at London, as were Chatton and Wodeham.¹³

Because Campsall's *Sentences* commentary, if extant, has not yet been discovered, his thought must be reconstructed from other scholastics' quotations. Fortunately, there are several witnesses to his discussion of intuitive and abstractive cognition, and they confirm the attribution to him of an opinion that, at century's end, the Parisian-trained theologian Pierre de Plaout considered distinctive enough to include in a list of the five most important along with those of Scotus, Aureol, Ockham, and Rimini:

It must be noted that, concerning the difference between abstractive and intuitive cognition, there are diverse opinions. And first concerning this [there] is a certain English doctor who is called Campsall, who posits that intuition and abstraction are the same thing, but successively rather than simultaneously. Hence he imagines that any given cognition can be adequately designated or called 'intuitive'—and this expressly from the name of the thing [i.e. cognition] because by means of that thing the presence of the object thus cognized is intuited. Which same cognition moreover, whenever it remains adequately in substance while its object is absent, is called 'abstractive cognition.'¹⁴

Pierre explains further that Campsall has established his position on the basis of "a principle taken from Aristotle that Ockham was accustomed frequently to use, namely that plurality must not be posited without necessity." As Pierre restates Campsall's argument, it went as follows: (1) if for verifying the proposition "Socrates knows B intuitively," the cognition (A) of object (B) together with the presence of (B) suffices; and (2) if for verifying the proposition "Socrates knows B abstractively," the [same] cognition (A) of the [same] object (B) together with the "non-presence" of B suffices; then (3) it cannot be necessary to posit a third

¹³ On these stages in a theologian's training, see Courtenay, *Wodeham*, pp. 45–53.

¹⁴ Petrus Plaout de Palma, I *Sent.* [delivered Paris, 1391], (Vatican lat. 4284, 52ra–rb): "Pro materie declaratione notandum est quod de differentia notitie abstractive et intuitive diverse sunt opiniones. Et primo circa hoc est quidam doctor anglicus qui vocatur Campsall, qui ponit quod eadem res est notitia intuitiva et abstractiva, successive tamen et non simul. Unde ipse ymaginatur quod notitia aliqua eadem adequate denominatur sive vocatur 'intuitiva,' et hoc expresse, a rei nomine quia per eam intuetur presentiam obiecti per eam cognite, que quidem notitia eadem [n]umquam adequate remanente in substantia sua absolute obiecto absente, dicitur 'notitia abstractiva' ... (52va): Alia est opinio Scoti in ista materia; alia Aureoli; alia Ockham; alia Gregorii."

entity, namely a second cognition (C).¹⁵ This presumably is because one has sufficiently accounted for all the phenomena at issue by positing only two entities, namely the cognized object and the cognition.

Pierre's account of Campsall's position closely coincides with the paraphrase offered by Chatton which, as one of the earliest descriptions that we have of Campsall's view, is also worth quoting in full:

One opinion seems to be that intuitive and abstractive cognition are not *really* distinct, but that the same cognition necessarily is an intuitive [cognition] of the thing when it is present, and abstractive when [the thing] is absent, because plurality is not to be posited without necessity. Nor is there any necessity [to posit a distinction here] ... All arguments proving a distinction between intuitive and abstractive [cognition] can be obviated by positing that one-and-the-same cognition is designated 'intuitive cognition' when the cognized thing is present—inasmuch as the concept 'intuitive cognition' connotes the object's presence—and that the very same cognition is called and designated 'abstractive' when the thing is absent, because this designation by the concept 'abstract' *connotes* the thing's absence.¹⁶

A second Oxford witness to Campsall's views was a Benedictine monk, Robert Graystones, who delivered his lectures on Lombard after Ockham's and before Chatton's baccalaureate, probably about 1321–22. For Graystones, the important discussions of cognition were those of Scotus, Alnwick, Reading, Ockham, and—though he did not at this juncture cite

¹⁵ Ibid.: "Et fundatur iste doctor principaliter in uno principio quo consuevit frequenter uti Ockham et trahitur ab Aristotele, scilicet quod non est ponenda pluralitas sine necessitate, ita quod quandoque aliqua propositio affirmativa verificatur pro rebus, si ad verificationem eius sufficit positio unius rei cum alia uno numero <non> est ponenda tertia res, sic est quod ad verificandum istam 'Sor intuitur B,' sufficit notitia de B cum presentia obiecti; et si subiectum substrahatur, ad verificandum istam 'Sor cognoscit B abstractive,' sufficit notitia de B cum non-presentia obiecti; sive quandoque re de novo acquisita, ideo etc." In the introduction to Ockham's *Quodlibetal Questions*, Wey draws attention [OTh IX: 35*] to Ockham's adoption, from Chatton, of a new formulation of the principle of economy: "quando propositio verificatur pro rebus, si duae sufficiunt, non est ponenda tertia." Plaut's quotation suggests that this "new formulation" ought, in fact, to be attributed to Campsall.

¹⁶ Chatton, *Lectura* prol. q.2 [ed. O'Callaghan: p. 236]: "Una opinio videtur esse quod notitia intuitiva et abstractiva non distinguuntur realiter, sed quod eadem notitia necessario est intuitiva rei quando est praesens et abstractiva quando est absens, quia pluralitas non est ponenda sine necessitate. Sed hic nulla est necessitas, quia isti utuntur pro arte respondendi quod ubi possunt vitare omnia argumenta per positionem unius rei aliter denominando eam alia re posita et aliter ipsa circumscripta, ibi negant tertiam rem. Sed in proposito omnia argumenta probantia distinctionem inter intuitivam et abstractivam possunt <<vitari>> ponendo quod eadem cognitio secundum numerum denominatur cognitio intuitiva, cum res cognita est praesens, eo quod conceptus cognitionis intuitivae connotat obiectum esse praesens, et quod ipsa eadem cognitio dicitur et denominatur abstractiva quando res est absens, quia denominatio ista per conceptum abstractum connotat rem esse absentem."

them by name—Aureol and Campsall.¹⁷ "Some argue," Graystones wrote:

That the same cognition is sometimes intuitive, sometimes not ... [for] the intuitive cognition of a stone and the intuitive cognition of a body can be simultaneously in the intellect [after the intuition]; therefore is the intellect able to compound them [into a proposition, and] therefore is that proposition able to be conserved in the memory; hence in the absence of [its] intelligible [objects] is such a cognition able to remain, but it will not then be intuitive.¹⁸

According to Graystones, the proponent of this position had urged further that it is preferable to accept the identity of the cognition when the cognized object is removed, than to assume either that an entirely new cognition must replace the original intuition, or that a new cognition is added to the original intuition.¹⁹

These three witnesses establish several elements of Campsall's position on intuition and abstraction. First, in his view, the cognitions usually termed "intuitive" and "abstractive" are, strictly speaking, identical; hence, the cognition does not differ from itself intrinsically. Second, the terms by which we name the cognition are connotative; that is, the term "intuition" (or "intuitive cognition") designates (*denominat*) not only a cognitive act, which is the primary significate; but because that act is a relation involving a seen object as terminus, "intuition" also designates that terminus secondarily. The term "abstractive cognition" can *mutatis mutandis* be similarly explicated, inasmuch as it is also connotative. Thus, the basis for applying one term or the other to a cognition depends *a parte rei*, or in other words, upon the presence or absence of an object rather than upon any intrinsic distinction within the cognition itself. The third element of Campsall's definition, as reported, is its foundation upon the principle of economy—a principle that he evidently tied to a theory of predication, to judge from Campsall's restatement of it in terms of the

¹⁷ Graystones I *Sent.* prol. q.1, "Utrum viator per aliquem actum possit esse certus de existentia alicuius rei distincti ab eo loco et subiecto" (London, Westminster Abbey 13 fols. 3va–6rb). Graystones discusses Aureol's views on fruition (col. 171), and Campsall on knowledge of God (col. 205) and on genera (col. 292). On Graystones, see also below, chapter VIII.

¹⁸ *Ibid.* (fol. 5va *in marg.*): "Arguunt tamen aliqui quod eadem cognitio sit quandoque intuitiva, quandoque non. Probo sic: cognitio intuitiva lapidis et cognitio intuitiva corporis possunt simul esse in intellectu; igitur intellectus potest illas componere; igitur illa propositio potest in memoria conservari; igitur in absentia intelligibilis potest talis cognitio manere. Et tunc non erit intuitiva; igitur <etc.> ..."

¹⁹ *Ibid.*: "Item, cognitio lapidis abstractive et postea presentetur sensui. Aut fit nova cognitio in intellectu et desinit antiqua; aut illa que prius fuit abstractiva nunc fiat intuitiva; aut acquiritur nova cognitio cum antiqua mediante. Primum non est dandum ... nec est ultimum dandum ... igitur relinquitur medium, quod est propositum."

verification of propositions. Finally, if Graystones is correct, among the motivations for Campsall's position was the conviction that, if intuition and abstraction were really distinct, then only when the intellect's extramental objects were present could such propositions even be formed by the intellect. If one were willing to grant that this is the case, one would still face the problem of accounting for the retention of propositions in the memory.

These worries suggest that Campsall—unlike Scotus and Aureol, for example—identified intellectual acts and their contents. It was, after all, in part to avoid precisely such consequences that Aureol had insisted upon distinguishing intentions from the intellectual acts forming them.²⁰ Thus it is not entirely surprising to find that, according to Chatton, Campsall had introduced "a new opinion" concerning intentions, namely that "a first intention is the direct act (*actus rectus*) [regarding] the extramental thing; a second [intention] is the reflexive act." Less surprising still, given Campsall's conclusion that the same cognitive act can be either intuitive or abstractive, is his reported conclusion where intentions are concerned: "thus, the same act is sometimes a first and [sometimes] a second intention."²¹

Although on some other issues, most notably the question of whether relations are distinct from their relata, and the understanding of simple supposition, Campsall and Ockham agreed,²² the latter refused to accept the identification of direct and reflexive intellectual acts, precisely because it would then follow that one-and-the-same cognition would be intuitive and abstractive.²³ It is, moreover, important to recognize that, given the

²⁰ See above, chapter IV, at n. 59; and Pinborg, "Zum Begriff." On this issue, Campsall is possibly the source of Chatton's insistence on an identification of intellectual acts with their contents, for which see below, chapter VII at nn. 78–91.

²¹ Chatton, I *Rep.* d.23, q.un., a.2 [ed. Knudsen: p. 23]: "Una opinio nova est quod intentio prima est actus rectus rei extra, secunda actus reflexus; ideo aliquando idem actus est intentio prima et secunda." The manuscripts' margins identify the opinion as Campsall's.

²² For their agreement on simple supposition, see the works cited in n. 5 above. We know Campsall's position concerning relations on the witness (early 1320s) of John Baconthorpe, O. Carm. I *Sent.* [Synan, *Campsall* I: p. 16 n. 26]: "Est alius qui reputat se hoc efficaciter demonstrare, Campsale, sic. Si relatio esset alia res a fundamento, ergo tot res generantur unico actu quo relationes; sed quando moveo digitum adquiruntur infinitae relationes, qui<<a>> adquiruntur infinitae distantiae ad infinitas partes mundi secundum approximationem et recessum digiti mei ad infinitas partes mundi; et sic apparet inopinabile sequitur, quod ad motum digiti mei impleatur mundus infinitis rebus." For the evidence that this denial that a relation and its relata were really distinct was among a core of positions construed by fourteenth-century opponents as, in their term, "Ockhamist," see Courtenay and Tachau, "Ockham, Ockhamists," pp. 72–75; also Erfurt *Wiss. Bibl.* C.E. 2. 109 (written 1344) fol. 25ra.

²³ Ockham, II *Rep.*, q.17, "Utrum actus rectus et reflexus sint idem realiter aut diversi

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chronology of Campsall's and Ockham's œuvre, it was not Campsall who agreed with Ockham when there was concurrence, but rather the reverse. This is not merely a quibble, for to get the intellectual priority backwards is to imply that the philosophical insight lay with Ockham and that, at best, Campsall groped towards it. Rather, much of what seems novel in Ockham's departures from Scotus may be derived from a thoughtful critique already delineated in Campsall's work.²⁴ A second reason for avoiding the temptation to continue to speak of Campsall as heading in an Ockhamist direction is provided by the fact that he is evidently the source for critiques of Ockham on some issues.

Hence it is useful to notice how greatly Ockham's interpretation of these modes of cognition differs from Campsall's, whose views he was in a position to know. First, Ockham considered intuition causally prior to and, therefore, *really* distinct from abstraction, as just mentioned.²⁵ Moreover, even if Ockham continued to employ the term "abstractive cognition," he objected to any notion of abstraction that relied upon representative images, especially the sensible and intelligible species which he had eliminated from his account of knowledge. Campsall, however, assumed the existence of such species, to judge from his distinction between two senses of "similitude," according to which species could be accepted as natural likenesses of objects from which they differed essentially.²⁶ Finally, where Campsall's argument against intuitions of absent objects indicates that for him the term "intuition" designated a relation,

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actus" [OTh V: p. 385]: "<Contra istam opinionem> Primo, quod actus rectus et reflexus sunt diversi actus realiter, quia si essent idem actus, sequitur quod eadem cognitio esset intuitiva et abstractiva." Ockham does not actually name the proponent of this view.

²⁴ Even Campsall's editor has not entirely avoided the temptation to refer to Campsall as heading in an Ockhamist direction; cf. Synan, *Campsall* II, pp. 3–5, 36–37. The only indication that Campsall ever responded to Ockham is the reference to the latter in the sole copy of Campsall's "Utrum materia possit esse sine forma." This reference, the question's structure, and its inclusion in a manuscript (Munich, Bayer. Staatsbibl. CLM 8943) comprising material from ca. 1320–27, suggest that it stems from Campsall's stint as opponent or respondent in debates, or from his magisterium in Theology. Nevertheless, the same question bears a scribal reference in the margin to the opinion of the even younger scholar, Rodington (fol. 32r, mistranscribed in Synan, *Campsall* II, p. 30 n. 42). Both references are probably due not to Campsall, but instead to the theological student who compiled the collection in preparation for his own lectures; thus the appearance of Ockham's and Rodington's names cannot serve either to date the text securely, or to provide evidence of who (other than the student) knew whose work.

²⁵ See above, chapter V, at nn. 34–43.

²⁶ See, e.g., Rodington, below, chapter VIII, n. 88; Campsall also requires species to explain forgetting; see Adam Wodeham, *Lectura secunda* d.3, q.5 (Cambridge, Gonville & Caius 281/674, fol. 176va): "Aliter respondet Campsalle, quod causa est quia aliquando alius actus intensus expellit speciem in memoria, et quod hec est causa obli<vi>onis." Campsall himself states, *Prior analyt.*, q.4.1 [Synan, *Campsall* I: p. 89]: "res non scitur nisi per suam speciem ..."

for Ockham it designated rather one of the relata. Consequently, on Ockham's understanding—but not on Campsall's, at least according to later adherents—the logical possibility of an intuition of a non-existent object was undeniable.²⁷

No more than Ockham was Chatton willing to accept Campsall's interpretation of intuition and abstraction. The first scholar who clearly did so is anonymous, the author of a commentary preserved at Erfurt. Probably trained in England, he polemicized rather steadily against the views of a contemporary he knew as William, that is, Ockham.²⁸ In addition to arguing that intuitive and abstractive cognition are not really distinct, but are the same cognition "which we call intuitive when the object is sufficiently present" to the knower, and abstractive when the object is not,²⁹ our anonymous scholar makes a further important contribution to the discussion. He is the first to point out that, in claiming that by intuition one perceives immediately that an object does not exist when it is not present to him, Ockham has conflated non-presence and non-existence. If intuition is the kind of simple, immediate *experience* by which one is aware that an object is present, this anonymous points out, one does not have the same *kind* of experience of the fact of an object's non-existence. Though this anonymous theologian is the first we know to have voiced this critique, its thrust becomes most apparent when encountered more fully developed in Holcot's discussion.³⁰

²⁷ See especially the arguments of Rodington and Holcot below, chapters VIII at nn. 38–47 and IX at nn. 9–11.

²⁸ Preserved in Erfurt, Wiss. Bibl. C.A. 2. 180, fols. 1–101, this commentary has not received detailed doctrinal study. Its present form postdates Thomas Aquinas's 1323 canonization, and probably predates 1330, as there is no explicit (nor, as far as I can discern, implicit) reliance on authors later than Ockham. This would accord with the fact that the anonymous author still refers to William, and not yet to Ockham.

²⁹ Erfurt Anon., I *Sent.* (C.A.2.180, fol. 5va): "Secunda definitio: quod notitia intuitiva et abstractiva respectu eiusdem obiecti non sunt diversi actus, sed idem actus aliquando dicitur 'notitia intuitiva,' videlicet quando res cognita est sufficienter presens cognoscenti; aliquando vocatur 'abstractiva,' quando scilicet non est presens. Quod autem actus sit idem, etc., probatur quia non oportet ponere distinctionem realem in actibus obiectivarum <?>, sed obiectivarum est idem; igitur <etc.>"

³⁰ Ibid.: "Sed dubium est quomodo scitur propositio negativa in qua negatur esse de aliquo, ut talis: 'Sortes non est.' Non per experientiam, quia quando habetur experientia de aliqua re, illa res necessario est. Non enim videtur aliquid nisi illud; sic igitur nec per demonstrationem, quia omnis talis est contingens; igitur <etc.> . . . Tertia definitio: quod per eundem actum sine re potest sciri rem non esse presentem probatur, quia ex hoc quod res est presens scit aliquis rem esse presentem; igitur ex hoc quod aliquis scit se non habere iudicium <rem esse presentem>, scire potest rem non esse presentem. Quarta definitio: quod per talem actum sine re non potest sciri rem non esse, quia non sequitur 'scio rem non esse presentem, igitur scio rem non esse,' sed est falsa consequentia. Quinto dico *contra Willelmum* <Ockham>, quia eodem actu sive eadem notitia intuitiva non scitur successive rem esse et non esse. Probatur primo ex precedentibus, secundo sic: ab eadem causa totali

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Between the anonymous Erfurt author and Holcot, however, at least one Franciscan also became an adherent of Campsall's interpretation. This was John of Rodington, who clearly saw his own views as contrary to Ockham's, whom he endeavored to refute.³¹ He, like the Dominican Holcot, has often been cited as an Ockhamist, but both were, in fact, consistently opposed to Ockham on epistemological issues. In what follows, it will be evident that the roots of their understanding of intuitive and abstractive cognition reach rather to Campsall.³²

Inasmuch as Campsall's influence on the understanding of intuitive and abstractive cognition is readily demonstrable, even upon scholars hitherto considered "Ockhamist," it is probable that Campsall's importance for developments at Oxford in the 1320s and 1330s has been vastly underestimated, and that further research will increase the degree to which Campsall appears to us a major influence on Oxford debates from the 1320s through the 1330s. The same cannot be said for Campsall's slightly older contemporary, John of Reading, whose *Sentences* commentary left few echoes in the work of later Oxford authors.

John of Reading

The first theologian to take issue with Ockham was a Franciscan and, at least where epistemology was concerned, in most respects a Scotist. Yet, despite the attention John of Reading paid to Ockham's *Reportatio* and, after 1324 when it became available, to his *Ordinatio*, it should not be assumed that Reading developed his understanding of intuitive and abstractive cognition in response to the Venerable Inceptor. Rather, Reading has to have expounded his position as a bachelor of the *Sentences*, a rank he like Campsall must have held a few years before Ockham reached that stage of his career, since Reading had already begun to serve as the Oxford Franciscans' 45th regent master in 1320, if not indeed earlier.³³ If he had not already started to revise his *Sentences* commentary

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et naturali non proveniunt effectus contrarii; sed intellectus cum actu et re causat iudicium quo scitur rem esse; igitur etc. Nec valet dicere quod intellectus cum actu sine re causat iudicium quo scitur rem non esse, quia hec est contra quartam conclusionem ... etc." For Holcot's discussion, see below, chapter IX, at nn. 13–17.

³¹ See below, chapter VIII, especially at nn. 33–35, 57–64.

³² That Rodington was an Ockhamist, rather than (as Michalski had suggested, a Scotist) was the thesis of M. Tweedale (see below, chapter VIII, n. 33); for Holcot, see chapter IX n. 2.

³³ On John of Reading, see: E. Longpré, "Jean de Reading et le B. Jean Duns Scot," *La France Franciscaine* 7 (1924), 99–109; Courtenay, *Wodeham*, pp. 62–63; S. Brown, "Sources I," 36–51; S. Brown and G. Gál, introduction, *Ockham Ord.* [OTh II: 18*–34*]; G. Etkorn, introduction, *Ockham Ord.* [OTh III: 16*–18*]; Girard Etkorn,

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into an *Ordinatio* before being appointed to that post, at some point he did turn his efforts to that task, either during his Oxford regency or, from 1322, as a master of Theology at Avignon. In producing the partially revised commentary that survived his death at the papal curia, Reading applied positions he had earlier delineated to the views of the younger bachelor of Theology as they became known to him. Thus, Reading simply included Ockham in the ranks of contemporary and near-contemporary theologians whose arguments, from Reading's vantage, merited consideration.³⁴

That Reading's own noetic views remained unaffected by acquaintance with Ockham's is confirmed by the first discussion of intuitive and abstractive cognition in Reading's commentary, which is in fact focused on the views of certain unnamed "others" (*alii*) none of whose arguments is Ockham's. Although the very diversity of these views indicates that as of 1322 the notion of intuitive cognition had not yet become a matter of general agreement at Oxford,³⁵ Reading's own purpose in considering them in this question, the first of his Prologue, is ultimately to establish that natural knowledge is scientific. To this end he sets out five requisite conditions—for which he relies heavily upon Scotus, and buttresses their inclusion by appeal to Grosseteste's Commentary on the *Posterior Analytics* and Alhazen's *Perspectiva*.³⁶ The first of these conditions of scientific

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"John Reading on the Existence and Unicity of God, Efficient and Final Causality," *FrSt* 41 (1981), 110–221; and G. Gál, "Quaestio Ioannis de Reading de necessitate," which contains an edition of I *Sent.* d.3, q.3. All references to this question are to Gál's edition; the remaining references to Reading's *Sentences* commentary are to the sole known manuscript of the entire commentary, Florence B.N. conv. soppr. D.IV.95, which is written in several hands.

³⁴ See introductions to the Ockham edition, n. 33 above. Among those to whom Reading pays close attention are Richard Drayton, Peter Sutton, Thornton, Robert Cowton, Nottingham, Durand of St. Pourçain, John Lutterell, William Alnwick and, especially, John Duns Scotus. G. Etzkorn, in "Reading on Existence," p. 119, points out that up through d.3, q.3, Reading's citations of Ockham correspond to the latter's *Reportatio*, but from d.4 onwards, citations are instead to his later *Ordinatio*. Because Reading was already in Avignon when Ockham began his revisions, it appears that Reading's commentary, from d.4 onwards, postdates the arrival of Ockham with his *Ordinatio* in 1324.

³⁵ Reading, I *Sent.* prol. q.1, "Utrum de ultimo fine humanorum actuum tamquam de subiecto primo possit habere aliqua scientia proprie dicta," covers pp. A–P and 1–11; the second article is devoted to five arguments constituting the *opiniones aliorum*.

³⁶ *Ibid.*, pp. C–E, contain three citations of Grosseteste (as, e.g., n. 38 below); in the same pages. Reading twice refers to Alhazen's arguments for the claim that perception includes discursive reasoning which, however, is imperceptibly rapid (p. E): "secundum Alacen, secundo libro capitulo 3, sed talis propositio non cognoscitur per discursum morosum ... patet per Alacen ibidem qui vult quod intellectus non cognoscit totum esse <maius> [*ms*: magis]—per te—nisi formando intentiones totius vel partis vel maioritatis unde sillogismus qui arguit totum est maius ..." See also below n. 39; and, for Scotus's discussion, his *Ord.* prol. p.5, qq. 1–2 [balic * I: p. 141].

knowledge (*scientia*) is that it be certain and, consequently, exclusive of all doubt and deception. Second, this knowledge must be evident (*cognitio evidens*).³⁷ There is no trace of Ockham's formulation in Reading's understanding of evident cognition; his emphasis instead is upon distinguishing evident from certain knowledge, and his appreciation is rather for Grosseteste, who had argued that, while the truths of faith are certain, they are not evident.³⁸ For Reading the third condition for scientific knowledge is an intrinsic and immediate connection to what is true, which he locates in what is necessary and propositional. Because the requisite propositions, according to the *Posterior Analytics*, must be linked demonstratively, scientific knowledge has as its fourth condition the recognition of the relation of the premises to the conclusion. Finally, as a result of the latter condition, science incorporates syllogistic, discursive reasoning.³⁹

Having established the preconditions for the occurrence of scientific knowledge, Reading denies that *properly speaking* it is necessarily only of existing objects. He approves this conclusion primarily as required to preserve divine foreknowledge; hence interpreting necessity strictly—as not predicable of any being or relation other than God—Reading argues first that abstractive cognition is not necessarily of existing objects, be-

³⁷ Reading, *ibid.* (p. C): "Prima <conditio> est quod sit cognitio certa, et per consequens excludens dubitationem et deceptionem ... Secunda conditio intrinseca scientie ut in se consideratur est quod sit <cognitio> [*ms.* conditio] evidens."

³⁸ *Ibid.*: "Nec est idem cognitionem esse certam et esse evidentem, tum quia certus est fidelis de articulis fidei de quibus tamen non habet evidentem cognitionem, tum quia aliquis videns miracula facta a Christo potuit certitudinaliter scire ipsum esse bonum et veracem, et per consequens audiens eum dicentem Deum esse trinum vel mortuos resurrecturos potuit esse certus de utraque veritate sed talis sic certus non habet cognitionem evidentem de talibus veritatibus dictis a Christo—et hoc loquendo de evidentia intrinseca sequente ex rationibus terminorum—quamvis posset habere evidentiam quasi extrinsecam ... Hanc conditionem scientie probo sic: scientia proprie <dicta> est cognitio conclusionis causate per demonstrationem a cognitione principiorum, secundum Lincolnensem primo *Posteriorum* conclusione prima."

³⁹ *Ibid.* (pp. C–D): "Tertia condicio que inest scientie ut comparatur ad verum immediatum, quod proprie dicitur sciri, scilicet consequentia est quod scientia sit veri necessarii et complexi ... Quartam condicionem habet scientia per comparisonem ad cognitionem principii, quia de ratione scientie est quod presupponat saltem a parte obiecti cognitionem principii. Et ideo primo *Posteriorum* dicit Philosophus quod scientia habetur per demonstrationem. Demonstratio autem ibidem est ex causis cognitionis primis et veris et immediatis, etc. Item, ibidem scire est causam cognoscere ... Quintam condicionem habet scientia per operationem habitudinem conclusionis ad principium, que est quod sequatur ex principio per discursum syllogisticum. Ista tamen additio secundum aliquos non est de ratione scientie in se, sed in aliquo intellectu tantum, qui scilicet natus est discurrere ... Contra ultimam condicionem, scilicet de discursu, arguitur ... <Sed> si de ratione scientie non esset discursus syllogisticus, hoc non esset nisi quia de ratione scientie et demonstrationis non est quod prius tempore vel duratione cognoscatur principium ... Similiter tamen quod ad scientiam non requiritur discursus morosus ... confirmatur per Alacen secundo *Perspective*, capitulo tertio ..."

cause whatever relation it has to the object is not a necessary one. If the relation is one of effect to cause, then it must be admitted that God could cause scientific knowledge of a rose that had been destroyed. Similar arguments can be brought to bear against any necessary relation of abstractive cognition to the *species*, "which substitutes (*supplet*) for the object."⁴⁰ Clearly, the only relation these cognitions have to external objects or to species is a contingent one; in order that one know intellectually (*intelligere*) some extramental object, all that can be considered necessary is the concept, i.e. the intellectual act itself—and this is necessary only on the grounds of identity.⁴¹

If the species is not strictly speaking necessary for abstractive cognition, does it not thereby follow that existence is not necessary for intuitive cognition (*visio*)? After all, Reading proceeds, "just as the species of a thing is with respect to abstractive cognition, so is the object's presence with respect to an intuitive cognition."⁴² Because God can do immediately what he does through secondary efficient causes, and inasmuch as vision is "a certain quality and effect caused by a present thing," God can cause "corporeal vision in the eye, as well as intellectual vision in the intellect,

⁴⁰ Ibid. (pp. G-H): "Diceret forte quod omnis cognitio scientifica realis et proprie dicta est obiecti existentis, quia cognitio realis habet necessario dependentiam et relationem ad obiectum sicut mensuratum ad mensura" After listing several conceivable relations scientific knowledge could have to the object, Reading proceeds: "Sed nulla istarum relationum est necessario consequens cognitionem ... Probatio assumpti, quod Deus potest causare in intellectu unius<quis>que scientiam de rosa, ipsa ad nihilata; ergo scientia sive cognitio rose habebit ad ipsam relationem realem. Dices forte ad hoc quod habebit relationem realem ad speciem necessario que supplet vicem obiecti. Contra hoc: quia possibile <est> intellectionem sive notitiam poni a Deo in intellectu nulla ibi forma scientie; igitur species non requiritur. Probatio antecedentis: quia si species necessario requireretur, hoc esset vel ratione motivi, quod non contingit—diceret—quia Deus in ratione motivi et efficientis potest immediate quidquid potest mediante causa secunda; vel hoc esset in ratione representativum, quod etiam non contingit, quia species eidem representat intellectui. Possibile enim est speciem esse in intellectu quando intellectus nihil intelligit ... vel tertio hoc esset in ratione terminati, quod etiam non oportet, quia posita intellectione a solo Deo in intellectu de rosa, nec rosa existente nec eius specie in intellectu, illa intellectio non habebit relationem ad obiectum vel speciem que non sunt, nec necessario habebit relationem realem ad aliquid aliud nisi solum ad Deum vel ad intellectum in quo est ..."

⁴¹ Ibid. (p. P): "Dico ad hoc: quod <quis> intelligeret aliquam rem requireretur necessario aliquid aliud ab actu intelligendi; cum hoc non sit res cognita, quia res non sit in anima III *De anima*, hoc igitur vel est species—vel verbum secundum omnes—vel saltem quedam definitio causata per actum, vel aliqua relatio intellectus ad obiectum. Sed nullum istorum; <igitur> requiritur necessario quod sit conceptus; igitur conceptus non est realiter nisi ipsa intellectio."

⁴² Ibid. (p. 1): "Dices secundum istud argumentum, sequeretur quod visio intuitiva, cum sit quedam intellectio, potest esse sine obiecto existente, quod videtur impossibile. Consequentia <patet, quia> sicut se habet species rei ad cognitionem abstractivam, sic se habet res ipsa presens ad cognitionem intuitivam. Si igitur cognitio abstractiva ... potest esse sine specie, igitur intuitiva sine obiecto presente."

of a thing that is not present or is even non-existent."⁴³ Thus, Reading concludes, one must concede the possibility of an intuitive cognition of a non-existent, if only by God's absolute power.⁴⁴

To anyone who expects to classify Reading as a slavish disciple of Scotus, the next argument is unexpected. For against the admission that by virtue of divine power there can be intuitive cognition of a non-existent, Reading adduces Scotus's view:

It could be said that intuitive cognition cannot exist except with respect to an existing thing—here speaking of the first object of the intuitive cognition—and from this to the argument made above, it could be said that intuitive and abstractive cognition are not similar, because intuitive cognition necessarily either intends towards or even has an annexed real relation to the object of which it is [an intuitive cognition], and hence it requires the object.⁴⁵

Now, while it is true that "naturally speaking" (*naturaliter loquendo*), that is, considering only the natural course of events, "all intuitive cognition is of a thing present in itself," and can occur naturally only if that thing is present in-and-of-itself (*in se*), nevertheless, Reading insists, the relation between object and intuitive cognition is not *necessary* and, therefore, God's ability to cause an intuitive cognition of a non-existent or non-present object cannot be denied.⁴⁶ Although he has arrived at this stance

⁴³ Ibid.: "Ad istud potest dupliciter responderi: uno modo concedendo consequens, quia Deus posset causare visionem corporalem in oculo vel etiam intellectualem in intellectu de re non presente, vel etiam non existente, quia cum visio sit quedam qualitas et effectus causatus a re presente, potest Deus in ratione cause efficientis solum illam visionem causare obiecto non existente."

⁴⁴ Ibid. (p. 2): "... sequitur quod illa intellectione stante in intellectu, impossibile est intellectum illum non videre ... quocumque alio circumscripito illa intellectione in intellectu, intellectus ille videbit intuitive creaturas sive existant sive non, vel habetur propositum. Quod non autem hoc debeat intellegi quod intellectus possit videre rem non existente de potentia dei absoluta saltem, et de modis cognitionis intuitive <post> dicitur." Reading's cross-reference is to his prol., q.3, where he states (p. 31): "Dico quod intuitiva sicut et abstractiva potest causari in intellectu a Deo de re nec presente nec existente; et etiam abstractiva potest causari a Deo absque re vel specie rei existente, ut dictum est prima questione."

⁴⁵ Ibid. (p. 2): "Aliter posset dici quod cognitio intuitiva non potest esse nisi respectu rei existentis, et hic loquendo de primo obiecto cognitionis intuitive; et tunc ad rationem superius factam posset dici quod non est simile de cognitione intuitiva et abstractiva, quia intuitiva cognitio necessario vel intendit vel habet necessario annexam relationem realem ad obiectum cuius est, et ideo requiritur obiectum illud [illud] ex ratione. Que autem via istarum duarum viarum sit verior, alias poterit explicari planius." Reading's "alias" again refers to prol., q.3 (cf. n. 44 above). Ockham had also objected to any "annexed" relation; cf. chapter V, n. 29.

⁴⁶ Ibid. (p. 8): "... illud assumptum, scilicet quod cognitio intuitiva est tantum existentis, et abstractiva non existentis, non est verum, quia abstractiva potest esse existentie secundum intellectum predictum. Et cum dicitur, <intuitiva> potest esse rei non

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from a different route—namely, a stricter application of the notions of necessity and contingency—than had Aureol or Ockham, with whom Reading is in closer agreement, it is nonetheless clear that he must be numbered among those who were committed to at least the supernatural possibility of intuitive cognition of non-existents. And so one, at least, of his contemporaries counted him, for Graystones characterized Reading's position thus:

Reading concedes that intuition can be of a non-present and even a non-existent thing, and hence in this life (*pro statu isto*) man is not able to be certain whether a thing is or is not by means of any intuition.⁴⁷

Yet the contingency of intuitive cognition of existence does not, for Reading, compromise certainty, because existential certitude is not the ground of scientific knowledge which, as he has defined it, is where certitude obtains.⁴⁸ He holds, after all, that both intuitive and abstractive cognition can ground scientific knowledge. Scientific knowledge abstracts from existence, Reading concedes, and existence can be known not only intuitively, but also abstractively, "for I now know the existence of a white thing that I once saw, even if it does not now exist."⁴⁹ This permits scientific thinking to depend upon memory, or to focus on what does not exist.⁵⁰

In order to argue this point, Reading introduces considerations of the import of the terms at issue, much as Campsall had before him. Thus, Reading remarks, we can refer to existence either nominally (*nominaliter*) or participially (*participialiter*), but only when we speak of existence par-

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existentis, quia Deus intuitive cognoscit res non existentes ..." Further, "Et si quaeres quare igitur dicuntur communiter quod abstractiva abstrahit ab existentia, et intuitiva est respectu existentis. Respondeo: cognitio intuitiva est alicuius per secura et clara cognitio eius, quia talis cognitio non potest naturaliter nisi ab ipsa sola re presente in se. Ideo, naturaliter loquendo, verum est quod omnis cognitio intuitiva est rei aliquo presentis in se. Sed ex hoc non sequitur quin Deus posset causare talem visionem talis rei in potentia visiva re non presente vel non existente, et per consequens potest, informata tali visione, videre[t] non existentem, sicut conceditur."

⁴⁷ Graystones (Westminster 13, col. 122): "Reding aliter dicitur, concedendo quod intuitio potest esse rei non presentis, etiam non existentis, et ideo pro statu isto non potest homo esse certus an res sit vel non sit per quamcumque intuitionem;" also (fol. 6rb): "Aliter (*margin.* Reading) dicitur, concedendo quod pro statu isto non potest aliquis esse certus de existentia cuiuscumque distincti loco et subiecto ab eo, quia hic non potest scire utrum ubi intuitio causetur ab obiecto vel non; et ideo <non> potest iudicare an res sit presens in se vel non."

⁴⁸ See above, n. 37.

⁴⁹ Reading, I *Sent.* prol. q.1 (p. 7): "... quia cognitio scientifica abstrahit ab existentia, dico quod existentia rei potest cognosci abstractive non tantum intuitive, sicut modo cognosco existentiam albedinis quam aliquando vidi, licet modo non existat."

⁵⁰ Although Reading suggests this here (pp. 7–8), he is more explicit in I *Sent.* d.3, q.3, for which see, e.g., below n. 73.

ticipially is actual existence entailed, for a participle consignifies a time. Put another way, if one accepts the term "existent" (*existens*) as a substantive expressing "what exists," then the claim concerning abstractive cognition should be read as "what exists can be known abstractively," and is true, according to Reading. If, however, the term "existent" is construed as the participial form of the verb "to exist," then it must be taken to refer secondarily to the fact of the actual, temporally concurrent existing. Thus, Reading concludes, the scope of the term "abstractive cognition" should be understood as including existence only nominally, while "intuitive cognition"—again restricted to the natural course of events—includes existence participially; that is, intuition's object is of "what exists as existing" (*existens ut existens*).⁵¹ Reading's use of the terminology of consignification reveals that, even though he does not here explicitly mention connotation, this semantic notion and an appreciation for its value as an analytic tool lie behind his reasoning.⁵²

Reading adds that, even if one were instead to concede Scotus's differentiation of the two modes of cognition on the basis of whether they concern existence, it would not follow that intuitive cognition is not scientific. Alluding to the intrinsic conditions of scientific knowledge already premised, he concludes that intuitive cognition as an immediate cognition of what is, is scientific.⁵³ Although intuitive and abstractive cognition are distinct, because—as Scotus had held—they differ in their [formal] rationes⁵⁴ they can nevertheless be of the same object, known in the same

⁵¹ Reading, *I Sent.* prol. q.1 (p. 7 continuing from n. 49): "Dico tamen quod cognitione eadem sub ratione existentis potest intellegi dupliciter: velut existens accipitur nominaliter, et sic potest cognosci abstractive, sicut dictum est prius; alio modo potest accipi existens participialiter, et sic non potest cognosci existens ut existens nisi ut existit actu, quia sic cognoscere existens est cognoscere ipsum ut existit in re propter consignificatum, quia participium consignificat tempus. Et ideo [non] oportet quod suum significatum existat in re quamvis existens, ut existens, cognoscam cognitione intuitive. Hoc non impedit quin cognoscam scientificae, quia cognitio intuitiva potest esse scientifica non respectu existentis ut existens est—saltem loquendo de creatura—quia lapis existere non est proprie scibile ..."

⁵² Unlike Campsall, however, Reading does not conclude from the definition of intuition as a cognition of what exists as existing, that it is *logically* impossible (that is, beyond God's absolute power) that there be such a cognition when the object, cognized as existing, does not in fact exist. On consignification and connotation, cf. Maierù, *Terminologia logica*, pp. 139–72; Paul Spade, "Ockham's Distinction Between Absolute and Connotative Terms," *Vivarium* 13 (1975), 55–76.

⁵³ Reading, *I Sent.* prol. q.1 (pp. 7–8): "Ad aliam probationem maioris, cum dicitur quod cognitio abstractiva distinguitur ab intuitiva quia non est existentis, et intuitiva est existentis, dico quod <si> hoc esset verum, non sequitur propositum, quia ut dictum est, cognitio intuitiva potest esse scientifica (ut dicit), tamen est immediate, alioquin Deus non haberet scientiam proprie, cuius oppositum dictum est prius."

⁵⁴ *Ibid.* (p. 8): "Et si arguas: cognitio abstractiva et intuitiva sunt cognitiones distincte; igitur habent obiecta distincta, quia cognitiones non distinguntur nisi per obiecta.

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way, as Ockham had argued. How then do they differ? "Intuitive cognition," Reading answers, "is simple, clear cognition of its object, whereas abstractive cognition is an obscure cognition of its object."⁵⁵

This was not in fact to be the definition that Reading actually employed in the rest of his commentary. In the third question of the Prologue, he reverts to the Scotistic definition, terming it the common manner of using the terms "intuitive" and "abstractive" cognition. Thus, he says, "it should be noted that there are two cognitions of any incomplex object: one intuitive, the other abstractive. The cognition that is of a thing existent and present in its own existence is commonly called intuitive, while abstractive cognition is the one that can be of an object, indifferent to whether it exists or not, or is present or absent."⁵⁶ Of the earlier definition of intuitive cognition as "simply clear vision," Reading writes:

[The term] intuitive cognition can be employed in two ways. The first is loosely (*large*), for clear vision or cognition of a thing, as would be [a vision] of a real thing as if truly existing; and in this way, one [can speak of] an intuitive cognition of a thing that does not exist ... It can also be employed strictly, and thus it means [cognition] only of a thing existing with presentiality (*presentialiter*) in itself.⁵⁷

Because their common source for the notions of intuitive and abstractive cognition was Scotus, Reading's account contains superficial points of agreement with Ockham's. Most notable is the insistence upon the achievability of scientific knowledge devoid of doubt in this life (*in via*), an insistence aimed at least in part at Peter Aureol.⁵⁸ Reading also

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Respondeo quod cognitiones alterius rationis—cuiusmodi est abstractiva et intuitiva—possunt esse eiusdem obiecti secundum eandem rationem in re obiecta. Hoc patet in simili, quia eandem rem secundum eandem rationem a parte rei quam cognoscit intellectus noster abstractive cognoscit Deus intuitive et angelus potest eandem cognoscere abstractive ..."

⁵⁵ Ibid: "Et si dicas: quomodo ergo distinguntur cognitio intuitiva et abstractiva, si possunt esse respectu eiusdem obiecti, dico quod cognitio intuitiva est simpliciter clara illius cuius est; cognitio abstractiva est cognitio obscura illius cuius est."

⁵⁶ Ibid., prol. q.3 (p. 24): "Notandum quod duplex est cognitio alicuius incomplexi in genere, una intuitiva et alia abstractiva. Intuitiva vocatur communiter illa que est rei existentis et presentis et in existentia sua, abstractiva cognitio que potest indifferentem esse rei sive sit presens sive sit absens, sive existens sive non existens, et est cognitio que habetur per <speciem> [*ms. sensibilem*] rei apud intellectum."

⁵⁷ Ibid. (p. 20): "Posset tamen aliter dici quod cognitio intuitiva potest dupliciter accipi ad presens: uno modo large, et sic est clara visio vel clara cognitio alicuius rei sicut esset si esset in se presens, et sic potest esse de re non existente, ut patet de visione Dei et beati. Secundo modo potest accipi stricte, et sic potest dici esse tantum rei in se presentialiter existens, et sic intellegunt communiter quod aliquis videt rem quia videt rem in se existentem presentialiter."

⁵⁸ Detailed comparison of Reading's discussions of Aureol (e.g., q.5 [p. 62], and the texts edited by Etkorn in "Reading on Existence") to the various versions of Aureol's

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speaks of the immediacy of intuitive cognition, but he means neither temporal instantaneousness nor the absence of ontological mediators, as did Ockham.⁵⁹ They concur, too, on the supernatural possibility of intuitive cognition of non-existents; but Reading also admits, on grounds of optical experience, the possibility of the natural occurrence of intuitive cognition of extramental objects that are not directly present to their observer.

Reading's Defense of Species against Ockham

The means by which such intuitive cognitions occur provide the focus of Reading's objections to Ockham, for Reading relies upon sensible and intelligible species. In the first question of the Prologue, he remarks casually that species cause abstractive cognition.⁶⁰ And if intuitive cognition is immediate, intrinsically it is neither direct nor impeded by species. Explicitly discussing sensitive intuitive cognition, Reading employs species to explain how objects not directly present to the visual faculty can nevertheless be seen via mirrors. Taking the example of an object actually located behind the observer, Reading inquires what causes the viewer's vision of the object, and responds that "according to all perspectivists . . . a certain quality or certain similitude of the thing," caused by the object, multiplies:

Directly to the mirror, which it cannot multiply beyond. So it then multiplies its similitude along a line in some way reflected to the eye. And thus . . . albeit more imperfectly than if the object were directly opposite the eye, [the similitude] causes in the eye a vision of the thing that, however, is not directly seen. And that is because vision along reflected lines is more imperfect than vision along direct lines.⁶¹

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commentary are required if we are to establish whether Reading knew only the *Scriptum*—and thus, did not know Aureol's views before summer 1317 at the earliest—or earlier lectures. In either case, the timing of Reading's stint as regent master suggests that Reading's own bachelor lectures were earlier than Aureol's Paris lectures, so the presence of the latter's views were probably introduced during Reading's revision.

⁵⁹ Although Reading frequently terms intuition "immediate" (as above, n. 53), since he rules out the obvious interpretations of immediacy, it is not clear how he understands this.

⁶⁰ I *Sent.* prol. q.1 (p. 8): "Econtrario autem <in comparatione ad intuitivam> cognitio dicitur abstractiva illa que est cognitio quam scilicet res in se presens non causat, sed quam species rei causat, et talem cognitionem essentialiter potest species causare sive res existat sive non existat; et ideo dicitur talis cognitio abstrahere ab existentia."

⁶¹ *Ibid.*: "Nec est imaginandum quod visio sit ex hoc quod res est presens oculo meo disposito et aperto palpebris, sed ideo video rem, quia visio que est quedam qualitas et quedam similitudo rei talis est causata et potentia visiva. Hoc etiam patet in exemplo, quia video visione corporali rem corporalem que non est directe presens, nec obiecta directe potentie visive, sicut quando video in speculo—[nec aliquid quod est in speculo, sed ipsam rem que est post tergum meum] nec video tunc speciem in speculo, nec aliquid quod est

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Evidently this example was initially aimed at Drayton who, if accounts of his views are to be trusted, intimated that unless the existent object were directly opposite the viewer, it would not be seen.⁶² Thus Reading's objection to Drayton regarded the issue of what constitutes the sufficient presence (rather than existence) of an object for naturally occurring intuition; but when Reading used the example again in the third question of the Prologue, his purpose had become to show instead that not only must divinely induced intuitive cognition of non-existents be assumed, but that species can cause such an intuitive cognition naturally. Again basing his argument upon the authority of perspectivist learning, Reading insists that this "can be supported by Alhazen, who says in the first book of [his] *Perspectiva*, in the first chapter," that when we look at a glowing globe we see an afterimage, caused by species of the object remaining in the eye "as a certain Doctor, namely John Pecham, explains."⁶³

These arguments imply, moreover, that like Aureol, Reading identifies intuitive cognition with sensation, as he confirms elsewhere in the question.⁶⁴ Although he does not inform us explicitly, presumably he does so on the basis of Scotus's late *Ordinatio* and *Quodlibetal* analogy of sensation to intuition. We should therefore recognize that what Reading proposes

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in speculo, sed ipsam rem que <est> post tergum, secundum omnes Perspectivos. Quod probatur, quia apparet talis res non in superficie speculi, sed quasi multum intra ipsum—quod non esset verum si aliquid quod est in speculo videretur. Unde quia res post tergum multiplicat directe similitudinem suam usque ad speculum, nec potest ultra multiplicare, multiplicat similitudinem suam secundum lineam aliquo modo reflexam usque ad oculum, et ideo quia causat visionem in oculo de re, tamen non presente directa oppositione ipsi oculo; ideo videtur eis, licet imperfectius quam si esset directe opposita oculo. Et hoc quia imperfectius causat visionem per lineam reflexam quam per lineam rectam. Sic igitur diceretur: visio posset esse rei non existentis." This example is repeated in prol., q.3 (p. 31), again explicitly as a discussion of intuitive cognition (as a marginal gloss notes), and replacing "similitudo" with "species."

⁶² Cf. Gál, "Quaestio Ioannis de Reading de necessitate" p. 82 para. 32; p. 125 para. 192, where Reading refers back to this discussion. Drayton's works are not extant, so he has not to date been the subject of scholarly study; he is quoted at length by Reading and Graystones throughout their commentaries. For his biography, see A.B. Emden, *Biographical Register of the University of Oxford I* (Oxford: 1957), p. 593.

⁶³ I *Sent.* prol. q.3 (p. 31 margin): "Istud potest confirmari per Alacen primo *Perspectiva* capitulo primo ... unde sicut dicit quidam Doctor, scilicet Ioannis Paccham, causa illius experientie est quod forma lucis et coloris manent in visione post absentia sensibilium ... hec ille. Sed si per aliquod tempus manet visio in absentia visibilis, potest semper manere." The reference to Pecham is the earliest explicit one I have encountered in an Oxford *Sentences* commentary; despite the wide distribution of his *Perspectiva communis* as a text, references to him in this period are fewer than those to Alhazen, Bacon, or Witelo.

⁶⁴ See, e.g. *ibid.* (p. 30): "Et si instes quod cognitio definitiva abstractiva quam habet intellectus de re aliqua est perfectior quam cognitio intuitiva eiusdem per sensum, igitur eodem modo in proposito; dico quod illa cognitio abstractiva est cognitio alterius rationis et superior quam illa visio sensualis, et tunc potest esse perfectior cognitio illa abstractiva quam alia intuitiva potentie inferioris."

is that, in the natural course of events, sense perception can occur when the perceived object is not present or is non-existent—and then, if and only if there are species serving in lieu of the object.

Given these views, it is not terribly surprising that Reading reacted forcefully against Ockham's rejection of *species*, a rejection that Reading thought not only left the phenomena insufficiently explained, but also marked a retreat to a position successfully dismantled by the Subtle Doctor. Thus, while revising his *Sentences* commentary, Reading set forth a point-by-point refutation of Ockham's elimination of species.⁶⁵ At the third distinction, Reading took up the issue of whether intelligible species—i.e. those explicitly defended by Scotus against Henry of Ghent—should be posited. After outlining Scotus's arguments, Reading related Ockham's and Richard Drayton's critiques of Scotus's position, countered them, and turned finally to an extended rebuttal of Ockham's entire explication of intuitive and abstractive cognition.

At the outset, Reading attempts to demonstrate that *intellectual* intuitive cognition, as Ockham had delineated it, is redundant; that is, all the abilities Ockham posits for it are already posited of sensitive intuitive cognition. Hence,

it suffices that one see by sensitive vision alone; therefore [intellectual] intuitive [cognition] is not necessary for the sake of certainty concerning contingent propositions. But just as he [Ockham] uses the principle of Aristotle and the Subtle Doctor, 'plurality is not to be posited without necessity,' therefore, one ought not to posit such intellectual intuitive cognition. Rather, sensitive [i.e. intuitive] cognition suffices.⁶⁶

It would seem, then, that in his interpretation of intuitive cognition as sensation properly speaking, Reading became one of the opponents of Ockham's hypothesis of intellectual intuitive cognition from whom the latter defended himself by an appeal to Scotus himself.⁶⁷ Even if one granted

⁶⁵ This is the question edited by Gál in "Quaestio Ioannis de Reading de necessitate," who first recognized (p. 69) that Reading construed Drayton's and, especially, Ockham's arguments as supporting Henry of Ghent against Scotus.

⁶⁶ I *Sent.* d.3, q.3 [ed. Gál: pp. 133–34 para. 226]: "Arguo tamen contra istam opinionem ex hoc dicto sic: si cognitio complexa non possit esse intuitiva, ut *isti* dicunt, tamen habens certitudinem de aliqua complexione in quantum habet certitudinem ... sequitur quod non habet certitudinem de complexione contingenti, ut quod 'hoc corpus est album' nisi ut sic cognoscat terminos, et ex terminis sic cognitis habeat certitudinem, vel tantum per argumentum habeat certitudinem ... Sed <hoc> non est nisi quia videt terminos coniungi in re; sed ad talem certitudinem sufficit quod viderit tantum visione sensitiva; igitur intuitiva non est necessaria propter certitudinem propositionis contingentis. Sed sicut *ipse* utitur principio *Aristotelis* et *Doctoris Subtilis*, pluralitas non est ponenda sine necessitate; igitur non oportet ponere talem cognitionem intuitivam intellectivam, sed sufficit sensitiva." Cf. also p. 134 para. 231.

⁶⁷ See above, chapter V, n. 46.

intellectual intuitive cognition, Reading continues, it does not follow that, as Ockham had claimed, for its occurrence only the intellect and the object are required. Species would not be superfluous, for there is a species in sensitive intuitive cognition; although rather than a cause of vision, Reading claims, as Scotus had on occasion, the species is only a naturally prior effect of vision. One could suppose, therefore, that intellectual intuitive cognition similarly involves species.⁶⁸

If it is unclear why on these grounds Reading should deny the superfluity of species in sensitive cognition, while claiming that they are not the cause of vision, this may be because the point is unclear to Reading as well; for he backs away from this position to the one propounded in his Prologue. Thus, he claims that a natural thing naturally causes its likeness, that is, its species,⁶⁹ in the sensitive organ. This species in the visual organ is the partial cause of the phantasm in the imagination, which in turn is the partial cause of the intelligible species in the intellect—from which abstractive cognition can be generated.⁷⁰ Corporeal vision seems to present a problem that other senses do not, Reading concedes, for vision ("naturally speaking," presumably) *requires* that the object be distant from the viewer in order to cause the species, or vision, in the sense of sight. Yet each of the exterior senses, according to Reading, requires a medium intervening between it and the object for perception; in more perfect faculties, that is, the intellect and the internal senses, no medium is necessary.⁷¹ Clearly, Reading here treats the species as the partial cause of vision as well as of intellection and imagination.

Regardless of whether the intellect can know intuitively, for the production of abstractive cognitions, Reading insists, intuitive cognition does not suffice, for abstractions depend as well upon species caused by the extramental object.⁷² Indeed, intuitive cognition, whether of the intellect or the senses, is not even a partial cause of abstraction, a point Reading has made already in his Prologue.⁷³ It is, he thinks, pointless to suppose that whenever one sees an object, if the intellect is not distracted, there will be two simultaneous acts of knowing, i.e. intuitive and abstractive: nor is

⁶⁸ 1 *Sent.* d.3, q.3 [ed. Gál: pp. 141–42, para. 262; p. 118, para. 168].

⁶⁹ *Ibid.* [ed. Gál: p. 146, para. 273; p. 149, para. 284].

⁷⁰ *Ibid.* [ed. Gál: p. 141, para. 262; p. 153, para. 302].

⁷¹ *Ibid.* [ed. Gál: p. 155, para. 307].

⁷² *Ibid.* [ed. Gál: p. 145, para. 270].

⁷³ *Ibid.* [ed. Gál: pp. 136–37, para. 241]; cf. prol. q.3 (pp. 27–28): "Ad primum, quando dicitur quod omnis abstractiva presupponit necessario intuitivam, dico quod hec est falsa ... Item, videtur quod hec maior preassumpta destruit cognitionem prophetiam, quia secundum illam Deus non posset aliquam cognitionem abstractivam saltem incomplexam revelare prophetis de aliqua re nisi prius haberent intuitivam de eadem. Preterea, videtur destruere omnem cognitionem scientificam per doctrinam ..."

it helpful to assume that intuitive cognition is a partial cause only for the first abstractive cognition, all succeeding abstractive cognitions of the same object requiring simply a habit (*habitus*).⁷⁴

While Ockham is correct according to Reading in considering abstractive cognition a cause of habit, it is not the case that "everything which can be saved by [positing] species can be saved by [positing] habits." Habit alone is insufficient to cause any abstractive cognition, or to incline the intellect to "imperfect" intuitive cognition.⁷⁵ The fact that after an intuitive cognition of an object we experience the ability to know what we were unable previously to know, is not evidence that habits rather than species are necessary. Experience will not tell us how to distinguish our habits from species that have been stored by the cognitive faculties; if anything, experience should lead one to posit species rather than habits. For not only are we not inclined to think about everything we have once known intuitively, we often encounter difficulty in thinking about or recalling such things. Habits, however, are by definition what facilitate or incline us to memory; thus, such difficulties argue rather for a species. If one were therefore to eliminate species—as Ockham does—on the grounds that they cannot be inferred from what is known *per se* or from certain experience, then one should eliminate habits on the same grounds.⁷⁶

Reading's defense of species, both sensible and intelligible, and of their roles in representing the object outside the mind to the knower, does not here greatly depart from a defense of Scotus's epistemology. Since he had the Subtle Doctor's arguments as a guide, on this issue he need not strike new ground, although he nevertheless does so in his pointed criticism of the non-introspectively discernible hypotheses in Ockham's account. Perhaps because Reading construes it as a clear-cut return to Henry of Ghent's thinking from that of the Subtle Doctor, Reading leaves largely

⁷⁴ I *Sent.* d.3, q.3 [ed. Gál: p. 136, para. 241]: "... quod cognitio intuitiva tam sensus quam intellectus est causa partialis cognitionis abstractivae, istam nego; tum quia non est rationale quod ... secundum hoc quandocunque video aliquod obiectum, si non sit distractio intellectus respectu eiusdem obiecti, simul erunt duo actus intelligendi, unus intuitivus et alius abstractivus, quod videtur inconveniens ... Secundum tamen istam viam, ad cognitionem abstractivam primam alicuius obiecti requiritur pro causa cognitio intuitiva sensitiva et intellectiva, sed respectu cognitionum abstractivarum sequentium non, sed habitus, quod videtur inconveniens. Nego igitur illam maiorem."

⁷⁵ Ibid. [ed. Gál: p. 145, para. 270]: "Ad aliud, quando dicitur 'omnia quae possunt salvari per speciem, possunt salvari per habitum,' dico quod nulla cognitio abstractiva potest salvari per habitum sine specie, sed e converso bene potest ... Dico tunc quod si nihil maneat in memoria, nulla scilicet species, ad quam recurat acies animi, non possem cognoscere obiectum prius cognitum sine nova sensatione ... si species in intellectu esset corrupta, non posset naturaliter intelligere illud ..."

⁷⁶ Ibid. [ed. Gál: p. 142, para. 263].

untreated the difficulties for a theory of perception that the elimination of *sensible* species presents. Although he alludes to the "problem" (*dubium*) unique to the sense of sight resulting from the necessary distance of the object from the percipient, he nevertheless ignores Ockham's claim that the object can act at a distance immediately on the viewer. Reading's focus is instead upon what he sees as Ockham's failure to show that the existence of habits obviates species, and upon the apparent superfluity of Ockham's intellectual intuitive cognition. Reading mentions, almost in passing, that he finds the inclusion of what he understands as the awareness that an object does not *exist* within the scope of intuition, contradictory on Ockham's definition.⁷⁷

These aspects of Reading's critique were to be echoed in the Oxford discussions of cognition for at least the next decade. Nevertheless, inasmuch as Reading held—as Graystones, at least, was aware—the very view that Lutterell inaccurately charged against Ockham, namely that because intuitions of non-existents can occur, one cannot be certain of any given object's existence, one must wonder why Reading's lectures were subjected to no such controversy or attempted condemnation? The available evidence hardly warrants much speculation, but the internal inconsistencies in his commentary, even if they should be attributed to a revision never completed rather than to an inconsistent mind, may have been a factor in the relative rarity with which Reading's contemporaries took note of his views. Another factor, and one more easily established, was the greater challenge that Peter Aureol's views posed for those who insisted upon intuitive cognition as the ground of existential certainty. His thought was only beginning to be known to Oxford scholars, including Reading and Graystones, in the years just before Ockham's debates with Chatton. Where subsequent Oxford scholars were concerned, it was apparently the latter who, by linking the Venerable Inceptor's epistemology to that of their French confrère, effectively removed to the distant background all previous interpretations of the Scotist dichotomy except for Campsall's.

⁷⁷ Ibid. [ed. Gál: p. 138, para. 245]: "Contra aliud, quod dicit quod cognitio intuitiva est qua necessario cognoscimus rem esse quando est, et non esse quando non est, arguo sic: aut cognitio intuitiva potest esse rei existentis sicut non-existentis, aut non. Si non, contradictio est quod per illam cognoscatur res non esse quando non est, quia talis cognitio non est nisi quando res est, per positum. Si sic, arguo: per illud quod uniformiter et aequaliter manet sive res sit sive non sit non potest ultimate cognosci res esse quando est et non esse quando non est; tum quia uniformiter manet, et nulla est mutatio in tali actu, non potest iudicari per illam res esse vel non esse modo et prius non; tum quia arguitur quod species non est causa cognitionis intuitivae, quia aequaliter manet sive res existat sive non, et ideo per illam non potest cognosci ut existens est ..." Thus, Reading evidently construes Ockham's argument as concerning the cognition of non-existent objects.

Chapter Seven— The Early Reaction to Aureol and Ockham: The Views of Walter Chatton

At Oxford, the earliest reaction to Ockham came from a scholar clearly familiar with the perspectivist treatises of Alhazen and Pecham, and who therefore recognized the conflict between Ockham's theory of knowledge and the technical accounts of perception. In the next two decades, this conflict was never to become peripheral to the concerns of Ockham's readers, but from Walter Chatton onwards, other issues were given a prominence at least equal to those Reading had demarcated. Chatton was, after all, more likely than Reading to shape the way future generations would understand Ockham's views, publicly expounded only after Reading had formulated his own.¹ The best Reading could do was to weave Ockham's views, where they seemed noteworthy, into a pattern of issues already knit; but Chatton was a year or two Ockham's junior, so more often than not, the older of the two bachelors established the issues for the other. The intellectual relation between these two Franciscans was, however, reciprocal, for Walter Chatton, as the first to consider Ockham's theory of knowledge in conjunction with Peter Aureol's, not only affected their students' appreciation of both, but helped eventually to persuade the Venerable Inceptor himself to change his views on the nature of concepts.²

Walter Chatton's preparation for lecturing on the *Sentences* was probably just short of complete when he began to encounter Ockham's views, evidently while residing at the Franciscan convent in Oxford during the years of the latter's own bachelor reading. In any event, Chatton was well-acquainted with his colleague's stance when, from 1321–24, he in turn lectured on Lombard at the London convent. There both had teaching duties that involved them in running debates. These are recorded, argu-

¹ Important studies of Chatton's thought include: V. Zoubov, "Walter Catton, Gerard d'Odon et Nicolas Bonet," *Physis. Rivista di storia della scienza* 1 (1959), 261–78; Gelber, "Logic and the Trinity," pp. 185–205, 210–16, 229–32; L. Cova, "Francesco de Meyronnes e Walter Catton nella controversia scolastica sulla 'notitia intuitiva de re non existente,'" *Medioevo* 2 (1976), 227–51; Christian Knudsen, *Walter Chattons Kritik an Wilhelm von Ockhams Wissenschaftslehre* (Bonn: 1976); and A. Maurer, "Ockham's Razor and Chatton's Anti-Razor," *MedSt.* 46 (1984), 463–75. See also n. 3, below.

² See above, chapter V, at nn. 145–59 and below, at nn. 78–91; cf. also S. Brown, "Chatton's *Lectura* and Ockham's *Quaestiones*."

ment by argument, in the written œuvre they produced during 1322–24: Ockham's *Summa logicae*, *Scriptum*, and *Quodlibetal* and *Physics* questions; and the partial revision of Chatton's *Sentences* lectures known as the *Lectura*.³ Although Chatton presumably intended that the revision supplant the *reportatio*, as the completed portions eventually did, both had an audience. It is not clear whether Chatton's *reportatio* incorporates lectures from Oxford, but by mid-decade (if not earlier) it was known there, so that when Chatton returned to serve as regent master for the Oxford Franciscans in 1329–30, he had already been an influential controversialist for several years.⁴

³ S. Brown, "Chatton's *Lectura* and Ockham's *Quaestiones*," establishes the composition of Chatton's works with the greatest precision to date; on his curriculum vitae, see also: L. Baudry, "Gauthier de Chatton et son Commentaire des Sentences," *AHDLMA* 14 (1943), 337–69; and Courtenay, *Wodeham*, pp. 66–74. Several questions from Chatton's *Sentences* commentary have been edited. Five of the seven questions of the prologue, extant only in its revised "ordinatio" form (cited as *Lectura*) are available: M.E. Reina, "La prima questione del Prologo del 'Comento alle Sentenze' di Walter Catton," *RCSF* 25 (1970), 48–74, 290–314; J. O'Callaghan, "The Second Question of the Prologue to Walter Catton's Commentary on the Sentences. On Intuitive and Abstractive Knowledge," in J.R. O'Donnell ed., *Nine Medieval Thinkers* (Toronto: 1955), pp. 233–69; Luciano Cova, ed., *Walter Catton. Comento alle Sentenze: Prologo, questione terza* (Rome: 1973); L. Cova, "La quarta questione del Prologo del 'Comento alle Sentenze' di Walter Catton," *RCSF* 30 (1975), 303–30; and q.5 in Christian Knudsen, "Chatton contra Ockham über Gegenstand und Einheit von Wissenschaft und Theologie," *CIMAGL* 50 (1985), 3–112. Also edited: I *Lectura* d.3, q.2, a.1–3 in Noel Fitzpatrick, "Walter Chatton on the Univocity of Being: A Reaction to Peter Aureoli and William Ockham," *FrSt* 31 (1971), 88–177; I *Rep.* d.3, q.2 in G. Gál, "Chatton et Ockham controversia;" I *Rep.* d. 22–23 in C. Knudsen, "Ein Ockhamkritischer Text zu Signification und Supposition und zum Verhältnis von erster und zweiter Intention," *CIMAGL* 14 (1975), 1–26; I *Rep.* and *Lectura* d.17, q.1 in G. Eitzkorn, "Walter Chatton and the Controversy on the Absolute Necessity of Grace," *FrSt* 37 (1977), 32–65; II *Rep.* d.4, qq.1–4 in K. Tachau, "Walter Chatton on Sensible and Intelligible Species," *RCSF* 40 (1985), 711–48; and a question on the continuum in J.E. Murdoch and E. Synan, "Two Questions on the Continuum: Walter Chatton (?), O.F.M. and Adam Wodeham, O.F.M.," *FrSt* 26 (1966), 212–88.

⁴ In a text discovered by Gelber, "Logic and the Trinity," p. 610, n. 105–06, Adam Wodeham states: "Ad presens, hic primo videndum est an regula Anselmi de hoc sufficiat, communiter allegata: 'omnia sunt unum ubi non obviat relationis oppositio' . . . Hec ergo ars supponenda est sicut vera et bona pro defectum sciendo vel non defectum, et hec erat ars Campsallae quam volebat impedire Chatton" (italics mine). As the names in the italicized phrase are uninflected, it is difficult to interpret Wodeham's remark. If, with Gelber (p. 198), one takes Campsall to be the subject and Chatton the object, then Campsall has to have known Chatton's arguments, and developed the cited rule (ars) in the course of refuting Chatton. One result is to render problematic the calculation of Chatton's lectures at Oxford as bachelor of the *Sentences*; cf. Courtenay, *Wodeham*, p. 69. Because, however, such a construction should have an instrumental ablative (qua) in lieu of the accusative (quam), I read this passage instead as "this was the rule of Campsall's which Chatton wanted to block [with these arguments]," which removes the difficulty of accounting for a time when Campsall could have learned of Chatton's arguments.

The Nature of Intuition and Abstraction

In the second question of the Prologue to his *Lectura*, Chatton examines the nature and relation of intuitive and abstractive cognition.⁵ These, he argues, are really distinct, able to occur in both the senses and the intellect.⁶ The point of departure, therefore, is Campsall's conviction that without any intrinsic change, any given cognition is intuitive in the presence of the object, and in its absence abstractive.⁷ Chatton objects first of all to resolving whether there is a distinction between acts or things by resort to the connotation of the terms designating them.⁸ Several of his arguments to this effect seem beside the point, and suggest that Chatton interprets the consequences of Campsall's view in the light of a second (and to date anonymous) opinion identifying intuition and abstraction not only with each other, but also with the cognizing soul itself.⁹ Chatton does point out, however, that on Campsall's understanding, one-and-the-same act is the primary significate of the two terms, "intuition" and "abstraction." If, however, the former signifies an act sufficient to cause the possessor's assent to the claim that an object is present, and the latter signifies the same act as sufficient to cause assent to the claim that the object is absent, then proponents of this position must explain how the same sufficient cause produces variable effects.¹⁰ Moreover, Chatton

⁵ All references to the second question of the *Lectura's* Prologue are to the edition of J. O'Callaghan (n. 1, above).

⁶ *Lectura* prol., q.2 [O'Callaghan: pp. 236–40, esp. p. 240 lin. 37–38]: "Secundo dico quod notitia intuitiva et abstractiva distinguuntur specie quia, si essent actus organici, requirerent organa alterius speciei sicut visio et imaginatio;" see also, nn. 16–17 below.

⁷ For Chatton's description of Campsall's view, see above, chapter VI, n. 16.

⁸ *Lectura* prol., q.2 [O'Callaghan: p. 236]: "Contra istam opinionem. Primo quia ista ars respondendi sic universaliter non placet mihi. Primo quia aequae esset ponendum quod quando albedo est praesens, tunc oculus est visio albedinis, et quando non est praesens non est ejus visio, eo quod visio significaret oculum connotando objectum esse praesens. Secundo quia secundum illam artem respondendi esset dicendum quod anima esset sua beatitudo quando Deus vult eam esse beatam et non esset beatitudo quando Deus non vult eam esse beatam, eo quod beatitudo significat animam connotando Deum velle ipsam esse beatam. Tertio quia secundum illam artem non esset ponere fidem, spem, et caritatem distinctas ab anima ..."

⁹ *Ibid.* [O'Callaghan: p. 238]: "Alia est opinio aliorum quod notitia intuitiva et abstractiva sint idem, quia sunt ipsamet anima, eo quod in anima non recipitur aliquod accidens." This view may be a source for Crathorn, for whom see below, chapter IX, nn. 49 ff.

¹⁰ *Ibid.* [O'Callaghan: p. 238]: "Secundo arguo sic: agens uniformiter manens et aequae praesens passo uniformiter disposito natum est causare uniformem effectum. Ergo si cognitio illa, quae est abstractiva, cum res est absens, uniformiter maneat quando res est praesens sicut prius et passum uniformiter dispositum causabit uniformem effectum. Sed prius causabit assensum quo assentitur se non videre rem, saltem non causabit assensum quo assentitur rem objectam esse praesentem. Ergo similiter se habebit

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insists, intuitive and abstractive cognitions are organic acts, and as such require distinct organs, "as is clear of ocular vision and the act of imagining." Thus intuition and abstraction are no more numerically indistinct than the sensations of diverse organs.¹¹

For Chatton, then, these objections expose phenomena for which an account positing only two elements, the cognitive soul and the cognized object, is insufficient. Accepting what is purportedly Campsall's formulation of the principle of economy, that when a proposition can be verified of things by positing two entities, then one need not posit a third, Chatton responds reasonably enough that nevertheless, one must do so when two are insufficient for the purpose. Moreover, he continues,

Such necessity is not required for positing more entities that a contradiction would evidently follow if they were not posited; for the requisite necessity that more may reasonably be posited, is that it suffices that everything may more conveniently be saved through more rather than fewer; otherwise there would be no necessity for positing that heat is distinct from fire ...¹²

In so saying, Chatton, who freely employs the principle of economy against mediators he believes unwarranted, enunciates a reminder that it is improperly invoked in support of hypotheses insufficient to account for the phenomena they purport to cover.¹³ For most of Chatton's audience,

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ille actus quando res est praesens, et sic non est intuitiva."

¹¹ Ibid.: "Quarto arguo sic: cognitio intuitiva et abstractiva se habent sicut actus organici requirentes organa alterius rationis. Patet de visione oculi et actu imaginandi. Ergo sunt actus et distincti numero et distincti specie, quia aliter non habemus viam probandi sensationes diversorum sensuum distingui numero et specie ex subjectis vel organis. Non enim plus sunt modo idem quam actus diversorum organorum."

¹² Ibid. [O'Callaghan: p. 240]: "Item, ibi est necessitas sufficiens ponendi tres res ubi propositio verificatur pro rebus et duae res qualitercumque praesentes sine alia re non sufficiunt ad ejus veritatem, sicut patebit infra, d.3, q.1, a.1. Sed ita est in proposito. Haec propositio 'anima videt lapidem' est propositio verificabilis pro re. Sed ad ejus veritatem non sufficiunt anima et lapis vel cognitio abstractiva cum eis, quia non est contradictio quod ista simul sint, et tamen quod non videat lapidem. Item, non requiritur tanta necessitas plurificandi res quod evidens sit contradictionem sequi, si non plurificentur. Necessitas enim requisita ad hoc quod rationabiliter ponantur plures, sufficit quod convenientius omnia salvantur per plures quam per pauciores; aliter enim nulla necessitas esset ponendi calorem distingui ab igne, quia omnia argumenta in oppositum salvarentur ponendo quod forma substantialis ignis esset calor. Quia tamen illa, quae experimur, melius salvantur sic quam aliter, ideo etc. Unde ubi tanta necessitas occurrit ponendi plura quanta ponendi ignem distingui a suo calore, ibi est necessitas rationalis ponendi plura et distinctionem inter ea. Sed ita est in proposito." Chatton's cross-reference is to I, d.3, q.1 (Florence B.N. conv. sopp. C.V.357, fol. 82ra) where he repeats this limitation on the principle of economy. Chatton thus seems to have adopted Campsall's interpretation of the principle before Ockham, and may have persuaded Ockham of its greater precision, since the latter only began to use this formulation in his fourth *Quodlibetal* debate, which also witnesses his decisive abandonment of *ficta*. See above, chapter V, nn. 157–59; chapter VI, n. 15.

¹³ In "Chatton's Anti-Razor," Maurer credits Chatton (and, following him, the

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his ability to discover such limitations in accounts he opposed was more striking and useful than his own positive views, which initially seem relatively derivative.¹⁴

Thus, Chatton's contemporaries would surely have recognized that, in insisting upon the distinction of the two modes of cognition, he joined many of his predecessors in drawing upon Scotus's *Quodlibetal* analogy.¹⁵ Indeed, Chatton's entire exposition of the distinction between intuition and abstraction closely paraphrased the Subtle Doctor's, beginning with the statement that in the senses, both modes are organic acts, and "are nothing other than interior and exterior sensation, or rather exterior sensation and the act of imagining," in the order of occurrence.¹⁶ Insofar as intellectual cognition is concerned, Chatton continues:

The difference between [intuitive and abstractive cognition] is not grasped by us better than through [analogy with] exterior sensation and imagination. I say, therefore, that there are such acts by which the soul relates to a thing as imagination and exterior sensation do in sensing a thing, such that intellectual intuitive [cognition] is that act by which the soul knows a thing to be just as it senses the thing through the exterior sense; and abstractive intellection is that [act] through which the soul proportionally

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author of the *Logica contra Ockham*) with the development of a methodological principle (p. 464), that given a "propositio affirmativa, quae quando verificatur, solum verificatur pro rebus: si tres res non sufficiunt ad verificandum eam, oportet ponere quartum, et sic deinceps." This rule, too, may derive from Campsall's own formulation of the methodological problem posed by sufficiency. At any rate, the opposition that Maurer posits between Chatton and Ockham on this issue is overstated. In the first place, they agree that hypotheses should not exceed those required to account for the relevant phenomena, as Chatton's use of the principle of economy shows (see, e.g., n. 26 below). They also agree on the converse claim: that the hypotheses must be sufficient (rather than too few) to account for the phenomena. Their disagreement is, rather, concerning whether the latter requirement has been fulfilled in given instances—as, for example, whether *in fact* the relevant data can be explained without supposing that species distinct from habits exist, or without distinguishing concepts from intellectual acts.

¹⁴ Thus, for example Rodington notes, I *Sent.* prol., q.1 [ed. Tweedale: p. 295] of Chatton: "Sed licet conclusio sit vera, argumenta tamen non videntur concludere." Similarly, Wodeham repeatedly notes that Chatton is wordy and not invariably to the point; cf. below, chapter X, n. 35, and *Lect. sec.* prol. q.6 (Gonville & Caius College 281/674, fol. 124ra): "et ideo si ad illud intellectum <Chatton> improbat eum <Ockham> in equivocum et frustra procedit sicut et frequenter facit." (For editions and manuscripts of Rodington and Wodeham, see below, chapters VIII and X.)

¹⁵ See above, chapter III, n. 72.

¹⁶ *Lectura* prol. q.2 [O'Callaghan: p. 248, lin. 17–21]: "Ex dictis patet quid dicendum est de differentia inter intuitivam et abstractivam, quia aut quaeris de intuitiva et abstractiva quae sunt cognitiones sensitivae et actus organici, aut de intuitiva et abstractiva intellectionis. Primo modo intelligendo, dico quod non sunt nisi sensatio interior et exterior, vel potius sensatio exterior et actus imaginandi." Cf. also above, n. 11; also II *Rep.* d.4, q.2 [ed. Tachau: p. 735 lin. 31–38]; q.4 [ed. Tachau: p. 742 lin. 17–p. 743 lin. 33].

knows the thing to be just as it senses the thing through the act of imagining.¹⁷

The importance of intuitive cognition, then, is that by means of it one knows an object to exist and be present when it is—although *not*, as Ockham had argued, that it does not exist or is absent,¹⁸ a discussion Chatton undertakes only after a lengthy consideration of Aureol's account of cognition.

Chatton introduces Aureol's view as the argument for the *natural* occurrence of intuitive cognition without the seen object's presence,¹⁹ and describes his position as the opinion that:

Abstractive cognition makes the thing appear absent, but intuitive [cognition] constitutes the thing in some apparent objective being. Which they prove thus: first, because if someone is in the water in which he moves, it seems to him that the trees on the shore move. Second, because otherwise a stick would not appear broken in the water. Third, a circle on fire would not appear when a flaming stick is rapidly moved.

The second conclusion of this opinion is that *de facto* there are intuitive acts that are naturally caused, without the presence of the seen object.²⁰

The five supporting experiences with which Chatton completes his summary of the second conclusion, are those of Aureol's prooemium to

¹⁷ *Lectura* prol. q.2 [O'Callaghan: p. 248, lin. 21–28]: "Secundo modo intelligendo de intellectivis cognitionibus, dico quod illarum differentia non innotescit nobis melius quam per sensationem exteriorem et imaginationem. Ideo dico quod sunt tales actus per quos anima sic se habet ad rem per imaginationem et sensationem exteriorem in sentiendo rem, ita quod intuitiva intellectiva est talis actus per quem anima sic intelligit rem sicut per sensationem exteriorem sentit rem, et intellectio abstractiva est illa per quam anima sic proportionaliter intelligit rem sicut per actum imaginandi sentit rem. Haec est via per quam nobis innotescit differentia istorum actuum."

¹⁸ *Ibid.* [O'Callaghan: p. 246]: "Contra istam opinionem probo quod notitia intuitiva perfecta in creaturis, si a Deo conservetur, non representet rem non esse;" see below, at nn. 50–56.

¹⁹ *Ibid.* [O'Callaghan: p. 241]: "Secundus articulus est utrum intuitiva potest naturaliter sine praesentia rei visae, et improbat Petrum Aureolum."

²⁰ *Ibid.*: "Haec est opinio una quod notitia abstractiva facit rem apparere absentem, sed intuitiva constituit rem in quodam esse obiectivo apparente. Quod probant primo, quia si quis existat in aqua in qua movetur, sibi videtur quod arbores in ripa moveantur; secundo, quia aliter non appareret baculus esse fractus in aqua; tertio, quia aliter non appareret circulus in igne cum virga ignita velociter movetur. Secunda conclusio istius opinionis est quod actus intuitivus est de facto naturaliter et causatur naturaliter sine praesentia rei visae." Clearly, despite the oblique "they," Chatton addresses the views of a single scholar, whom he here quotes closely enough to identify. Baudry, "Gauthier de Chatton," pp. 343–45, includes a catalogue of Chatton's references to "aliqui" or "alii" when he quotes—frequently verbatim—from one. This seems to have been a scholarly courtesy and was employed by most theologians examined in this study; it is worth noting, however, inasmuch as it is important not to take such citations as evidence as to whether Aureol's positions had acquired adherents.

his *Scriptum*.²¹ Chatton's paraphrases thus reveal that he knew the version of Aureol's *Sentences* commentary available no earlier than the summer of 1317 and, unlike Ockham, was familiar enough with it to treat the discussion from the third distinction of book I as the underlying basis for that of the prooemium.²² In other words, Chatton took Aureol's case for the "apparent being" as the crucial premise in support, as Chatton stated it, of the *de facto* occurrence of *naturally* caused intuitive cognitions of non-existent or non-present objects. As Chatton set up the arguments, the strategy for opposing Aureol's theory was obvious: refute the premise, and find an alternative explanation for the phenomena adduced as experiential evidence in support of each conclusion. Chatton's reunion of Aureol's discussions, together with the strategy offered against them, was to prove historically significant, not least for influencing the way in which other scholastics in England—beginning with Ockham—would read Aureol and understand his notion of "apparent being."²³

In taking up the rebuttal of the first conclusion, Chatton denies that by means of the act of intuitive cognition a (visible) thing is constituted in some being distinct from the act of seeing and the thing seen.²⁴ In the first place, he claims, such an entity (*esse*) would be superfluous, for given the presence of an object, and the "substance of the act of seeing" in the sensitive faculty, the object is already seen; hence, no further entity (*ens*) is required.²⁵ This argument is to the point only if Aureol's apparent being is conceived of as a mediating *cause* of vision; and subsequent argu-

²¹ Ibid. [O'Callaghan: p. 241]: "Secunda conclusio istius opinionis ... Primo, quia visio solis et cujuscumque visibili intensi remanet in oculo, objecto recedente. Ergo etcetera. Secundo, quia in somniis aliquando homo iudicat se videre vel audire; ergo visio vel auditio est tunc in sensu exteriori. Tertio, quia timenti apparet quod sonos audiat et terribilia videat. Quarto, quia ludificatus videt ea quae non sunt sicut canes et castra. Quinto, quia oculus mollis videt rubeum etiam ipso recedente, quia aliter virtute illius visionis non apparerent alia visibilia esse rubea."

²² O'Callaghan drew attention in his apparatus (p. 241) only to Aureol's prooemium, and did not consult the partial copy of Chatton's question in Cambridge Univ. Library Ff.iii.26 (fol. 122va–123vb, 130va). Its marginal notations guide the reader (fol. 122vb) to "Aureol, q.2 prologi" for the "first conclusion," i.e. "quod ... intuitiva constituit rem in quodam esse objectivo apparente;" and (fol. 123rb) to "dist. 3, q.2" for the second (as in n. 21 above). O'Callaghan's note to Aureol's prooemium as Chatton's source for this discussion is presumably the basis for Cova's erroneous statement to the same effect in his valuable study, "Meyronnes e Catton," p. 236. For Aureol, see above, chapter IV, nn. 19–20, 80–81; for Ockham, above, chapter V, nn. 96–99.

²³ See below, chapter VIII, at nn. 65–68 and especially chapter X.

²⁴ *Lectura* prol. q.2 [O'Callaghan: p. 241]: "Contra primam conclusionem istius opinionis, quod per actum intuitivum non ponatur res in quodam esse distincto ab actu videndi et ipsa re visa."

²⁵ Ibid.: "Probo, quia posita albedine praesente et posita substantia actus videndi in potentia, omni alio ente distincto circumscripto, adhuc ipsa albedo esset visa. Ergo superfluit ponere illud ens distinctum."

ments confirm the suspicion that Chatton so understands it. So, he continues, if there were such an entity, it would impede vision because this apparent being rather than the object would be known first. This is not a minor difficulty in Chatton's view. Extrapolating to the knowledge that the blessed obtain in the afterlife, he concludes that "consequently some such 'created entity' (*ens fictum*) rather than God would be the Beatific Object."²⁶

Such a conclusion had already been presented by Alnwick against the logical possibility of an intuition of a non-existent.²⁷ Although it alludes to the theological constraints Chatton places on an account of cognition, the significance of his objection lies, rather, in his identification of Aureol's "apparent, objective being" with mental entities created, that is *ficta*, by the cognitive faculties. While this is not at all mysterious in light of Aureol's own classification of "intentions" as *ficticia*,²⁸ Chatton's choice of synonyms reveals that it is less the ontological status or nature of Aureol's postulated entity than its origin that concerns him. His remaining "proofs" constitute a serial restatement of his antipathy towards such mental entities. The heart of his position rests in an argument Aureol had also employed: that the inference, "Homer exists in thought (*est in opinione*), therefore Homer exists (*est*)" is invalid, because "to exist (*denominatio*) of that which does not exist except in thought, and hence what is designated is no third entity, i.e. not a *fictum*."²⁹ Moreover, extending such reasoning to the

²⁶ Ibid.: "Secundo, quia si ponatur illud ens distinctum, ipsum impedit visionem albedinis. Quia illud ens distinctum, si ipsum nec est illa visio nec est ipsa albedo nec ambo simul, ergo est tertium ab eis. Si ergo illud ens distinctum primo videatur, ergo albedo non videtur, sed ens distinctum. Quod est falsum. Et per consequens Deus non erit obiectum beatificum, sed quoddam tale ens fictum ... Sexto, eadem ratione aliud ens fictum concomitaretur volitionem et per consequens nullus nec in via nec in patria frueret Deo propter se, sed quodam ente ficto. Unde ad istam viam videretur sequi quod nulla res extra cognoscitur vel videtur, sed quoddam ens fictum significans rem extra ... Videtur ergo ad istud dicendum secundum artem positam supra, quod ubi propositio verificatur pro entibus, si duo sufficiunt, non oportet tertium ponere. Sed ista propositio, 'Sors videt albedinem,' verificatur pro entibus, et ad hoc quod ipsa sit vera sufficiunt haec: entitas istius visionis et entitas illius albedinis cum est praesens, quia istis positus ... omni alio ente ab eis circumscripto, adhuc necessario sequeretur quod illa propositio sit vera, et per consequens non est tale ens fictum ibi."

²⁷ So, at least, Graystones indicated (Westminster 13, fol. 4ra): "(*margin.* Alnwick) dicunt quod neque potentia nature nec Dei potest cognitio intuitiva esse nisi obiecto presente. Et potest pro eis sic argui ... Praeterea, si posset esse visio sine visibili posset aliquis esse beatus et tamen non habere Deum pro obiecto presentem; sed consequens videtur falsum. Consequentia patet, quia habens visionem Dei est beatus ..."

²⁸ See above, chapter IV, n. 35.

²⁹ *Lectura* prol. q.2 [O'Callaghan: p. 241]: "Tertio, quia non est imaginabile quoniam illud ens fictum sit substantia vel actus, et per consequens est alicubi subjective ... Quinto, quia non sequitur: Homerus est in opinione; ergo Homerus est. Ergo esse in

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opinion that "the thing (*res*) has some [objective] being in the soul," Chatton concedes its truth only insofar as extrinsic designation is concerned.³⁰

Aureol would doubtless have concurred in considering the inference invalid, having mustered the argument against Radulphus Brito in the first place, to justify positing the existence of the intentional, objective entity. Thus, it is not obvious how Chatton thought the argument supported his attack upon the hypothesis of a cognitive entity, but perhaps he had in mind a critique along Radulphus's lines. Opposed like Chatton to distinguishing intellectual acts from concepts, Radulphus had insisted that for something to be known (*esse cognitum*) was merely a designation of the relation between an object and a cognitive act, not a name for a resulting mental entity. Radulphus's views do not appear to have been directly known to Oxford, and Chatton may have pieced them together from Aureol's iterated refutations.³¹ If so, this might explain Chatton's strategy at this juncture.

When he has disposed of the apparent being, Chatton takes up the second conclusion. He states his concern baldly at the outset, thereby making explicit, evidently for the first time in an English *Sentences* commentary, the difficulty implicit in Aureol's theory of intuition *if* one assumes that Aureol posits it as the source of existential certitude. Like both Scotus and his colleague Ockham, Chatton himself holds intuition to be precisely that, and does not seem to notice that Aureol had not; hence Chatton objects that if intuitive cognition could be caused naturally when the object is absent, or even if such a cognition could be conserved for some time (*diu*) in its object's absence, then "all human certainty would perish." After all, he proceeds, we are most capable of certitude

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opinionem non est nisi denominatio extrinseca eo quod non est nisi opinionem esse, et per consequens non est tale ens tertium;" Chatton turns again to this example in *I Lectura* d.3, q.2 [ed. FitzPatrick: p. 93].

³⁰ Ibid. [O'Callaghan: p. 242]: "Item, minus videtur inconveniens concedere quod ipsemet actus videndi sit esse objectivum rei extra et per consequens quod praedecessores ponentes talia entia objectiva hoc intellexerunt, quam quod praeter actum et objectum, ens objectivum sit quoddam ens tertium distinctum ab utroque et ab ambobus simul ... Contra auctores dicentes quod res habent esse in anima, dico quod verum est per extrinsecam denominationem ... Ita in proposito ipsa cognitio potest dici aliquid esse objecti per extrinsecam denominationem quia est qua posita, verum est dicere quod res est cognita, et hoc non est nisi cognitionem illam esse in anima, virtute cuius iudicat qualis est res vel iudicare potest.&rdquo"

³¹ Cf. Aureol, chapter IV above, n. 50–51; see also his *Scriptum* d.3, s. 13 [II: p. 713]. Aureol's debate with Radulphus is discussed in Pinborg, "Zum Begriff." It is unlikely that Chatton knew Brito's views directly, inasmuch as I have not yet found any explicit reference to Brito in Oxford discussions of first and second intentions. This is not surprising, since his views were elaborated in teaching Arts at Paris, and treatises from that Faculty evidently were not conveyed to Oxford as regularly as were important *Sentences* commentaries.

concerning sensibles, because of the fact that we experience our own sensations. By means of such sensations, sensibles appear present to us and memory is generated; from memory, in turn, is generated experience. As memory and experience themselves derive from sensation, there is no other means of acquiring any certainty that [external] reality is as it is signified to be by any given proposition, other than to be able to argue with certainty from the sensation by means of which an object appears present to the percipient, to the fact that the object is present. Now if such sensations could occur or even be conserved for some [significant] time (*diu*) when the apparently present object is in fact absent, then, Chatton concludes, this route to certainty is not after all reliable: one could not argue infallibly from the fact that a thing appears present to the fact that it is present.³² And as there is no other means of confirming or discounting the evidence of the senses other than through a process ultimately dependent upon sensations, invincible error could never be ruled out.³³

Given the stakes involved, Chatton's attention here and elsewhere in his *Sentences* commentary to disproving what he considers the inextricable hypotheses of an "objective being" and the intuitive cognition of non-existents becomes clearer.³⁴ His refutation here, however, is less successful than his delineation of the problem. After *pro forma* allegations that the acceptance of naturally induced intuitive cognitions of absent objects would require accepting the restriction of divine omnipotence—arguments noteworthy principally for Chatton's interchanging of non-pres-

³² *Lectura* prol. q.2 [O'Callaghan: p. 242]: "Secundo, contra secundam conclusionem opinionis, probo quod visio rei non potest naturaliter causari re absente, nec etiam naturaliter diu conservari ipsa recedente. Probo primo, quia aliter periret omnis nostra certitudo, quia maxima certitudo nostra de sensibilibus convenit nobis per hoc quod experimur nostras sensationes per quas sensibilia nobis apparent praesentia. Si ergo sensatio causatur naturaliter re absente, et etiam diu conservetur sine ea, ergo illa via non est certa. Confirmo quia ex <<sensationibus>> generatur memoria et ex memoriis experientia. Aut ergo ex sensatione per quam apparet nobis re praesens convenit certitudinaliter arguere ipsam esse praesentem, et habetur propositum; aut non, ergo nulla est ars acquirendi certitudinem quod sic sit in re sicut significatur per propositum." (Punctuation mine). See also n. 58 below.

³³ *Ibid.* [O'Callaghan: p. 243 lin. 1–4]: "... Nam aliter per causas naturales causaretur in nobis error invincibilis per naturam, quia per naturam causatur actus per quem apparet nobis res esse praesens quae non est praesens, et virtute illius actus mens assentit rei significatae per istam: 'a est praesens.' <<Ergo>> mens errat per causationem causarum naturalium et est error invincibilis, quia nemo potest vinci per sensationem aliquam eo quod idem est argumentum de illa sensatione; nec per intellectum planum est." (Punctuation mine).

³⁴ Among the places Chatton treats the hypothesis of the esse objectivum are *I Rep.* d.3, q.1 (Florence, Bibl. naz. conv. soppr. C.5.357, fols. 84va–86va); d.3, q.2 [ed. Gál, "Controversia"]; *Lectura*, d.3, q.1 [ed. Fitzpatrick]; *I Rep.* d.22, a.1 [ed. Knudsen, "Ockhamkritischer Text"].

ence and non-existence³⁵—he accepts for the sake of the analysis that there could be such intuitive cognitions. What precisely would be the natural cause? The statement of the case—i.e. that the object is absent—eliminates the possibility that the intuitive vision (*visio intuitiva*) could be caused by the thing of which it is a vision. Excluding habit as a cause on the grounds that none precedes the first sensation, and having to his mind refuted the claim that there is an apparent being, Chatton considers the possibility that the object's species could produce such a vision. A species, however, "is innately neither caused nor long (*diu*) conserved without the presence of that thing of which it is a species—which is clear in the cases of species in a mirror, light in the medium, and sound in the air."³⁶ Chatton further maintains that a species would not only cause itself to be seen, but would also produce the sight of a present thing (*res*) that, moreover, would appear to be in some place where neither it nor its species is, an allegation that might well strike his reader as incompletely explained.³⁷

Lest these arguments be misconstrued as a rejection of sensible species multiplied through the medium, Chatton immediately affirms their existence as well as their inherent ability to remain for a brief time "on

³⁵ *Lectura* prol. q.2 [O'Callaghan: p. 242–43]: "Tertio, sequitur quod Deus non possit certificare nos evidenter quod res existat, quia aut per intuitivam aut per abstractivam incomplexam aut per abstractivam complexam. Non primam, quia illa non requirit et etiam naturaliter rem esse praesentem per te, licet per actum appareat esse praesens. Nec secundo, quia notitia incomplexa abstractiva potest aequae esse, saltem non minus, absentis sicut praesentis; ergo non plus certificatur rem esse praesentem quando est praesens quam quando est absens. Nec per abstractivam complexam, quia si intuitiva est naturaliter absentis, ergo multo fortius ipsa propositio in mente potest esse quando res non est praesens, quia experimur quod eadem propositio cum componatur ex cognitionibus abstractivis potest esse aliquando vera, aliquando falsa. Quarto sic: omnes notitiae intuitivae creatae aequae naturaliter dependent ab objectis suis, quia sunt actus ejusdem ordinis. Sed aliqua est possibilis quae naturaliter requirit objectum existere, quia non est negandum a potentia Dei de quo non probatur ipsum includere contradictionem. Sed hoc non potest hic probari. Ergo et cetera. Quinto, quia aut intelligitur per abstractivam quod actus ille naturaliter aequae indifferenter est natus existere sive res sit sive non sit, ita quod ideo dicatur existere abstractivae, quia in essendo indifferenter est ... Aut per abstractivam intelligitur talis cognitio per quam non apparent res esse praesentes ..."

³⁶ *Ibid.* [O'Callaghan: p. 243]: "Sexto arguitur sic. Ista visio rei absentis a quo causaretur? Aut a re cujus est, et habetur propositum; aut ab aliquo habitu, quod non, quia nullus praecedat primam sensationem; aut ab aliqua specie prima—hoc falsum est. Probo primo, quia nec illa species nata est naturaliter causari nec diu conservari sine praesentia illius cujus est, sicut patet de specie speculi, lumine medii, sono in aere." (Punctuation mine.)

³⁷ *Ibid.*: "Secundo, quia species illa, si sit, non solum causaret visionem sui, sed causaret visionem rei praesentis, et haberetur propositum. Ergo oportet quod causet visionem per quam appareat res esse in tali situ in quo non est talis species nec ipsa res cujus est species; quod non apparent verum. Sit enim nulla illius speciei in aere; esset signum falsum et error praecederet cognitionem."

account of their intensity" when their generating object has receded from the field of vision.³⁸ What, then, of the threat to certitude? The consequences attributed to Aureol's claim that vision would be conserved naturally in the absence of its object, would seem to follow as inevitably from Chatton's own admission, and by the time of the Prologue's composition, this objection had indeed already been raised against him.³⁹ A denial would require ingenuity, and Chatton does not attempt one. Instead, he grants that,

For that time during which vision can remain when the visible object has receded, certainty is not had. Nevertheless, since such vision does not endure for long after the removal of the visible object, after [the vision ceases] one can be certain whether the object really exists, since it will be obvious to [the viewer] whether the vision lasts awhile.⁴⁰

In response to further objections, Chatton also admits that as God is able to cause a vision without an object, God could presumably cause a person in this life (*viator*) to judge reality, on the strength of such a vision, to be other than it is. Yet the fact of God's supernatural powers, Chatton insists, does not limit certainty in the realm of *naturally* caused knowledge, as this would not introduce the possibility of naturally caused invincible error.⁴¹ Finally, although a species is innately capable of enduring briefly

³⁸ Ibid: "Non videtur dicendum quoad istud quod, licet aliquando visio prius causata nata sit manere per aliquod tempus re visa recedente, eo quod species intensa per quam immediate visio causatur remanet per aliquod tempus re ipsa recedente propter <<intentionem>> speciei, tamen numquam nata est visio aliqua naturaliter causari vel diu conservari sine praesentia rei visae, sicut probatum est, quia nec ipsa species causatur naturaliter nec diu remanet sine illo cuius est species, sicut patet de lumine in medio, de sono in aere, de specie speculi; aliter, sicut probatum est, non haberemus certitudinem de <<sensibilibus>> causatam per causas naturales."

³⁹ Ibid.: "Sed contra hoc dubitatur. Primo, quia idem argumentum est contra te <<i.e. Chatton>> si visio manet per aliquod tempus in absentia rei. Ergo, saltem illo tempore non haberetur certitudo per causas naturales. Secundo, quia aequè probas quod nec Deus potest causare visionem sine praesentia rei. Tertio, quia tunc error esset ante cognitionem, eo quod species ipsa repraesentaret rem esse in illo situ in quo prius, et hoc si species conservet visionem sicut ponis." (Punctuation mine.) These arguments seem to be Wodeham's; see below, chapter X nn. 54–55.

⁴⁰ Ibid.: "Ad primum. Concedo quod pro illo tempore pro quo visio potest remanere recedente visibili non habetur certitudo; tamen quia illa visio non durat diu post recessum visibilis, ideo potest quis postea habere certitudinem utrum ita sit in re, quia per hoc sibi constabit, si visio illa diu duret." Note also Chatton's argument from the perception of sound: "auditio soni remanet sono corrupto quia est auditio soni distantis; aliter non judicaret se audire sonum ita distantem. Et ille sonus multiplicatur successive; ergo non est, quando auditio est, et tamen non causatur naturaliter nisi ab illo sono causaretur; non tamen causatione quae requirat causam et causatum simul existere, sed tali qua sufficit causatio succedere ex praecedenti."

⁴¹ Ibid. [O'Callaghan: pp. 243–44]: "Ad secundum concedo etiam conclusionem quod non habemus talem certitudinem quin Deus, qui potest causare visionem sine

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in the object's absence, because it is a *representative* of the object which produces it, the species can remain only *after* the object's presence. One may, therefore, safely infer from the species' presence that the object has recently existed and been present.⁴²

Chatton is clearly unwilling to view the species' circumscribed capacity for a brief existence independent of its object as a serious threat to existential certainty. Moreover, given the existence of species, Aureol's experiential evidence can be explained to Chatton's satisfaction without recourse to the hypothesis of an "objective being" or *factum*. Concomitantly, if these experiences can be so explained, then, because the presence of a species entails the visible object's presence and existence, it cannot be concluded on the basis of Aureol's evidence that vision occurs naturally without a present, existent object. Turning to the experiences purporting to establish the first conclusion, Chatton argues that each results instead from the production of "successive visions" so ordered that from them the "superior power," i.e. an internal sense, "judges to be there what is not there."⁴³ Thus, taking the instance of the man in the boat to whom it seems the trees along the shore move,

The [experience] proves only that when the [observer's] eye and the water move in this way, the trees on the shore thus continuously cause successive visions in such an order that the immediately superior judgmental faculty is insufficient for judging what is the case; hence, it will err, because it will not realize how else these visions might be caused than they would be if the trees actually moved.⁴⁴

Similarly, the experiences supporting the second conclusion are instances of faulty judgments due to the impression of lingering sensible species.⁴⁵

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praesentia rei posset causare in nobis unum actum quo iudicaretur aliter esse in re quam est; tamen cum hoc stat quod habeamus talem certitudinem, quod per causas naturales non possemus sic poni in errore invincibili."

⁴² Ibid. [O'Callaghan: p. 244 lin. 3–10].

⁴³ Ibid. [O'Callaghan: p. 244]: "Ex hoc patet quod per nullum istorum probatur quod visio causatur sine praesentia visibilis, quia in primo exemplo dico quod oculus non videt motum arboris in ripa, sed videt ipsam arborem, et per consequens res visa est. Cum hoc tamen stat quod talis est ordo visionum et tales sunt visiones quod potentia superior iudicat ibi esse quod non est ibi. In secundo exemplo patet idem ... <<et>> potentia superior iudicat ibi esse fracturam quae non est ibi. In tertio exemplo patet idem ... quod potentia superior iudicat ibi circumum igneum quod non est ibi."

⁴⁴ Ibid.: "Ad primam rationem opinionis, cum dicitur de existente in aqua, dico quod illud non probat aliquid esse ens fictum objectivum distinctum a visione ipsa et re visa; sed solum probat quod propter hoc quod ipse oculus sic movetur et etiam aqua, arbores in ripa sic continue causant alias et alias visiones, et eo ordine quod potentia immediate superior iudicativa non sufficit iudicare sicut est; sed errat, quia non advertit quomodo aliter causentur istae visiones quam causarentur, si arbores in ripa moverentur."

⁴⁵ Ibid. [O'Callaghan: p. 245 lin. 1–23].

In short, like Ockham but for entirely different reasons, Chatton removes Aureol's evidence from the realm of exterior sensation and relocates it within the province of judgment. In doing so Chatton, unlike the Venerable Inceptor, was aware that he was choosing an interpretation Aureol had attempted to refute, and Chatton responds with a Scotistic defense of the attribution to the interior senses of the capacity to evoke erroneous judgments.⁴⁶ As he seems unconcerned by this concession, Chatton may assume that it can be demonstrated that such errors would not be invincible.

Chatton's consideration of Aureol's theory exposes several epistemological commitments that underlie his response to Ockham and, secondarily, to Campsall. In the first place, Chatton here indicates and elsewhere confirms that he takes sense perception to be primary: intellection is, in this life (*in via*), ultimately dependent upon it. Further, rejecting the Augustinian view that we are most certain of our internal states of mind, or mental acts, Chatton holds instead that the fact of our sensations is what we experience with most certainty. Thus, Chatton's chief concern with natural knowledge is with knowledge of external reality obtainable through sense perception.⁴⁷ As he has defined intuitive cognition, it is the only route to certitude insofar as natural knowledge is concerned: hence Chatton's determination to guarantee inferences from the perception of extramental objects to their existence.

Given these commitments, it is not surprising that when confronted with Ockham's account of cognition, Chatton found it inadequate as a psychological theory. Moreover, although he summarizes Ockham's distinction between abstractive and intuitive cognition fairly, the wording of his critique is evidence that here, as throughout his *Sentences* commentary, he

⁴⁶ Chatton summarizes Aureol's argument quoted in chapter IV, n. 63, and notes [O'Callaghan: p. 245 lin. 24–43] that Aureol's use of judgment involves a conflation of the operations of two internal senses, namely the common sense and imagination. Where imagination is concerned, Chatton continues [lin. 44–48]: "Contra: difficile est videre quod imaginatio causet talem motum corporis <qua imaginatur se videre> ... Ad primum istorum: quilibet experitur quod ad fortem imaginationem causatur febris, causantur multi motus in corpore, etiam causatur calor in corpore." Chatton may be drawing here on Scotus's *De anima* qq.9–10, as did Wodeham later (chapter X below). See also Cova, "Meyronnes e Catton," pp. 236–37.

⁴⁷ In addition to nn. 33, 41 above see also a.5 of this question [O'Callaghan: pp. 255–61]: "Quintus Articulus est an anima videat actus suos intuitive in via, et tenet quod non," especially p. 256–57: "Secundo, quia intellectus potest acquirere scientiam de actibus suis per experientiam. Ergo cognoscit illos actus experimentaliter et intuitive. Tertio, quia Augustinus ex intentione XIII *Trinitatis* primo, tenet quod anima videt suam fidem ... Contra istam opinionem. Primo, quia rationes suae <<Ockham>> aequae probant quod simul sunt actu infinitae visiones ... Secundo, quod superfluit ponere illam visionem <<intuitivam>> ... Ad istum articulum dico quod anima cognoscit actus suos sine omni intuitiva in via ... Ad Augustinum, dico quod per 'videre fidem' solum intelligit recipere actum credendi. Isto modo videtur Magister Sententiarum intelligere ipsum ..."

construes his English confrère's views as extensions of Aureol's, and productive of the same difficulties.⁴⁸ Chatton quotes Ockham's definition of intuitive cognition from the first question of the latter's Prologue as that cognition:

By virtue of which it can be known whether the thing exists or not; and if the object exists, the intellect judges at once that it exists, unless the intellect is impeded on account of an imperfection of its knowledge. In the same way, if by divine power a perfect intuitive cognition of a non-existent object were to be conserved, by virtue of this incomplex cognition one would know evidently that the object did not exist.⁴⁹

Chatton objects, however, to the contention that intuitive cognition, in addition to producing knowledge of an object's existence, also provides knowledge of non-existence. He counters that if God is able to conserve such a perfect intuitive cognition, that intuition will *not* "represent the object not to be."⁵⁰

The introduction of the notion of representation betrays Chatton's own conception of the process of knowledge as fundamentally representational, and indicates perhaps the roots of his misconstruction of Ockham's claim. For in the course of arguing that the assertion of evident knowledge of non-existence, despite God's preservation of the cognition of a non-existent, arbitrarily limits God's [absolute] power, the overtones of Aureol's definition of intuitive cognition echo. Chatton maintains that there is no contradiction involved in supposing that as well as conserving such a vision, God could cause one to have an act of knowing whereby something would *appear* present,

When it would [in fact] be absent ... either this cognition of the thing would be intuitive, which according to you [i.e. Ockham] is false, because you posit that intuitive cognition is that by means of which a thing *appears not to be when*

⁴⁸ Ibid. [O'Callaghan: pp. 246–49]: "Tertius articulus est per quem modum innotescit nobis differentia inter abstractivam et intuitivam, et improbat[ur] Ockham et opinionem Oxoniensis."

⁴⁹ Ibid. [O'Callaghan: p. 246]: "Haec est opinio aliquorum, quaestione prima prologi, articulo secundo, quod 'distinguuntur per istum modum, quia notitia intuitiva rei est talis, virtute cuius potest sciri utrum res sit vel non. Si enim res sit, statim intellectus iudicat eam esse nisi impediatur propter imperfectionem illius notitiae; et eodem modo si esset perfecta talis notitia per potentiam divinam conservata de re non existente, virtute illius notitiae incomplexae evidenter cognosceret illam rem non esse.' Virtute etiam ejus scitur veritas contingens de re, ut qualis est, quantum distat, et hujusmodi. Sed per abstractivam ista non sciuntur eo quod abstrahit ab esse et non esse. Et infra tenet quod intuitiva non potest esse naturaliter sine objecto, licet possit de potentia Dei; abstractiva autem potest. Ex isto infert quod ista notitia intuitiva est illa a qua incipit notitia experimentalis." For Ockham, see above, chapter V nn. 19, 37, 42, 58.

⁵⁰ Ibid: "Contra istam opinionem probo quod notitia intuitiva perfecta in creaturis, si a Deo conservetur non representet rem non esse."

it is not; or it is abstractive, which it is not, since according to you, and in truth, an object does not appear to be present by means of abstractive cognition.⁵¹

If Ockham ever did hold that by means of an intuitive cognition an object *appears* present or absent, that view is not preserved;⁵² the suspicion, however, that Chatton's interpretative restatement results from his appraisal of Ockham's view as but a variation of Aureol's is substantiated by an examination of Chatton's subsequent arguments. He explicitly links their theories—together with Campsall's—by insisting that the same consequences follow as from Aureol's, for "if by means of intuitive cognition a thing should appear to exist, then [the thing] is constituted in some 'apparent being' by [intuitive cognition], which you [Ockham and Campsall] deny."⁵³

According to Chatton, Ockham's inclusion of the knowledge of non-existence within the scope of intuitive cognition can be further rebutted on the grounds that although an object's presence is known intuitively when the object is present, its absence is discovered only through mental argument (*arguitive*), that is, by discursive reasoning:

For one can perceive that he does not have an intuitive [cognition] of a thing, and from this argue that this thing is not present, because when there is no impediment preventing him from seeing the thing, and he does not see it, it therefore is not present. Consequently, he would know discursively (*arguitive*) that it is not present.⁵⁴

Furthermore, we are not experientially aware of knowing instantly that

⁵¹ Ibid: "Primo, quia secundum istud Deus non posset causare in nobis unum actum cognoscendi aliquam rem per quem ipsa appareret nobis esse praesens quando esset absens. Et hoc falsum, quia nihil negandum ab eo de quo non concluditur ipsum inferre contradictionem. Consequentiam probo, quia aut illa cognitio rei esset intuitiva, quod falsum est per te, quia ponis quod intuitiva est illa per quam apparet res non esse quando non est; aut abstractiva, quod non, quia per te et secundum veritatem, per abstractivam non apparet res esse praesens."

⁵² In V *Quodl.*, q.5 [OTh IX: p. 496 lin. 30–36; p. 498 lin 60–76] however, Ockham does accept (in objections against his own position) Chatton's wording, whom Ockham quotes without commenting on the distortion of his own views.

⁵³ *Lectura* prol. q.2, a.3 [O'Callaghan: pp. 246–47]. There Chatton recollects Campsall's view (p. 248, "opinio alia"), remarks that it can be disposed of "sicut contra praecedentem <opinionem>," that is, Ockham's, and then objects: "tertio, si per intuitivam res appareat existere, ergo per eam constituitur in quodam esse apparenti; quod negas."

⁵⁴ Ibid. [O'Callaghan: p. 249]: "Ad primum istorum, intelligo sic illud argumentum: cuius praesentia cognoscitur intuitive cum est praesens, ejus absentia cognoscitur arguitive cum est absens, quia aliquis potest percipere se non habere intuitivam illius rei, et ex hoc arguere quod illa res non est praesens quia, cum non sit ibi impedimentum quin videretur, si esset praesens, et non videtur, ergo non est praesens, et per consequens arguitive cognosceret ipsum non esse praesens."

an object is absent, although we may be aware of detecting its absence by discursive reasoning. We have met this criticism of Ockham's extension of the scope of intuition to include immediate awareness of non-existence, in the anonymous follower of Campsall who, within a year or two of Chatton, had urged that the *kind* of simple, immediate experience by which one is aware that an object is present, is not the same kind of cognitive experience by which we know that an object does not exist.⁵⁵ The experience of noticing what is absent, Chatton here insists, we can have; but when we have it, we are aware that it is not temporally immediate, but involves the kinds of cognitive acts properly labelled "abstractive."

Chatton claims further that we do, on the other hand, experience having intuitive cognitions of absent objects which we perceive exceedingly briefly as present. As he has already argued against Aureol, Chatton concludes that from such experiences, "it therefore follows that [contrary to Ockham's analysis] we do not know an object not to exist by means of an intuitive cognition" when the species is in fact preserved although the object is no longer present.⁵⁶

Nor is there experiential evidence that we have *intellectual* intuitive cognition of sensibles in this life (*in via*) in addition to sense cognition, Chatton continues.⁵⁷ Such an intellectual intuitive cognition is unnecessary in

⁵⁵ Ibid.: "Ex isto confirmo conclusionem principalem contra tertiam opinionem, quia non experimur nos cognoscere quod res non sit praesens nisi arguitive tantum, et experimur nos habere aliquam intuitivam per aliquod tempus re absente." For Campsall's anonymous follower, see above, chapter VI, n. 30.

⁵⁶ Ibid.: "Ergo sequitur quod per intuitivam non cognoscimus rem non esse. Ad secundum argumentum, concedo quod eadem propositio potest primo esse vera et postea falsa. Ita visio et cognitio incomplexa potest esse talis per quam res apparet esse, quae tamen non est, et hoc tam de potentia Dei quam etiam naturaliter per aliquod tempus post recessum rei."

⁵⁷ *Lectura* prol. q.2, a.4 [O'Callaghan: pp. 249–55]. The title for the article should read, "utrum anima <<intellectiva>> in via videat sensibilia intuitive," as is clear from its contents and from the variants that O'Callaghan notes (p. 249, n. 1). Chatton's own opinion is on p. 253: "Videtur ergo dicendum quod anima in via non habet naturaliter aliquam <<intellectionem>> intuitivam, quia sensationes exteriores sibi sufficiunt ad causandum quemcumque assensum rebus significatis per propositiones contingentes. Cum enim anima format hoc complexum, 'albedo existit,' si simul cum hoc videat visione sensitiva albedinem omni alio circumscripto, causatur assensus rei significatae per hoc complexum contingens 'albedo est'. Ergo praeter visionem sensitivam non oportet ibi ponere aliam cognitionem intuitivam respectu illius." Throughout this article, O'Callaghan faces an abbreviation that had so habitually been used for "intentio" that its fourteenth-century employment for "intellectio" was ambiguous for some contemporary scribes, among them one who, in copying Chatton's text, consistently wrote out "intentio." O'Callaghan notes (p. 235) the difficulty of discerning which reading is intended, but decides in favor of "intentio" rather than "intellectio." The latter, however, is required for meaning, inasmuch as Chatton's contrast is with "sensatio." This would not have been obvious to editors before Pinborg's work clarified the terminology, and in what follows I correct O'Callaghan's text to "intellectio" as indicated.

order to know that a sensible object exists, and thereby to derive an understanding of any contingent fact for, as he has already established, to this end sensitive intuitive cognition suffices.⁵⁸ Implying that the issue arises from a faulty interpretation of Kilwardby's doctrine on the soul's faculties codified in the Oxford condemnations of 1277,⁵⁹ Chatton once again sees the crux of the matter as a multiplication of mediators beyond necessity and, consistently parsimonious, denies *intellectual* intuitive cognition in this life. After such a steady Scotistic inspiration in Chatton's account up to this point, however, his readers may well have been startled to note the insouciance with which he ignores Scotus's view—an omission anyone familiar with Ockham's defense of intellectual intuitive cognition would not overlook.⁶⁰

Chatton departs again from Scotus on the issue of the intuitive cognition of the soul's own acts although, as usual, without any overt reference

⁵⁸ Cf. also *ibid.* [O'Callaghan: p. 252]: "Quinto arguo sic: ista <<intellectio>> intuitiva aut causatur a sensatione vel non. Si non, ergo intellectus non indiget sensu vel sensatione. Non potes dare primum, quia in quo genere causae ista <<intellectio>> requirit sensationem? Non sicut materiam vel formam vel finem; ergo sicut efficientem, quia non ponis plures. Sed hoc non potes dicere, quia ideo probas quod sensatio nec causat partialiter nec totaliter assensum, quia illa quae sunt in intellectu sufficiunt. Immo ex opposito, sicut tu poneres quod sensatio esset causa partialis vel totalis istius visionis, ita diceret quod sensatio est causa partialis vel totalis ipsius actus assentiendi ipsi rei contingenti. Et per consequens omnia salvarentur sine tali <<intellectione>> intuitiva." Again, [O'Callaghan: p. 253]: "Arguo ergo contra opinionem de intuitiva. Et primo pono argumentum quod faceret *ille* qui teneret primum argumentum articuli <<scilicet de Kilwardby>> supra dicti. Argueret enim sic: illud quod immediate recipit sensationes exteriores non indiget alia notitia intuitiva respectu sensibilibus extra. Sed illud idem quod recipit <<intellectiones>> [*ms. habet intentiones*] est immediatum receptivum sensationum ... Secundo arguo sic ad conclusionem: si in anima esset quaedam <<intellectio>> intuitiva, tunc illa determinaret sibi aliquod organum corporis pro subjecto ...". The *ille* to whom Chatton refers is evidently Wodeham who, when he quotes this discussion in his *Lect. sec. prol.*, q. 1 (Gonville & Caius 281/674 fol. 107vb), states that Chatton argues: "primo per argumentum quod *feci pro me*;" see below, chapter X. From the foregoing it should also be clear that Fitzpatrick, "Univocity," p. 145, is incorrect in reading Chatton as denying "intuitive cognition *pro statu isto*," from which Fitzpatrick draws a series of inferences, pp. 145–54, that do not fully explicate Chatton's views.

⁵⁹ *Lectura prol.* q.2, a.4 [O'Callaghan: pp. 249–50]: "Opinio <Ockham> est quod sic," i.e. quod anima intellectiva cognoscat sensibilia intuitive, "quia homo non solum per sensum, immo etiam per intellectum apprehendit veritates contingentes et eis evidenter assentit. Aut ergo per <<intellectionem>> intuitivam, et habetur propositum, aut non ... Contra istam opinionem arguo; tamen praemitto esse notandum quod inter articulos condemnatos per Kilwardby sunt tres articuli condemnati contra opinionem ponentem solum unam formam substantialem in homine. Primus articulus est quod vegetativa, sensitiva, et intellectiva sunt una forma simpliciter—error ... Isti articuli intelliguntur a diversis diversimode ... Isto praesupposito contingit diversimode arguere contra opinionem praedictam."

⁶⁰ For Scotus, see above, chapter III, nn. 69–71; for Ockham, chapter V at n. 46. See also Cova, "Meyronnes e Catton," pp. 233–34, who considers Meyronnes more faithful than Chatton to Scotus's views, partly on these grounds.

to the Subtle Doctor.⁶¹ In this case Chatton disputes Ockham's affirmation of intuitive cognition of internal actions once more on the grounds that experiential evidence is lacking, and also that superfluous intellections or visions—indeed, infinite regresses of them—must be supposed.⁶² However conditions may be in the afterlife, the soul's knowledge in this life is achieved instead, Chatton emphasizes, by abstractive cognition without any intuitive cognition.⁶³

Chatton's Defense of Species

During the course of his consideration of intuitive and abstractive cognition in the Prologue to his *Sentences* commentary, Chatton implies the extent to which species seem indispensable for an explanation of cognition. If there were no species, one would have to resort instead to unreal postulates, that is, to *ficta* of only objective being, in order to "save the phenomena" of sensation and intellection alike. Such *ficta*, however, would ensure disastrous consequences for the attainment of natural certainty. Thus, the acceptance of the "fact" of intuitive cognition must not carry a commitment to the rejection of species, as Ockham had intended. Since Chatton's fundamental attention is on sensation and not intellection, he responds to Ockham's elimination of species not as Reading had, but instead, in distinction four of the second book of his *Reportatio*, Chatton defends the entire process of the multiplication of species. These five questions stand as the first extended rebuttal of Ockham's denial of any species, sensible as well as intelligible.

Inquiring first as to whether species of a visible object multiply through

⁶¹ Above, n. 47.

⁶² *Lectura* prol. q.2, a.5 [O'Callaghan: p. 256]: "Confirmo, quia aequè poteris adquirere scientiam per experientiam de illa visione et aequè de visione illius visionis et sic arguo de infinitis, sicut tu ponis de actu recto. Ergo aequè probas infinitas."

⁶³ *Ibid.* [O'Callaghan: p. 257]: "Ad istum articulum aliter dico, quod anima cognoscit actus suos sine omni intuitiva in via. Notandum tamen quod aut quaeritur de 'cognoscere' tali cognitione quali cognoscitur sive res sit sive non sit, aut de cognitione intuitiva propria, aut de actu assentiendi rei significatae per istam: 'ego intelligo lapidem' ... De cognitione secundo modo dico quod nulla est intuitiva in anima viatoris intellectiva nec rei extra nec rei in anima. Si de tertia cognitione, dico quod anima assentit rei significatae per istam 'ego intelligo' sine omni intuitiva, quia praeter istam propositionem 'ego intelligo lapidem,' quae propositio componitur ex cognitionibus abstractivis, sive causetur per intuitivam sive non, non requiritur nisi quod illa <<intellectio>> recipiatur in anima. Confirmo istud quia anima dupliciter experitur aliquid, quia experitur aliquid sicut objectum, et aliquid experitur sicut subjectum unum experitur proprium actum; aliter enim iretur in infinitum, quia solum experiretur actum suum sicut objectum ... Licet ergo experientia, qua anima experitur aliquid sicut objectum, requiratur intuitivam, ideo anima nihil sic experitur in via nisi per sensationes, tamen experientia qua experitur aliquid sicut actum et non sicut objectum non requirit talem intuitivam."

the corporeal medium, Chatton responds that they do, for action would otherwise occur at a distance.⁶⁴ If, however, as "common opinion holds," a visible object multiplies species in the medium, are they then of the same essence as the object, or essentially different? That this fundamental difficulty afforded by the Baconian theory impressed Chatton as pivotal for a tradition of dissatisfaction with the theory—a tradition, moreover, from his vantage point antecedent to Ockham—may be inferred from Chatton's summary of the intellectual alignments on the issue:

For many are of the opinion that whiteness [for example] causes a form in the medium of the same essence [as the object]: Durand [of St. Pourçain], Hugh of Novocastro, and many *de villa* [i.e. at Oxford]. Some of them, however, hold at the same time that contrary qualities, no matter how diminished they may be, cannot be simultaneously in the same subject. Some [i.e. Ockham] prove this conclusion, because redness diffused by a ray crossing through a window is truly color, as it is truly visible, and nothing is visible except light or color.⁶⁵

Although Chatton here refers to his opponent by the politely oblique "some," he is elsewhere more explicit in describing the same view, telling his reader to "look in Ockham's *Reportatio*."⁶⁶ To his arguments, Chatton responds that the object causes something in the medium essentially different from itself, for "light (*lux*) in the body of the sun and the light (*lumen*) that it causes in the medium are essentially different, since they are no less different than the light (*lumen*) caused by the sun and the light caused by the moon: and these differ essentially ..."⁶⁷

Having established species in the medium, Chatton next asks "whether a sensible object causes a species in the exterior sense, that differs from the act [of the sense]?" The very formulation of the question is patently

⁶⁴ II *Rep.* d.4, q.1 [Tachau: p. 720 lin. 66-p. 721 lin. 74; p. 724 lin. 147–48].

⁶⁵ Ibid. [Tachau: p. 724 lin. 150–66]: "Secundus articulus est an obiectum visibile causet in medio aliquid eiusdem rationis vel alterius, nam communis opinio est quod aliquid causet. Sed vertitur in dubium, an aliquid eiusdem rationis vel alterius. Et sunt opiniones multe quod albedo causat in medio formam eiusdem rationis: Durandi et Hugonis de Novo Castro et multorum de villa. Aliqui tamen de eis simul tenent quod qualitates contrarie quantumcumque remisse sint, non possunt esse simul in eodem subiecto. Istam conclusionem probant aliqui, quia rubedo diffusa per radium transeuntem per vitrum est vere color, quia est vere visibile, et nihil est visibile nisi lux vel color; et non est species in qua reponatur in genere colorum nisi rubedo; igitur etc." Chatton's remarks support the hypothesis of A. Maier, "Das Problem," pp. 429–34, 439, that Ockham was influenced by Durand, although Chatton's citation of the latter's discussion of the multiplication of species is the first that I have discovered in an English Commentary.

⁶⁶ Ibid. [Tachau: p. 727 lin. 245–55].

⁶⁷ Ibid. [Tachau: p. 725 lin. 174–79]: "Et arguo quod causet rem alterius speciei; nam lux in corpore solis et lumen quod causat in medio sunt alterius speciei, quia non minus quam lumen causatum a sole et lumen causatum a luna; sed ista sunt alterius speciei."

a rejoinder to Ockham's assertion that by "species," Aristotle had intended "act" or "habit" as the effect of a sensible object on the sense.⁶⁸ Chatton offers a cursory exposition of Aureol's experiences to reiterate his support for the hypothesis that in sensation there is an impression made on the senses. Yet according to "another opinion" (which is correctly attributed to Ockham in the margin) these experiences do not prove that what is impressed on the senses is a *species*; rather, a sensible object such as color "impresses some comforting or damaging *quality* upon the organ." Chatton counters that the act of seeing is organic, that is, it is caused either by the presence of some impressed form, or by something received in the sense organ, which something is "what I call 'species.'"⁶⁹ Consequently, action on the sense is mediate rather than immediate, and Chatton reminds his reader that he has already stated that intellection is mediated by the [sense] organ.⁷⁰ If, after all, an extramental object could cause action in the soul immediately, he argues, then the soul would not need the sense organs for sensation.⁷¹

Perhaps Chatton's argument is truncated, for it is not at all clear how he thinks he has refuted Ockham's allegation that what is impressed is no species, but only a quality. To confuse the issue further, Chatton continues:

They [i.e. Ockham] rely upon paucity, but regarding the matter at hand they multiply and make more qualities without necessity, that is, by positing an act and an impressed color, and beyond that, there is a quality disposing or indisposing the organ [to act]. But with respect to the same sensible object, for the present everything can be saved if a single quality, which I say [is the] species, is impressed on the organ.⁷²

⁶⁸ Ibid., q.2 [Tachau: p. 734]: "utrum sensibile causet in sensu exteriori speciem differentem ab actu;" for Ockham, see above chapter V, at n. 83.

⁶⁹ Ibid. [Tachau: p. 734 lin. 10–p. 735 lin. 30]: "Contra: actus videndi est organicus. Que causa? Aut quia causatur ad presentiam alicuius forme impressae in organo, et habeo propositum, quia illam voco 'speciem.'"

⁷⁰ Ibid. [Tachau: p. 735 lin. 31–38]. Chatton refers to *Lectura* prol., q.2, a.4 [O'Callaghan: p. 251]: "Secundo arguo sic ad conclusionem. Si in anima esset quaedam <<intellectio>> intuitiva, tunc illa determinaret sibi aliquod organum corporis pro subjecto, licet non immediato, tamen pro subjecto mediato, et per consequens experimur eam in aliquo determinato organo. Probo, quia nisi <<intellectiones>> omnes reciperentur in determinatis organis, tunc non plus experiremur nos intelligere in capite quam in pede, et quancumque potentiae hominum intelligere per copulationem ad phantasmata. Tamen ex hoc quod <<intellectio>> recipitur experimur nos intelligere."

⁷¹ II *Rep.* d.4, q.2 [Tachau: p. 737 lin. 66–71].

⁷² Ibid. [Tachau: p. 736 lin. 58–p. 737 lin. 63]: "Item isti innituntur paucitati, sed in proposito multiplicant et plurificant qualitates sine necessitate; ponunt enim actum et colorem impressum, et preter illum, aliam qualitatem disponentem vel indisponentem organum; sed respectu eiusdem sensibilis pro tunc omnia salvari possunt si organo imprimatur tantum una qualitas quam dico 'speciem.'"

In the third question, Chatton extends his defense of species to the inner senses, insisting that species better explain the acts of imagining and remembering than does Ockham's habit (*habitus*). Imagination, like the act of seeing, is organic, depending upon a species impressed on the sense organ, in this case, the phantasy.⁷³ Similarly, a species impressed in the senses best accounts for the act of remembering an isolated incident.⁷⁴ Chatton therefore again accuses his confrère of "positing pluralities without necessity," namely habit, and an additional quality for disposing the senses, interior and exterior, to act.⁷⁵

Turning finally from the senses to the "intellectual part" of the soul, Chatton admits that while,

It is difficult to prove that such a species is there, nevertheless, the intellect no less than the sensitive part [of the soul] has a principle sufficient to cause its first act. Therefore, what suffices to cause the first abstractive act of the intellect? It is not [caused] by the soul alone, because before sensation it cannot cause that act which it now can; nor is [the sufficient cause] an intuitive intellection, because I have elsewhere proven that we do not have that in this life; nor is it a habit, because I am speaking of the first act; nor is it sensation, because the intellectual part has a sufficient principle of its own. Hence, it is the species acquired there from the intermediate sensations.⁷⁶

Even if one were to posit intellectual intuitive cognition in this life, no habit inclining the intellect to abstractive acts would result since, as Chatton reminds his audience, Ockham himself had insisted that one thing cannot cause the first cognition of another thing. This is a stance, by Ockham's criterion, at least, inconsistent with Chatton's assertion that species differ essentially from the objects from which they multiply. Finally, Chatton attacks the posited habit on the grounds that it cannot provide more evident cognition than a species.⁷⁷

⁷³ Ibid., q.3 [Tachau: p. 738 lin. 1–18].

⁷⁴ Ibid. [Tachau: p. 739 lin. 27–39]; cf. also q.4 [Tachau: p. 744 lin. 53–59].

⁷⁵ Ibid. [Tachau: p. 739 lin. 48–p. 740 lin. 51].

⁷⁶ Ibid., q.4 [Tachau: p. 742 lin. 17–p. 743 lin. 26]: "Sed contra: licet reputem difficile probare ibi speciem talem, non minus tamen intellectus habet principium sufficiens causandi primum actum suum quam pars sensitiva. Igitur, quid causare sufficit primum actum intellectus abstractivum? Non <causatur> ab anima tantum, quia ante sensationem non potest causare illum actum sicut modo potest. Nec intellectio intuitiva, quia alias probavi quod talem non habemus in via. Nec habitus, quia loquor de primo actu. Nec sensatio, quia pars intellectiva habet penes se principium sufficiens. Igitur, species ibi adquisita mediantibus sensationibus." See Scotus, above chapter III, nn. 16, 20, 25.

⁷⁷ Ibid. [Tachau: p. 743 lin. 27–p. 744 lin. 52]: "Preterea, etiam ponendo actus intuitivos, illi non causarent habitum inclinativum in actus abstractivos. Dices quod simul causatur cum primo actu intuitivo alius actus abstractivus. Contra: a quo? Non ab actu intuitiva, quia una res, per eos, non causat primam notitiam alterius; sed intellectio intuitiva est res distincta ab illo quod cognoscitur per primum actum abstractivum ... Item, non minus requiritur species in memoria quam aliquid previum actui in ipsa

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Although at times repetitive or sketchy, Chatton's rebuttal of Ockham attempted a systematic defense of species. The insistence upon the organic nature of the soul's actions and, as a corollary, on the intellect's dependence in this life upon the senses, fleshed out the allusions to psychological theory in Chatton's Prologue to the *Lectura*. His response was the harbinger of the reaction that Ockham's relative disinterest in the organic aspects of psychology continued to elicit, for what interested Ockham only slightly was fundamental to the Aristotelian psychological corpus and to perspectivist theory. Even more than Reading's, Chatton's critique exposed the irreconcilability of that theory with Ockham's, and did so while the Venerable Inceptor was still revising his commentary into an *Ordinatio*.

The Debate with Ockham Concerning Concepts, Propositions and the Object of Scientific Knowledge

If Ockham, as a proponent of direct realism in epistemology, rejected species generated by and multiplied from objects as mediators blocking such directness of cognition, Chatton insisted upon them precisely as causes requisite to guarantee that concept formation was not an arbitrary process due solely to the cognitive faculties' agency.⁷⁸ From his standpoint, Ockham's account of concept formation, which began with the cognitive faculty's act, namely an intuition, was for all intents and purposes indistinguishable from Aureol's where the results were concerned: the concept was something formed by the soul, and hence what he termed a

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intellectiva, sed ibi ad causandum assensum post deliberationem requiritur formatio propositionis, et presupponitur; igitur similiter, si actus debet esse evidens ante deliberationem, aliquid presupponitur. Item, habitus in intellectu potest augeri et possunt elici mediante habitu intensiores actus intensione correspondente habitui augmentato absque hoc quod habeantur actus evidenciores quam prius. Igitur, ad habendum actum evidenciores oportet recurrere ad species."

⁷⁸ I *Rep.* d.3, q.2 [ed. Gál, "Controversia": p.210]: "Tertium dubium est quomodo praedicatur conceptus universalis de pluribus. Ipsi ponunt fictum ad salvandum hoc quod ponunt quod praedicari est intelligi et obici. Sed ego dico quod praedicari est habere esse subiectivum. Nec causa eorum valet, quia fictum illud aut dependet essentialiter ab intellectione, et tunc variatur ad variationem intellectionis, quae, ut certum est, variatur et plurificatur; aut non dependet ab ea, et tunc esset aliquid—vel esse posset—cognitum si non cognoscitur, quod est contradictio." Chatton's understanding of a fictum as the mind's arbitrary creation is clear in his concession that the soul does create concepts of entities that do not exist extramentally [p. 207]: "Ad auctoritates concedo quia anima potest fingere multa, sicut montem aureum et chimeram et huiusmodi, sed hoc non est aliud quam habere intellectionem montis aurei vel chimerae, id est intellectionem virtute cuius possem iudicare quod talis esset natura eius si esset, ut supra dictum est. Et tu <<Ockham>> salvas hoc per complexa, ego melius possum, quia pono conceptum simplicem aequivalentem semper complexo." Cf. also Fitzpatrick, "Chatton on Univocity," pp. 93–94, 98.

'*fictum*,' rather than something derived from the object itself. Chatton's conviction that his two confrères' interpretations of intuition bore the same consequences was doubtless confirmed by Ockham's initial view on the ontological status of concepts, that they had only "objective being" in the soul; by his early willingness to accept the term '*fictum*' as an adequate description of *second* intentions, including universal concepts;⁷⁹ and finally by Aureol's own assertion that the object of faith was propositional truth.⁸⁰

It is hardly surprising, then, that Chatton objects strenuously to Ockham's conviction that the proper object of scientific knowledge (*scientia*) was conceptual, specifically the proposition which, Ockham argued, was the bearer of truth and falsity.⁸¹ Chatton's attack on the view that the

⁷⁹ Ibid. [Gál, "Controversia": pp. 200–01]: "De natura conceptus est una opinio <<scil. Ockham>> quod conceptus universalis non est aliqua <<intellectio>>, sed aliquid fictum, non habens aliquod esse subiectivum in mente nec extra, sed tantum esse obiectivum et cognitum ... Non solum hic, sed multi alii ponunt unum esse obiectivum huiusmodi, medium inter cognitionem et res extra, diminutum quoddam. Etiam quidam <<scil. Aureol>> hoc ponunt in cognitione intuitiva, ut tactum fuit in Prologo. Alia est opinio <<scil. propria>>, quia non intelligo quod conceptus universalis vel particularis sit aliud quam ipse actus cognoscendi. Et ideo pro hac opinione et contra illud fictum adhuc arguo." See also *Lectura* d.3, q.1, a.2 (Florence, B.N. conv. soppr. C.V. 357, fol. 84va): "Secundus articulus est videre utrum conceptus differat ab ipsa cognitione. Hic est opinio multorum hominum (*marginis* opinio Petri) quod preter actum intelligendi necesse est ponere quoddam ens obiectivum distinctum ab actu intelligendi et ipsa re intellecta secundum suam existentiam realem extra. Tamen isti diversificantur. Aliqui enim videntur tenere quod in omni cognitione, tam sensitiva quam intellectiva, tam confusa quam distinctiva, necesse est ponere unum talem esse cognitum distinctum ab esse cognitionis et ab esse reale extra illius obiecti ... De ista autem opinione est alias tactum superius questione secunde prologi articulo secundo, saltem quod non oporteat hoc ponere in cognitione sensitiva. Alia est opinio (*marginis* Okam) quod licet hoc non oporteat ponere in cognitione propria singularis, tamen oportet hoc ponere in cognitione universali ..." See above, chapter V, nn. 146, 152 for Ockham's view and Wodeham's claim that Ockham had only described universals (not first intentions) as "ficta."

⁸⁰ *I Rep.* d.3, q.2 [Gál, "Controversia": p. 203]: "Item, actus credendi causatus mediante articulo fidei aut habet complexum pro immediato obiecto—et oppositum probavi in prima quaestione Prologi—aut rem extra, et <habetur> propositum; aut fictum, et certe in illud non credo." Chatton refers back to *Lectura* prol. q.1 [Reina: p. 52 lin. 41–p. 53 lin. 89]: "Hic videntur aliqui <<scil. Ockham>> dicere quod actus iudicativus est ille quo intellectus non tantum apprehendit obiectum, sed etiam illi assentit vel dissentit; et iste actus est tantum respectu complexi ... Et quaestione septima Prologi tenent quod fides est respectu credibilium complexorum ... tenent quod qualibet scientia est tantum de propositionibus, sicut de illis quae sciuntur. Istam autem conclusionem unam videntur habere pro fundamento in toto processu in quaestionibus *Primi Sententiarum* ... Aliorum <<scil. Aureoli>> opinio videtur esse ad eandem conclusionem. Dicunt enim super *Tertium Sententiarum*, cum quaerunt de obiecto fidei, dicunt enim illi quod, sumendo obiectum fidei pro illo quod creditur, sic obiectum fidei est ipsa veritas sic complexa ..." There is no evidence that Ockham knew the discussion in Aureol's *III Sent.*

⁸¹ Ibid. [Reina: p. 53 lin. 90–93]: "Contra istam conclusionem istarum opinionum, proba quod tam actus credendi quam actus sciendi et opinandi, et quilibet actus assen-

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mental proposition is the object to which one assents as true and from which one dissents as false, constitutes in fact an attack on Scotus's position as well, as Rodington and Wodeham note;⁸² overtly, however, Chatton's attention is directed to Ockham and Aureol. Quite fundamentally, Chatton thinks Ockham's view that the object of assent is the "complex" or proposition rather than the extramental thing is, in the context of the latter's own epistemology, incoherent. Starting from Ockham's assumption that assent is an adjudicative—and hence not a simple—act of the intellect, but one which depends upon prior simple acts (intuitions), then by parity of reasoning, *incomplex* intellectual acts must have as their objects mental *ficta*.⁸³ This is a conclusion Ockham could not grant, because such objects would be the mediators he eschews as threatening direct realism.

Unlike Ockham, Chatton thinks that some mediators pose no problem, because he accepts that entities by means of which (*mediante quo*) objects are known can themselves remain unknown. Chatton's exposition of his own positive views on the role of the mental proposition explicitly depends upon this point, for he states that just as the species (or mental intention) is an entity *by means of which* the generating object is known, and is not itself the object known, so the mental proposition created by joining together such intentions is a *means by which* the same thing is known, such that the complex "man is white" signifies the man referred to by the

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tiendi, quem habet intellectus per hoc quod format complexum significans rem extra, habet rem extra pro obiecto, et non illud complexum;" *Lectura*, prol., q.4 [Cova: p. 307 lin. 71–88]; *I Rep.* d.3, q.2 [Gál: p.203 (above, n. 80)]. For Ockham, see above, chapter V, nn. 13–15.

⁸² Rodington, *I Sent.* prol. q.1 [ed. Tweedale: p. 294]: "Tertium dubium, quoad eius obiectum, ubi est maior difficultas, et est hic una opinio quae videtur Doctori Subtili VI *Metaphysicae*, q.6, quod primum quod scitur est complexum, et sic idem est cui post adhaeret;" Wodeham, *Lect. sec.* d.1, q.1 [ed. Gál: pp. 79–80]: "... quod assensus habet rem ipsam pro immediato obiecto partiali, sed totum complexum, cuius res est pars, pro obiecto totali ... <ut> dixi ibi, sequitur Ockham in *primo*. Modo etiam dico quod eundem sensum sequitur Scotus, nam super VI *Metaphysicae*, quaestione <paen> ultima, vult quod in propositione semper est formaliter veritas vel falsitas, quia propositio semper est conformis vel difformis rei extra, id est rei significatae sive intra sive extra." For editions and manuscripts of Rodington and Wodeham, see below, chapters VIII and X.

⁸³ Chatton, *I Rep.* d.3, q.2 [Gál, "Controversia": p. 203]: "Rationes eorum non concludunt, quia sicut patebit in solvendo eas, aequae sunt contra omnes homines et etiam contra se ipsos, quia aequae probant cognitionem singularem habere pro obiecto ens fictum;" again, *I Rep.* d.22, a.1 [ed. Knudsen, "Ockhamkritischer Text": p. 15]: "Per eos <<i.e. Ockham>> omnis actus assentiendi habet complexum pro obiecto, ergo cognitiones particulares correspondentes partibus complexi habent incomplexa, videlicet ficta quaedam, pro obiectis et significatis. Et ideo secundum opinionem quam solebant tenere et sine qua dimittunt quaestiones insolutas, haberent dicere, quod nomina communia, cuiusmodi sunt 'animal' et 'homo' et huiusmodi, significarent primo talia ficta et non primo res extra."

subject term.⁸⁴ Like species, then, propositions *represent* objects to the intellect; and any "evident proposition signifying an extramental object does not represent it less perfectly than a habit in the intellect, or a species or some sensation."⁸⁵

In an argument several later scholars would take to be the heart of Chatton's own position, he suggests that, after all, the mediating role of propositions is introspectively obvious:

Assent to a proposition itself necessarily presupposes assent to the thing signified by the proposition, because I assent that 'thus it is in reality as is signified by the proposition' before I assent that the proposition is true. Hence the first assent which the intellect has in forming the proposition does not have the proposition itself for an object but [instead] the thing or things signified by means of [the proposition].⁸⁶

⁸⁴ *Lectura* prol. q.1 [Reina: p. 54 lin. 120-p. 55 lin. 142]: "Et contra istud suppono pronunc quod propositio in mente componatur ex intentionibus sicut propositio in voce ex vocibus, sicut alias ostendetur. Suppono etiam quod eodem ordine quo proferuntur in voce voces illae, quae sunt partes propositionis in voce, una vox post aliam successive, quod eo ordine et successive potest intellectus formare suos conceptus correspondentes, qui componunt suam propositionem. Tunc arguo: cum intellectus format hoc complexum 'Deus est trinus in personis,' hic est subiectum et praedicatum et copula, et sine omni actu distincto ab eis ... Idem enim significat <subiectum> quando sibi additur praedicatum et quando non additur, quia est signum naturale, et quod praedicatum addatur vel non addatur, hoc cadit sub libertate voluntatis, maxime si termini sumantur significative et non distinguantur a suis significatis ... Item, arguo sic ad idem: ista propositio 'Deus est trinus in personis' aut solum significat rem extra, et habetur propositum;" see also prol. q.4 [Cova: p. 307 lin. 71–88]; *I Rep.* d.3, q.2 [ed. Gál, "Controversia": p. 207]: "Complexum enim significaret alia ratione partium, nec sic conceptus simplex; nec est ibi aliud 'terminare' nisi intellectionem esse in anima. Quod si species vel habitus vel aliquid aliud concurrat ibi, hoc non est in ratione termini, sed tantum ad causandum actum quo immediate res ipsa extra intelligatur." For Chatton's understanding of species as the terms of propositions, cf. *Lectura* prol. q.5 [ed. Knudsen, "Gegenstand und Einheit": p. 34]: "Ad tertium ... 'deficiente sensu deficit scientia secundum illum sensum,' verum est, quia illo deficiente non acquirerentur de re extra species <<sensibiles>>, quae natae esset haberi ante compositionem et divisionem mediante sensatione, et de illa re non acquiritur scientia talis, qualis nata est haberi per illum sensum sine talibus speciebus." See also Nuchelmans, *Theories of the Proposition*, p. 210.

⁸⁵ Chatton, *Lectura* prol. q.1 [Reina p. 60 lin. 327–p. 61 lin. 346].

⁸⁶ *Ibid.* [Reina: p.59 lin. 282–87]: "Secundo in principali arguo sic ad conclusionem illam: assensus ipsi propositioni necessario praesupponit assensum rei significatae per propositionem, quia prius assentio 'sic esse in re sicut significatur per propositionem' quam assentiam quod propositio sit vera. Ergo primus assensus quem habet intellectus in formando propositionem non habet propositionem ipsam pro obiecto, sed rem vel res significatas per propositionem illam." Chatton states this point elsewhere; cf. prol. q.2 [ed. O'Callaghan: p. 262]. See below, chapter VIII n. 62, chapter IX, n. 28, and chapter X, n. 96, for the responses of Rodington, Holcot, and Wodeham to this argument. Chatton's entire discussion is quoted without attribution by a frater Hartmanus, *I Sent.* prol. q.1 (Kraków, Bibl. Jagiell. 1276, fol. 3vb): "Quantum ad primum, est opinio tenens ... <quod> omni apprehensione complexi ab intellectu circumscripta solo complexo in intellectu posito, potest intellectus assentire vel dissentire ... preterea, nos assenti-

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Chatton claims that this is confirmed when we consider scientific demonstration, for the conclusion of a demonstration is formally related to the premises such that assent to the conclusion presupposes assent to the extramental significate.⁸⁷ That significate, despite Chatton's use of expressions such as "thus it is in reality as is signified by the proposition," is most emphatically no state of affairs, but rather is a really (*subiective*) existing thing. The subject, predicate, and copula of the mental proposition are simultaneous cognitions by means of which the signified object is diversely known.⁸⁸

Chatton's claims that propositions are merely the means by which objects are known, is consistent with his insistence that the term "proposition" designates the complex intellectual act itself, for neither Ockham nor Chatton considers any *act* the kind of thing that could block directness; rather, acts are what are directed. Thus, Chatton reveals himself as willing to accept causal but not cognitive mediators such as he interprets objectively existing concepts to be; if the former "move the soul to act," the latter would prevent the mind from ever having outwardly directed, i.e. non-reflexive, acts.⁸⁹ Chatton's chief concern with the role Ockham posited for the mental proposition derived from its composition from concepts that, on this interpretation, must be *ficta*. To conclude that such a proposition is the object of mental acts seemed to Chatton tantamount to accepting completely arbitrary, in principle unverifiable, and thus supremely contingent, mental associations not merely as the objects of thought, but also as the object of science.⁹⁰ Ockham was as opposed to this consequence as Chatton, who evidently succeeded in persuading him that it indeed followed from the distinction between intellectual acts and

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mus propositionem propter res." Hartmanus probably wrote (at Cologne?) between 1324–1330, and names both Ockham and Chatton (e.g., fol. 7rb, 23vb); see Z. Włoddek *, "Quelques remarques sur le ms. 1276 de la Bibl. Jagiell.," *Mediaevalia Philosophica Polonorum* 10 (1961), 87–95.

⁸⁷ Chatton, *Lectura* prol., q.1 [Reina: p. 59 lin. 288-p. 60 lin. 313]; prol. q.5 [ed. Knudsen, "Gegenstand und Einheit": p. 25 lin. 4-p. 26 lin. 32].

⁸⁸ Ibid. [Reina: p. 57 lin. 203–09]: "Res extra cognoscitur et per subiectum et per praedicatum et copulam, quia illi termini sunt cognitiones rei extra. Ideo, per totum tempus quo formatur propositio in mente significans rem extra, cognoscitur res extra, aliquando per subiectum illius propositionis, aliquando per copulam, aliquando per praedicatum. Sed quia isti termini non sunt cognitiones ipsius totalis propositionis, ideo ex hoc quod illi termini sunt in mente non cognoscitur ipsa totalis propositio."

⁸⁹ In addition to I *Rep.* d.3, q.2 (quoted above in n. 84), see *Lectura* d.3, q.1, a.2 (Florence, B.N. conv. soppr. C.V.357, fol. 85ra): "Quarto <contra opinionem Ockham> sic: secundum istud, intellectus per talem cognitionem nullo modo cognosceret rem extra, nam per istum actum quo cognoscitur visio rei create non cognoscitur illa res visa ..." This is a response to the view quoted above, n. 79; cf. also I *Rep.* d.22, q.un. a.1 [ed. Knudsen, "Ockhamkritischer Text": p. 17].

⁹⁰ Chatton implies this concern at many points, perhaps without ever being explicit; cf. e.g. I *Rep.* d.3, q.2 [Gál, "Controversia": pp. 206–07].

their "contents," the *ficta*. As a result, Ockham eventually ceased to defend his original position, and began to entertain the only remaining alternative: that concepts are identical to the intellectual acts by which we acquire them.⁹¹ This is not to say, however, that Ockham entirely adopted Chatton's position, for although finally persuaded that *ficta* were superfluously posited, Ockham never came to accept that species were required for an adequate explanation of vision and of concept formation.

Chatton, Ockham, and Lutterell

Even when Ockham was Chatton's ostensible target, the latter rarely read the former's epistemological statements entirely independently of Aureol's. Significant repercussions for the reception of Ockham's delineation of intuitive and abstractive cognition resulted also from this entanglement of their views, which Chatton seems to have initiated. His *Reportatio*, reporting lectures completed by November 1323, was the earliest commentary in which this convergence occurred; and although the Prologue is extant only in the later *Lectura* version, Chatton's own cross-references in the *Reportatio* establish that he did not alter the discussion of intuitive and abstractive cognition, except perhaps in the details of argumentation.⁹² Thus, the *Lectura* serves as a reliable guide to Chatton's position of 1322 when the Prologue and first two books were composed.⁹³

It is therefore conceivable that Chatton's description was a source of Lutterell's obviously indirect acquaintance with Ockham's notion of intuitive cognition, which Lutterell attempted to have condemned in the summer of 1323. His second article attacks the thesis that "intuitive cognition is inherently not necessarily of existents more than of non-existents, nor considers existence more than non-existence." The most salient feature of the article is the inclusion of Aureol's experiences in support of the connected opinion accepting "false intuitions."⁹⁴ Lutterell could not

⁹¹ As Chatton noted, I *Lectura* d.3, q.1, a.2 (quoted in Fitzpatrick, "Chatton on Univocity," p. 148). He frequently insists that the intellect's act of forming a complexum is not distinct from the concepts so ordered; see e.g. I *Lectura* prol. q.1 [Reina: p. 54 lin. 122-p. 55 lin. 131 (above, n. 84)].

⁹² For such cross-references, see above, n. 79.

⁹³ This date for the *Reportatio* was established by Baudry, "Gauthier de Chatton," pp. 337–69, and accords with S. Brown's recent delineation (in "Chatton's *Lectura* and Ockham's *Quaestiones*") of the relation of the later *Lectura* to Ockham's London works; see also Courtenay, *Wodeham*, pp. 162–63.

⁹⁴ John Lutterell's articles of condemnation, which he drew up at Avignon, are available in Fritz Hoffmann, *Iohannes Lutterell*. The second article proposed for censure (pp. 11–15), "Quod notitia intuitiva creature secundum se non est necessario plus existentis quam non existentis nec plus respicit existentiam quam non existentiam" is Ockham's

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have found these in Ockham's discussion of the intuitive cognition of non-existence, since Ockham did not know—or at any rate did not quote—the prooemium of Aureol's *Scriptum*, from which some of the experiences are drawn. More important, those experiences that he did know, Ockham did not discuss under the rubric of intuitive cognition at all, but rather in determining whether an "objective being" should be posited.⁹⁵ Moreover, Lutterell's resumé of the experiences and the opinion they buttress is incomplete and inaccurate, reflecting a second-hand awareness of Aureol as well. The most reasonable supposition is, then, that Lutterell encountered the opinions already correlated, as he could have in Chatton's *Sentences* commentary, if the contents of the Prologue were known in Oxford by 1323.

Yet even if Lutterell's source was Chatton's commentary, it is unlikely that Chatton himself either initiated or encouraged efforts at official condemnation of his confrère's stance, given not only the respectful tone of his disagreement, but also the steady success in persuading Ockham to modify his opinions. In any event, regardless of whether Lutterell's version of Ockham's theory of intuitive cognition should be laid ultimately at Chatton's door, the latter's juxtaposition of Aureol's and Ockham's views carried weight, as can be gauged in other *Sentences* commentaries.

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own; but Aureol's view is anonymously introduced (p. 13) as "nec debet movere <ratio> aliorum, qui ponunt quod est invenire intuitivam sive intuitionem falsam." Concerning Lutterell's efforts, see above, chapter V, n. 6; J. Koch, "Neue Aktenstücke zu dem gegen Wilhelm Ockham in Avignon gefürten Prozess," RTAM 7 (1935), 353–380; RTAM 8 (1936), 79–93, 168–197.

⁹⁵ See above, chapter V, at nn. 97–144.

Chapter Eight— Oxford in the 1320s

During the opening years of the 1320s, Reading left Oxford for Avignon, and Chatton and Ockham moved to London. Between their departures and Chatton's return by the close of the decade, the controversy at Oxford over the nature and definition of intuitive and abstractive cognition, and the positing of species, seems to have continued unabated. Its exact course, however, is difficult to trace given the paucity of extant *Sentences* commentaries. Those of a Benedictine Monk, Graystones; a Dominican friar, Hugh Lawton; a Franciscan, John of Rodington; and a secular, Richard FitzRalph, most sharply reveal the stages of the discussion at Oxford before Chatton's return. The first of these theologians to lecture on the *Sentences* was Graystones, who did so apparently before the end of 1322.¹ Within three or four years, he had been followed by Lawton, whose lectures are preserved in fragmentary form.² Rodington's lectures were delivered near the end of the decade, probably in 1328–29,³ the same academic year in which FitzRalph attained the status of bachelor on the *Sentences*.⁴

In the first twenty years of the fourteenth century, Oxford scholars' acceptance of the dichotomy of intuitive and abstractive cognition had been by no means universal; nor, among those who did adopt it, had there been unanimity concerning whether the cognitive process or event termed "intuitive cognition" was of the sort to produce certitude. Beginning, however, with Ockham and Chatton, Oxford theologians increasingly took for granted not only this dichotomy, but also that the *primary* func-

¹ See above, Chapter VI at n. 17. I owe the establishment of the date for Graystones' commentary to William J. Courtenay; see his "The Reception of Ockham's Thought in Fourteenth-Century England," in *From Ockham to Wyclif*, pp. 94–96.

² That Erfurt, Wiss. Bibl. C.A. 2.105 and Vatican, Vat. lat. 829 contain portions of Lawton's commentary is the discovery of Hester Gelber.

³ This date is not as secure as that of Rodington's years as regent master of the Oxford Franciscans; Ockham's editors surmise [OTh IV: 13*] ca. 1325 for Rodington's *Sentences* lectures. In addition to Courtenay, *Wodeham*, pp. 82–83, see: J. Lechner, *Johann von Rodington, O.F.M. und sein Quodlibet de conscientia*, BGPTM suppl. III.2 (1935); idem, "Die Quästionen des Sentenzkommentars des Johannes von Rodington O.F.M.," *Franziskanische Studien* 22 (1935), 232–48. Jeanne Barbet, "Le Commentaire des *Sentences* de Jean de Rodington, O.F.M. (+ 1348) d'après les manuscrits Reims 503 et Toulouse 192," *CNRS, Bulletin d'information et de l'institut de recherche et d'histoire des textes* 3 (1954), 55–63, provides the most complete list of known manuscripts and sorts them into two versions; those I have consulted contain the earlier redaction.

⁴ See below, n. 100.

tion of the intuitive mode of cognition was to yield existential certainty.

Robert Graystones

Writing at Oxford at roughly the same time that Chatton was presenting his own views at London, Graystones stood at the turning point in this development. Thus, for example, he discusses the dichotomy of intuitive and abstractive cognition under the rubric of whether in this life by any cognitive act we can be certain of the existence of anything other than ourselves.⁵ For him the starting point of any treatment of intuition and abstraction is Scotus's definition of them, for which Graystones turns to the familiar *Quodlibetal* analogy, in which intuition is described as "bearing upon the thing as present in-and-of-itself."⁶ This description, he remarks, grounds Alnwick's insistence that neither by natural means nor by divine power can there be intuitions when their objects are not present.⁷ Graystones concurs in part, for "it seems to me," he concludes, "that just like abstractive cognition, intuitive cognition is something absolute, and hence I dare say that God cannot cause or conserve [an intuition] without an object nor without a present object."⁸

But if Graystones' statement of his own view reveals his partial acceptance of Alnwick's interpretation of Scotus, for the Benedictine the possibility of naturally occurring intuitions of non-present or non-existent objects presents "a greater doubt."⁹ Although Graystones is evidently unaware of Aureol's hypothesized "apparent being," all the experiences

⁵ Graystones, I *Sent.* prol., q.1 (London, Westminster Abbey 13, fol. 3va): "Quia actus precedit habitus, cum ex eis habitus generentur, antequam queram de scientia quero unam questionem de actibus, et est ista: utrum viator per aliquem actum possit esse certus de existentia alicuius rei distincti ab eo loco et subiecto."

⁶ *Ibid.*, a.1 (fol. 3vb): "De primo dicit Scotus in suo Quodlibet questione 13, col. 627c, quod abstractiva fertur in rem non ut in se presens est potentie cognitive, sed in ali-quo alio, sive illud sit species vel aliud virtualiter continens illud vel notitia eius; intuitiva vero fertur in rem ut presens est in se, ita quod in <intuitiva> [*ms. habet: imaginativa*] illa res ipsa que cognoscitur in propria existentia est motiva potentie cognitive et non ipsum virtualiter vel representative continens. Exemplum primi in potentia sensitiva est quod virtus imaginativa fertur in rem sive sit presens sive non, et ideo non fertur in illam ut presens est sed magis ut abstrahit ab hic et nunc; visus autem fertur in rem ut presens est visui. Et eodem modo est de intellectu. De abstractiva non est dubium, et de intuitiva sunt." Cf. above, chapter III, n. 72.

⁷ *Ibid.* (fol. 4ra): "Ex hiis dicentis ... aliqui (*mag. Alnwick*) dicunt quod neque potentia nature nec Dei potest cognitio intuitiva esse nisi obiecto presente."

⁸ *Ibid.* (fol. 4vb): "Videtur igitur mihi quod cognitio intuitiva sicut et abstractiva est quid absolutum, et ideo audeo dicere quod non potest Deus illam causare vel conservare sine obiecto vel <non> presente obiecti."

⁹ *Ibid.*: "Sed an naturaliter posset esse <intuitio> sine illo <obiecto> est magis dubium, et potest persuaderi quod sic."

listed as evidence of such intuitions can be found somewhere in the latter's discussions of cognition, so some version of his *Sentences* commentary was probably available to Graystones. To Aureol's examples, Graystones may have added others gleaned from such sources as Roger Bacon's consideration of perceptions that persist in the absence of their generating objects.¹⁰ In any event, Graystones shows no signs of having known Chatton's treatment of Aureol; and the Benedictine's conclusion that naturally occurring intuitions without present objects would compromise existential certainty, was reached instead by considering Scotus's response to Henry of Ghent's sense illusions.¹¹ Finding the experiential evidence difficult to explain away, and aware that Reading had denied on similar grounds that intuition could be the sufficient vehicle for the acquisition of existential certitude, Graystones himself adopts a *via media* between Reading and Aureol.¹² Clearly distinguishing non-presence and non-existence, Graystones thus determines that intuition and abstraction innately differ formally from each other, "that is intrinsically, just as any given thing differs in itself from anything else." Moreover:

Intuition bears on the thing which would be present, whether it is present or not; abstraction, however, bears on the thing not as it is present, but abstracting from all temporal differences. But just as abstractive [cognition], even though it is not of an existent [thing] as existent, can nevertheless

¹⁰ Ibid. (fol. 4vb–5rb): "Primo ex dictis Philosophi ii *De sompno et vigilia*. Ibi capitulo secundo dicit quod singulis organis sentiendi inest sensatio non solum agentibus sensibus sed etiam abeuntibus; exercat autem et in visu et in auditu. Cum igitur virtutes exteriores non sint virtutes abstractivae, sequitur quod sensatio que manet recedente sensibili erit cognitio intuitiva. Confirmatur istud, quia visibile non causat visionem eius nisi quia immutat medium, et medium immutat sensum. Patet ex vii *Physicorum* commento xii ... (5ra) igitur immutatio medii, species scilicet creata in eo—si ponatur—potest aliquantulum manere post in absentia visibilis, ut videtur Philosophus dicere ii *De sompno*, et exemplificat de circulis causatis in aqua ... et ponit Augustinus xi *De trinitate* <cap.> 2, fol. 6, 'si quis diu respicit corpus splendidum, puta solem, et post clausit oculos, adhuc videt splendidum' ... et ii *De sompno et vigilia* cap. 2, ponit illud <idem experimentum> Philosophus sic dicens ... (5rb) Item potest esse exemplo de aliquo ignito circuito moto velociter. Videtur enim ibi circulus, et tamen non est circulus. Eodem modo de baculo qui videtur fractus in aqua et tamen non est fractus." For Aureol, see e.g. above, chapter IV, nn. 20, 81; for Bacon, cf. his *Opus maius*, pt.6, cc.7–8 [II: 189–91].

¹¹ Ibid. (fol. 5rb): "Item, aliter non possent sensus illi cuius sunt <que> nos videmus. Unde, et hoc concedit Scotus, quid iste nittitur exponere primo libro <Ord.>, questione illa, 'an alia veritas sincera possit haberi a viatore sine illustratione speciali luminis increate,' <ubi> concedit quod visu<s> potest esse rei absente, ut patet in illusionem sensuum. Dicit tamen quod tales visiones non sunt eque perfecte sicut sunt visiones rerum presentiarum existentium." For Scotus, see above, chapter III, nn. 79, 87–88.

¹² Ibid. (fol. 5rb–va): "Et si queras an per naturam posset tam perfecta species causari in medio obiecto (5va) absente sicut ipso presente, non audio hic asserere, cum non appareat experimentum ... nec debet negari a natura quod non potest ostendi repugnare nature ... Est satis certum quod cognitio intuitiva potest esse etsi obiectum non sit." For Graystones' discussion of Reading, see above, chapter VI, n. 47.

be of an existent, so intuitive [cognition], although it tends towards the thing which would be existent, can nonetheless be of a non-existent. Intuition therefore is a clear vision such as to be innately caused by the thing in its proper existence, and which tends towards the thing as if it were present, although [the thing] is not always required to be present.¹³

What is most striking about Graystones' definition is how closely it parallels Aureol's own definition of intuition as a mode of cognition bearing on an object as present, whether it is or not.¹⁴ If he adopts the latter's account in part, he does not accept its entirety, both because he posits no "apparent being" and because, when introducing Reading's denial of existential certitude, Graystones refers the reader back to experiential evidence already adduced, thus explicitly linking the issue of the nature of intuition to the question of whether certitude is attainable in this life.¹⁵ Still, he comes closer to accepting Aureol's understanding of intuition than did anyone else in Oxford whose views survive. While this Benedictine's commentary appears to have exerted remarkably little influence, his espousal of Aureol's and Reading's conclusions may have illustrated for Oxford scholars the worries Chatton repeatedly voiced as the consequences of accepting even the logical possibility of intuitive cognitions of non-existents.¹⁶

Hugh Lawton

Only recently have fragments of Lawton's *Sentences* commentary been discovered, and it is not yet possible to reconstruct his views on cognition in any detail.¹⁷ Nevertheless, his stance on what had before him been en-

¹³ Ibid. (fol. 5va): "Quomodo igitur differunt intuitiva et abstractiva? Dico quod differunt formaliter ex se ex natura, scilicet intrinseca, sicut quecumque res seipso differt a quecumque <alia>. Si autem queras de differentia qua cognoscitur hoc differe ab illo, videtur mihi posse dici: per hoc quod intuitiva fertur in rem que esset presens sive sit presens sive non; abstractiva fertur in ipsam non ut est presens, sed abstrahit ab omni differentia temporis. Sicut autem abstractiva, quamvis non sit existentis ut existens est, tamen potest esse existentis, sic intuitiva, quamvis tendat in rem que esset existens, tamen potest esse non existentis. Intuitiva ergo est visio clara qualem nata est res in existentia propria causare, et que tendit in rem *ac si esset* presens, quamvis non oporteat eam semper esse presentem. Abstractiva minus perfecta est cognitio, nec tendit in rem ut est presens; sed magis ut abstrahit ab omni differentia temporis."

¹⁴ See above, chapter IV, nn. 70, 84.

¹⁵ Above, chapter VI, n. 47; immediately before Reading's views are mentioned, Graystones remarks (fol. 5vb–6ra): "idem potest argui ex aliis experimentis <prius> [*ms. habet: post*] positus."

¹⁶ Above, chapter VII, at nn. 26, 32–33.

¹⁷ Above, n. 2. In what follows, I am indebted to the analysis of Lawton's account advanced by Gelber, in "I Cannot Tell A Lie: Hugh of Lawton's Critique of Ockham on Mental Language," *FrSt* (forthcoming). I am grateful to Gelber for a copy of her paper

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tirely non-controversial, namely the traditional Boethian tripartite classification of propositions as written, spoken, and mental, testifies to a continued debate at Oxford propelled by the dispute between Chatton and Ockham on the nature and role of propositional knowledge.

The novelty in Lawton's rejection of the distinction among propositions was his insistence that the intellect has no *subjectively* existing propositions; that is, the only really existing propositions are vocal or written.¹⁸ By rejecting the existence of mental propositions, he could not consistently have accepted Ockham's view that they are the proper objects of scientific knowledge. Still, the denial of the subjective existence of mental propositions is equally an attack upon Chatton's position that concepts, including complex ones or propositions, are identical to intellectual acts subjectively existing in the soul.¹⁹ Hence, Lawton argues, if we begin by supposing that "a mental proposition, if it exists, [is] some composite of parts which are not the act of composing itself, and that one part of the proposition does not compose the other," but instead the proposition is put together by a "composing act of the intellect," then we must wonder whether that act is a "composed or complex" one or is "simple and incomplex." If the former, then, Lawton suggests, such acts must be composed of others; and to accept this consequence, he implies, is to commence an infinite regress. If, on the other hand, one supposes the intellectual acts in question to be simple, then would not all simple intellectual acts—i.e. apprehensions—produce propositions? Some apprehensions do not do so, however, and the simultaneous perception of many extramental things does not *ipso facto* produce mental propositions.²⁰ Indeed, Lawton

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and for her explanation of Lawton's positions generally. For Lawton's views on the proposition, we rely on the summary of William Crathorn (on whom, see below, chapter IX), in Erfurt, Wiss. Bib. C.A. 4.395a.

¹⁸ Crathorn, I *Sent.* q.2 (Erfurt C.A. 4.395a, fol. 14ra): "Sed contra istam opinionem arguit frater Hugo de Lawtona qui ponit omnem propositionem esse vocalem vel scriptam et nullam esse in intellectu subiective." On the Boethian source of this doctrine, cf. Ockham, I *Summa logicae* c.1 [Oph I: p. 7 lin. 13–25]; Spade, "Semantics of Terms," p. 189.

¹⁹ See above, chapter VII, nn. 79, 91.

²⁰ Crathorn, I *Sent.* q.2 (Erfurt C.A. 4.395a, fol. 14ra): "Arguit <Hugo> primo sic, supponendo quod propositio mentalis, si sit quid compositum ex partibus, non sit actus componens se nec quod eius una pars componat aliam, sed quod componatur per actum intellectum componentem. Quo supposito, querit de illo actus intellectus componente, aut sit compositus et complexus, vel simplex et incomplexus. Si dicatur quod est actus compositus et simplex, cum non componat se, nec pars partem, eadem ratione per omnem simplicitatem intellectivam fieret compositio; quod est falsum. Si dicatur quod actus componens sit formaliter et intrinsece simplex, dicatur tamen propositiones quia est plurium. Contra: si sic, componere sit propositiones in mente constituere subiective. Tunc sequeretur eadem ratione quod plures res extra simul intellecte essent propositio mentalis vel subiective existerent in intellectu; quod falsum est. Secundo arguit sic: intellectum

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stresses, "two intellections or intentions distinct from each other do not, by being simultaneously known, either compose or assist in constituting one true act which is called a 'proposition.'" As a result, the second alternative must also be rejected.²¹

Beyond proposing further arguments against accepting subjectively existing mental propositions composed from diverse concepts,²² Lawton also denies that they are required as the mental correlates of spoken propositions.²³ Nevertheless, none of these arguments rests on a denial of concepts. On the contrary, Lawton is implicitly committed to the view that there are concepts, and that they are "similitudes" of the objects that they represent; what he does deny is that such similitudes are capable of linguistic functions. In Lawton's words,

No similitude which is subjectively in the soul is able *to supposit* for any thing; therefore, no such similitude can be a part of a proposition ... I prove the antecedent, because either [the similitude] would supposit for itself or for another thing. [It would] not [supposit] for itself because it does not signify itself, as it is not a similitude of itself; nor [would it supposit] for another thing, because [the similitude] would do so either naturally or by convention (*ad placitum*).²⁴

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ponere aliquid non est nisi intellectum intelligere id; igitur intellectum ponere aliqua non est nisi intelligere illa ... igitur per hoc quod aliqua simul intelliguntur non est in eis maior compositio quam prius." Cf. *ibid.* (fol. 14va): "Tredécimo sic: si istis terminis vocalibus 'animal,' 'genus,' isti propositioni vocali 'animal est genus' correspondeat una in mente, erit processus in infinitum in intentionibus primis et secundis." See also n. 22 below.

²¹ *Ibid.*: "Et per consequens due intellectiones vel intentiones inter se distincte non componunt nec concurrunt ad constitutionem unius veri actus qui dicitur 'propositio' per hoc quod simul intelliguntur."

²² *Ibid.* (fol. 14ra–rb): "Tertio arguit sic: si propositio mentalis sit vere unus actus numero, igitur non componitur ex diversis conceptus; falsum et contra ponentes propositiones mentales existere subjective in anima, quia ponunt eas componi ex diversis ... Si dicatur quod propositio non est vere unus actus numero, igitur sequitur quod nullus actus intellectus sit componens vel compositus." Crathom lists a total of fourteen arguments as Lawton's.

²³ *Ibid.* (fol. 14rb): "Quarto sic: si omni propositioni vocali prolate ab intelligente non abstracto corresponderet propositio consimilis in mente subjective, tunc homo non posset mentiri, quia mentiri est dicere contra dictamen rationis; dictamen autem secundum ponentes propositiones mentales est cognitio complexa seu propositio opposita propositioni vocali prolate a mentiente. Quinto sic: si essent tales propositiones subjective in intellectu, posset tunc simul intellectus componere propositiones contradictorias mentales correspondentes istis vocalibus: 'intelligo quid loquor,' 'non intelligo quid loquor,' quod videtur esse contra experientiam ...'

²⁴ *Ibid.*: "Undécimo sic: nulla similitudo que est subjective in anima potest supponere pro aliqua re, igitur nulla talis similitudo potest esse pars propositionis. Consequentia est manifesta; antecedens probo, quia vel supponeret pro seipsa vel pro alia re. Non pro seipsa, quia non significat se, nec est similitudo suiipsius; nec pro alia re, quia si sic, vel ad placitum, vel naturaliter."

Lawton dismisses the possibility that supposition is conventional, for then the intellect could arbitrarily rule that some concept could supposit for an object without being its likeness.²⁵ This consequence Lawton treats as absurd because he takes as obvious that concepts signify, i.e. function as signs, for an object precisely because they are its naturally occurring similitudes. Thus, while evidently accepting the existence of object-generated species, to which he refers interchangeably as "similitudes," "concepts," and "intentions," Lawton objects to considering them the bearers of supposition. If species cannot supposit, then they do not function as do terms in vocal and written propositions, and however important epistemologically and psychologically, they are bereft of semantic utility.²⁶

To deny that mental images of extramental objects function semantically is to sever the connecting link between perception and meaning for which species had served at least since Bacon's *De signis*.²¹ The indications that Lawton strove to drive a wedge between the semantic and optical aspects of accounts of knowledge are historically interesting, even if his arguments evidently persuaded none of his colleagues and successors at Oxford, who instead understood this connection as among the very advantages the perspectivist account offered. If he had no followers in this direction, Lawton's voice may nevertheless have been an important one

²⁵ Ibid. (fol. 14rb–va): "Non <supponit similitudo> ad placitum, quia licet intellectus posset statuere quod quando aliquis conceptus vel cogitatio occurrit, quod tunc occurrat sibi quoddam aliud cuius ille conceptus vel cogitatio non est similitudo, ille tamen conceptus non supponeret pro illo, sed esset tantum signum recordativum illius. Nec supponit naturaliter pro aliqua re, quia nulla res videtur naturaliter supponere pro alia re. Si enim una res posset supponere naturaliter pro alia, hoc maxime esset verum de rebus eiusdem speciei, ut sunt due albedines, duo homines; et sic naturaliter Sortes supponeret pro Platone. Quod falsum est. Duodecimo arguitur sic: Si similitudo est in anima, supponeret pro re naturaliter cuius est similitudo, tunc omnia possent affirmari et negari de illa similitudine que possent affirmari et negari de re illa cuius est similitudo. Consequens falsum, igitur antecedens ..." See also: "Sexto sic: copula propositionis mentalis vel est una similitudo naturalis et actus simplex vel plures actus. Si detur primum, igitur vel est similitudo rei importate per subiectum et predicatum, vel alicuius rei non significate per subiectum et predicatum. Si similitudo rei significate per subiectum et predicatum, igitur non posset copulare in propositionibus mentalibus que corresponde<n>t istis vocalibus: 'homo est animal,' 'albedo est albedo,' quia in talibus denotatur quod eadem res importatur per subiectum et predicatum. Si dicatur quod non est una similitudo nec unus actus, igitur in omni propositione mentali correspondente vocali propositioni in qua hec copula est, est tertium adiacens; <ideo> essent ad minus quatuor termini. Quod est inconveniens, quia sicut propositio mentalis correspondet propositioni vocali, ita numerus terminorum mentalium <correspondet> numero terminorum vocalium; igitur sicut in ista, 'homo est animal,' sunt tantum tres termini, et in mentali sunt correspondentes."

²⁶ Gelber, in "I Cannot Tell," first recognized the significance of this consequence of Lawton's position.

²⁷ Above, chapter I, 55–56, 68.

for the debate between two fellow Dominicans, Crathorn and Holcot, over the nature of the mind's similitudes.²⁸

Lawton's arguments are also historically interesting as an index of the development of Ockham's and Chatton's audience at Oxford, for while it is not surprising that, like Graystones, Lawton knew views elaborated in Ockham's Oxford lectures on the *Sentences*, this Dominican evidently also had some familiarity with the London teaching of both Franciscans. Inasmuch as the arguments offered against accepting subjectively existing mental propositions composed from diverse intellections implicitly counter Chatton's chief claims in support of that position, some version of his *Sentences* lectures was available to Lawton, probably no later than mid-decade. There is evidence, too, that Lawton, who treats Ockham's views as equally subject to this critique, had some access to his rejection, under Chatton's influence, of the objective existence of concepts in favor of their identity as intellectual acts. Because Ockham's acquiescence to Chatton on this issue is datable to 1322 or 1323 at London, Lawton is among the earliest witnesses to the Oxford response to their London teaching.²⁹ Within another three or four years, however, Oxford Franciscans, at least, showed a thorough knowledge of Ockham's and Chatton's disputes, as is clear from the influential commentary composed by John of Rodington.

John of Rodington

For Rodington, as for his predecessors, Scotus's description of cognition constituted the nucleus of his own analysis, which also displays the influence of Reading and Campsall, as well as familiarity with Chatton's opinions.³⁰ Rodington concurs with Scotus in distinguishing intellection

²⁸ Below, chapter IX, at nn. 21–27, 50–59; Gelber, "I Cannot Tell," and "The Contingencies of Propositions as Contingent Facts: The Dominicans William Crathorn and Robert Holcot," paper delivered at the Twentieth International Congress on Medieval Studies, Kalamazoo, Michigan 1985.

²⁹ See above, chapter V, nn. 4–9; chapter VII, nn. 3–4.

³⁰ Rodington's epistemology has been the subject of a dissertation by Martin Tweedale, "John of Rodynton on Knowledge, Science, and Theology," University of California, Los Angeles, 1965. I have found Tweedale's preliminary edition of several questions from Rodington's commentary useful, and have relied upon Assisi, Bibl. comm. 133, Vatican, Vat. lat. 5306 and Brussels, Bibl. Royale 11578 (1552) for questions not edited by Tweedale and to correct his edition. As the following will indicate, however, I do not agree with his assessment of Rodington's views as a rejection of Scotus for Ockham (Tweedale's pp. 14–86). For Rodington's familiarity with Reading, see n. 45 below. Tweedale mentions (pp. 19, 147) Rodington's knowledge of Chatton's views on the object of knowledge (below, nn. 57–64), but Rodington's reading of Chatton (as of such intermediary discussions as those of frater Hartmanus) is more extensive than Tweedale sug-

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from sensation, although because he considers the former dependent in this life (*in via*) upon the latter for knowledge of sensible objects, the boundary is easily trespassed.³¹ If Scotus is the source of this distinction, so too his is patently the understanding of intuitive and abstractive cognition from which Rodington's ultimately derives, although his interpretation of the Subtle Doctor is that of Campsall. What is not entirely clear is whether Rodington considered himself in complete agreement with Campsall. Rodington indubitably knew his views, and on at least one occasion opposed him, when discussing the thorny issue of how, as a similitude, species can represent the object's substance, since substance and accidents differ innately. Whatever Rodington's appreciation of his own dependence on or independence of Campsall, however, some subsequent fourteenth-century readers did link their views.³²

Ockham's influence upon Rodington's epistemology was by contrast chiefly negative.³³ Indeed, Rodington was affected by Ockham's theory of intuitive and abstractive cognition in a way neither Reading nor Chatton had been. As Ockham's senior, Reading took notice of the Venerable Inceptor's views on cognition after formulating his own, and largely combatted what seemed an unwise regression to Henry of Ghent's elimination of intelligible species. Chatton, as Ockham's colleague (*socius*), disagreed with more aspects of his contemporary's delineation of abstractive and intuitive cognition, but like Reading, in the main deplored what he took to be mistaken departures from the Subtle Doctor's views. Chatton's arguments, in their turn, were a rich mine from which Rodington drew to fashion both his own views on occasion and his critique of Ockham; but to this younger confrère, it was clear that in lieu of a problematic interpretation of Scotus's theory, Ockham had in fact presented

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gests. It is, moreover, probable that Rodington knew Chatton's *Reportatio* rather than *Lectura*.

³¹ Although the distinction between intellection and sensation is clear throughout the lectures, Rodington expresses it most explicitly at *I Sent.* d.3, q.3 [Tweedale: pp. 420–37].

³² See nn. 37, 38, 42, 88 below. At least one later reader connected Rodington's and Campsall's views on future contingents; see Anon., *I Sent.* (Vatican, Vat. lat. 986, fol. 28va–vb): "Aliqui bene concedunt quod Deus ab eterno cognovit nec potuit non cognoscere res in suo simplici esse et omnia in sua natura ... quamvis aliter dicant de propositionibus complexis ... Hoc posito, pono aliquas propositiones quas ponit Rodinton in primo suo <libro> et aliquas a Richardi Compsaley."

³³ Although Tweedale proposes (p. 86) that "with regard to Scotus, Rodynton seems to think that the Subtle Doctor's view" of the distinction between intuitive and abstractive cognition "is tenable, though not at all preferable," as appears from the fact that Rodington "describes [the view] in exactly the same way as had Ockham," the question Tweedale thus characterises (*I Sent.* prol., q.2) in fact constitutes a point-by-point refutation of Ockham's *I Ord.* prol., q. 1, beginning with his preliminary definitions. The same can be said of many other questions in Rodington's lectures.

an alternative account of knowledge.

In reaction, Rodington not only endeavored to mount a defense of Scotus's definitions of intuitive and abstractive cognition against the explicit critique in Ockham's Prologue to the *Ordinatio*,³⁴ but rejected as well the explication of evident cognition, the propositional character of knowledge, the distinction between apprehensive and adjudicative functions with the reservation of the latter to the intellect: in brief, the entire conception of the foundations of knowledge that Ockham had advanced.³⁵

Of Ockham's five conclusions opposing Scotus's description of the difference between intuitive and abstractive cognition, the first was that they could not be distinguished on the basis of the presence of the object, for Scotus erred in assuming its presence to be required as a *terminus* for the act of intuitive cognition.³⁶ Rodington's rebuttal in his own Prologue is an interesting one: "I respond to the arguments by sustaining the opinion of John [Scotus]," Rodington begins,

[and] I say ... that this [Ockham's] deduction is not pertinent, because John speaks of cognition (*notitia*) which is had naturally in this life. One can also respond by pointing out that the noun 'vision' necessarily connotes something existing that is seen; and then, when it is inquired what the relation of object to vision is, it would be said that the object is intrinsically included within the total import of the noun 'vision.' And so, just as God cannot make a white thing without whiteness, so He cannot make vision without a seen existent. It is obvious, then, that [Ockham's argument to the contrary] is inconclusive.³⁷

³⁴ See above, chapter V, nn. 23–30.

³⁵ On the rebuttal of Ockham's notion of evident cognition, see e.g. I *Sent.* prol., q.2 [Tweedale: pp. 309–25] and Tweedale's discussion, p. 107. Thus, Rodington begins (p. 309): "De secundo termino dico quod notitia evidens est qua habita necessario assentio cognito sine imperio voluntatis, quod patet ex hoc quod sequitur ... Unde alii <i.e., Ockham> male exponit istud terminum, cum dicunt quod notitia evidens est cognitio uni complexi ex notitia terminorum incomplexa mediate vel immediate nata sufficienter causari ..." Again (p. 325): "Dico quod notitia evidens [etc.] non dependet necessario ex intuitiva." On propositional knowledge, see below at nn. 57–63. Following Aristotelian psychology, assimilated to Augustine when possible, Rodington acknowledges the senses' adjudicative capacities at I *Sent.* prol., q.2, a.3, dub. 2 (Vat. lat. 5306, fol. 7rb) and d.3, q.3 [Tweedale: pp. 422–26].

³⁶ Rodington, I *Sent.* prol., q.2 [Tweedale: pp. 326–27; Vat. lat. 5306, fol. 6vb]: "Argumenta (*margin.* Hockam I, q.1) contra Scotum: Consequenter improbatur Doctor Subtilis quantum ad quinque conditiones per quas distinguit abstractivam ab intuitiva. Prima est quod abstractiva indifferenter est existentis et non existentis, praesentis et non praesentis; intuitiva tantum realiter existentis et praesentis. Contra istud arguitur <<reducendo>> Doctorem ad opposita ..." For Ockham, see above, chapter V, nn. 18, 23.

³⁷ *Ibid.* [Tweedale: p. 329; Vat. lat. 5306, fol. 7ra]: "Quantum ad tertium in isto dubio, respondeo ad argumento, suscipiendo opinionem Iohanni. Ad primum, dico quod illa deductio non est ad propositum, quia Iohannes loquitur de notitia que naturaliter

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This exposition of Scotus adheres to that of Campsall, like whom Rodington depends upon the semantic principle of "connotation" whereby, for instance, predicating the term "vision" of an act includes asserting the existence of the seen object. If the purpose of Campsall's resort to the connotation of the terms at issue had not been made explicit (at least by those who quoted him earlier in the decade), it is clarified by Rodington.³⁸ The point of his argument is so to specify the acts under discussion as to remove by definition the logical possibility of an intuitive vision of a non-existent strictly speaking—i.e. when the terminology is accurately and properly applied.³⁹ He further restricts the discussion to naturally induced vision in this life, as had Chatton before him.⁴⁰ Thus, Rodington proposes that the term "vision" signifies specific perceptual events in which an existent visible object is seen by means of the sense of sight. For the moment, he does not spell out his objection further,⁴¹ but it follows that if one considers any other sort of event, one cannot properly refer to that event by employing the word "vision." Just as the perceptual act involving sound and the sense of hearing is not properly speaking vision, so the cognitive act in which a non-existent object is seen would not, on Rodington's account, be "vision" properly speaking as Ockham would have it, although it might properly be called "imagination," for example.

That Campsall's definition underlies this interpretation of Scotus is confirmed by Rodington's paraphrase of Scotus's *Quodlibetal* analogy:

It can be said that vision and imagination do not differ except as intuitive and abstractive [cognition] do in the intellect, namely insofar as the very

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habetur pro statu isto. Aliter potest dici, ponendo quod hoc nomen 'visio' connotat necessario aliquid existens visum; et tunc diceretur, quando queritur qualiter se habet obiectum ad visionem, scilicet quod obiectum sit intrinsece inclusum in toto quod importatur per hoc nomen 'visio.' Et sicut Deus non potest tunc facere quod sit album sine albedine, ita non potest facere visionem sine existente viso. Sic patet quod assumptum non concludit."

³⁸ Tweedale's discussion (pp. 86–89) of Rodington's use of the notion of "connotation" first alerted me to its significance; see above, chapter VI, nn. 14–16, for Campsall. Paul Spade, "Absolute and Connotative Terms," points out (pp. 55–56, n. 2) that among the terms that Ockham accepts as connotative are all relative terms and "the terms 'true,' 'good,' 'one,' 'power,' 'act,' 'intellect,' 'will,' and 'desirable.'" It is not clear whether Ockham would have been forced to grant Rodington's inclusion of "vision" among connotative terms, but a strong case could be made for its inclusion alongside "will" and "intellect," even if Ockham denies that "vision" is a relative term. The logical impossibility of severing *album* from *albedine*, which Rodington adduces, is the common example of a connotative term; cf. Ockham, I *Summa logicae* c.10 [OPh I: pp. 36–37].

³⁹ Rodington is not, however, careful to restrict the use of "visio" to its employment *stricte loquendo*, but this seems clearly to be what he proposed to do; see below, at nn. 54–60.

⁴⁰ Above, n. 37; for Chatton, see above, chapter VII, nn. 57–58.

⁴¹ See below, nn. 51–56.

same thing that is vision in the presence of a thing (*rei*) is afterwards imagination in [the thing's] absence.⁴²

Like Campsall, Rodington's goal is to demonstrate that intuitive and abstractive cognition, although distinct, do not differ essentially (*sunt eiusdem rationis*)⁴³ but that intuitive cognition has something "added" in comparison to abstractive cognition, namely existential knowledge.⁴⁴ This does not mean that there is *no* distinction between the two sorts of cognition;⁴⁵ however, because the change from an intuitive to an abstractive

⁴² Rodington, *I Sent.* prol., q.2 [Tweedale: p. 318]: "Tertio modo potest dici quod visio et imaginatio non differunt nisi sicut intuitiva et abstractiva in intellectu, quantum ad hoc scilicet quod illud idem quod visio est in praesentia rei postea est imaginatio in absentia." Rodington thus recapitulates his position as already defended, *ibid.*, concl. 1 [Tweedale: p. 314; Vat. lat. 5306 fol. 4v; Assisi 133, fol. 3rb]: "Et secundum istum modum dicendi potest dici quod intuitiva non distinguitur ab abstractiva, nisi sicut cognitio magis perfecta et minus perfecta, quia perfecta cognitio est per quam scio quod terminus est, etc., imperfecta quia non scio sic. Et sic dico non sunt alterius rationis, immo eadem cognitio primo potest esse abstractiva et post intuitiva, et e converso millies in die."

⁴³ *Ibid.*, concl. 1 [Tweedale: pp. 311–14]: "Prima conclusio, quod impossibile est quod sint conceptus alterius rationis, nisi cognoscantur res alterius rationis ... <Probatur> secundo sic: conceptus non habent unde sint alterius rationis nisi ex obiecto et ex intellectu. Sed non possunt esse alterius rationis ex obiecto, si obiectum sit penitus idem; nec ex intellectu, quia intellectus non causat conceptum alicuius, nisi secundum modum illum quo sibi praesentatur obiectum; et si eodem modo repraesentatur, sequitur quod conceptus erit idem vel, si sint distincta, quod erit <<n>>t eiusdem rationis ... (p. 312) Contra istam conclusionem sic arguitur <<Ockham>>. Primo, cognitio intuitiva et abstractiva sunt alterius rationis; patet, quia inter individua eiusdem rationis non est ordo perfectionis. Intuitiva perfectior est alia, igitur etc. Sed tales cognitiones possunt esse penitus eiusdem rei; igitur etc. ... (p. 313) Non obstantibus istis, teneri potest prima conclusio, et maxime in eadem potentia <<anime>> et forte in diversis potentiis ... (p. 314) Pro responsione ad primum argumentum videndum est de distinctione inter intuitivam et abstractivam ... Tunc ad argumentum quando dicitur quod inter individua eiusdem rationis <non est ordo perfectionis>, dico quod verum est loquendo de perfectione formali ... sed potest esse ordo perfectionis materialis sive gradualis, quia unus habet gradum perfectiorem quam alius." Thus, Rodington opposes Ockham's insistence that intuition and abstraction differ specifically, above, chapter V, n. 35.

⁴⁴ *Ibid.* [Tweedale: pp. 314–15]: "Dupliciter possunt intellegi <<cognitio intuitiva et abstractiva>> et distingui. Uno modo, sic: quod omnis cognitio abstractiva est cognitio simplex rei, ita quod non est alterius additi, ut si proferatur ista vox 'homo,' statim intelligitur significatum vocis sine hoc quod intelligatur esse idem alteri vel non esse idem, existens vel non existens, etc. Omnes enim tales cognitiones essent respectu <<in>> complexi ... Per oppositum, intuitiva est actus cum addito ... si dicatur qualiter erit sensitiva intuitiva, dico quod propter hoc, quod est ita clara cognitio quod si sentiens habet potentiam iudicativam statim potest scire quod <<res>> est, etc. Et ideo si sensatio est talis per quam non potest iudicari rem esse, illa potest vocari 'abstractiva.' Sic igitur patet ad argumentum primum."

⁴⁵ Rodington cites an objection against his own position, *ibid.* [Tweedale: pp. 319–21; Brussels fol. 4vb]: "Contra istam conclusionem <<proprium>> arguitur sic: et primo quod distinctio nulla sit inter intuitivam et abstractivam, <<et>> postea, quod viator non potest habere cognitionem abstractivam de Deo." The same view is adduced and disputed by Reading, *I Sent.* prol. q.3 (Florence, B.N. conv. soppr. D.IV.95, pp.

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cognition requires no intrinsic change in the cognition itself, the distinction is not a *real* distinction. It may, for instance, be a formal distinction, although Rodington may never have said so explicitly.⁴⁶

Rodington believes that the absence of a real distinction between intuitive and abstractive cognition provides the basis from which to refute Ockham's hypothesis of the intrinsic causal priority of intuitive cognitions. Rodington maintains that, on the contrary, abstractive cognitions do not necessarily presuppose intuitions, for either may precede the other.⁴⁷ Man can understand what neither exists nor can exist even though he cannot intuit such non-entities.⁴⁸ This, however, could not be the case if the abstractive cognition of an object required a prior intuitive cognition of it.

The defense of Scotus against Ockham that Rodington offers here is not without its own problems. An obvious difficulty is that Rodington follows the virtually universal thirteenth- and fourteenth-century practice of interchanging "intuitive vision" (*visio intuitiva*) and "intuitive cognition" (*cognitio* or *notitia intuitiva*) in discussing sensation.⁴⁹ Yet Rodington, like Ockham, admits that sensitive intuitive cognition is not limited to the sense of sight, but occurs in the other external senses as well.⁵⁰

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24–25), where the wording of the arguments is almost completely the same as in Rodington's text; the order of the arguments differs, however. Rodington refutes the position again at the outset of *I Sent.*, d.3, q.1 (Vat. lat. 5306, fol. 62va). Its proponent is not named by either Reading or Rodington; moreover, it does not seem to be precisely the opinion that Chatton opposes, *Lectura* prol., q.2 [O'Callaghan: p. 238].

⁴⁶ If Rodington does understand a formal distinction, this would constitute a further departure from Ockham who, both at *II Summa logicae* c.2 [OPh I: p. 253 lin. 124–p. 254 lin. 152] and *I Ord.* d.2, qq.1, 6 [OTh II: pp. 17–20; 160–224], expressly limited the formal distinction to *divinis*, accepting only real distinctions in creatures.

⁴⁷ Rodington, *I Sent.*, prol., q.2 [Tweedale: p. 321]: "Ad primum argumentum pro secunda conclusione, dico quod abstractiva non presupponit necessario intuitivam;" see also n. 42, above. Similarly, adjudicative acts do not necessarily presuppose apprehensive acts (Brussels, fol. 7ra; Vat. lat. 5306, fol. 8rb): "Sextum dubium <est> si actus iudicativus et apprehensivus sunt idem actus, quod non, quia necessario iudicativus respectu complexi presupponit apprehensivum respectu eiusdem ... argumentum (*Vat. marg.* Ockham, primo <libro>) questione prime prologi) apud precedentem non concludit ..."

⁴⁸ *Ibid.* [Tweedale: p. 321]: "intelligere possum quod non est nec esse potest, sicut negationes et talia que intueri non possunt." God, of course, can intuit such, "quia non aliter cognoscit factum quam faciendam."

⁴⁹ Examples are numerous in Rodington's arguments; in addition to n. 37, above, cf. Tweedale, pp. 322–23 (Vat. lat. 5306, fols. 5vb–6rb).

⁵⁰ Given Rodington's consistent treatment of vision's operation as analogous to those of the other senses, this is the most reasonable inference. In *I Sent.*, d.3 [Tweedale: pp. 421–36], Rodington treats all the senses as equally impervious to invincible error concerning their proper objects; he is, moreover, completely explicit that there is *sensitive* intuitive cognition, contrary to Tweedale's assertion, p. 94. Thus, at *I Sent.* prol., q.2, a.3 [Tweedale: p. 328]: "Ad argumenta igitur respondeo. Ad primum, dico quod verum est quod requiritur intuitiva, puta sensitiva, et hoc sufficit propter coniunctionem potentialium <sensitivarum et intellectivarum> ad evidentiam habendam de contingenti." Rodington does reject (as a departure from Scotus) an additional *intellectual* intuition in this

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Thus, the terms range over diverse significates, and Rodington's claim that "intuitive vision" *necessarily* connotes an existent object is insufficient to show that intuitive "cognition" does too. Even if the same argument be made for each of the other senses, it is not clear that the argument would be sufficient, because the import of intuitive "awareness" (*notitia*) or "cognition" unlike that of intuitive "vision" (*visio*) was not a matter of general agreement. Hence, Rodington's argument would resolve into a solution by fiat, which is not his evident aim.

More seriously, Rodington admits that the term "corporeal vision" is itself equivocal. In addition to the meaning he has already defended, "vision" can be a synonym for the intention (*intentio*) in the sense,⁵¹ that is, "for the [object's] accident informing the instrument of the sense, which [accident] can exist although the object has been destroyed."⁵² Even if the word "vision" is understood in this manner, however, it is not accurate to speak of this accident informing the soul as a vision of that subtracted object, because when "vision" signifies this intention, it signifies precisely something absolute without signifying any relation it may have to anything else.⁵³

It nevertheless seems clear to Rodington that when Augustine held there to be no vision without an existent object, he understood "vision" in the first way, as signifying "both the act in the sense and the object existing externally." In which case, vision is no more possible without an object than "riding a horse is without a horse, or going by foot without feet."⁵⁴ The advantage of ruling out the possibility of vision without an

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life; it is not needed, Rodington insists, for the existential knowledge of sensibilia [Tweedale: p. 326]: "Primum dubium est si naturaliter habeamus de sensibilibus notitiam intuitivam intellectivam. Dicitur quod sic," whereupon Rodington lists Ockham's arguments (identified as his in Vat. lat. 5306, fol. 6vb), before responding [Tweedale: p. 328]: "Ad istud dubium teneo oppositum praedicatae opinionis. Et primo probabo quod intuitiva <<intellectiva>> naturaliter loquendo non est de sensibilibus, loquendo de cognitione viatoris."

⁵¹ I *Sent.* prol., q.2 [Tweedale: p. 331]: "Ad istud [et] primo videndum est de visione corporali qualiter accipitur aequivoce. Secundo quid ad ipsam requiritur. Tertio a quo causatur. Quarto qualiter numeratur. Quinto de proposito, <scilicet> si poterit esse <de> non existentis. De primo, dico quod visio dupliciter accipitur, sicut patet II *De Trinitate*, c.2 et 8, pro sensu informato, et sic dicit visionem et actum; alio modo accipitur ibidem pro sola intentione sensus." Rodington again identifies what remains in the senses as *intentiones* in dub.2 of the same question (Vat. lat. 5306, fol. 7rb).

⁵² Ibid. [Tweedale: p. 332; Vat. lat. 5306, fols. 7vb–8ra]: "Videtur igitur mihi dicendum pro isto quod visio potest dupliciter accipi, scilicet vel pro accidente informante instrumentum sensus, et sic potest esse visibili destructo."

⁵³ Ibid.: "Nec debet sic dici visio alicuius <Vat. marg. absolute> substantiae albedo subtractae, quia sic significat praecise absolutum sine habitudine ad aliquid aliud." Cf. also *ibid.* [p. 334], where Rodington specifies that what is seen is only a "representativum."

⁵⁴ Ibid.: "Aliter accipitur quantum ad totum quod significat et quod connotat, et si-

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existent object by definition is offered by implication in Rodington's subsequent extrapolations. If his argument is granted, vision of a non-existent becomes a logical contradiction; and as his opponent Ockham did not dispute the definition of God's absolute power as bounded by the impossibility of effecting the logically contradictory,⁵⁵ then Rodington's defense can obviate the issue of whether God could cause by his absolute power (*de potentia absoluta*) an intuitive vision of a non-existent. Such a vision, as a logical contradiction, is beyond divine power: a solution that would guarantee the existential certainty afforded by intuitive cognition without entailing any infringement of divine omnipotence.⁵⁶

When Rodington considered the issue of the object of knowledge, the two major alternatives facing him were Ockham's view that the mental proposition, to which we assent as true or from which we dissent as false, is the object of scientific knowledge, and Chatton's critique of that position. After identifying the view Chatton attacked as that of Duns Scotus,⁵⁷ Rodington proceeds to align himself with the latter, albeit with modification. He first states that he accepts Scotus's opinion that what is primarily known is the proposition, on the grounds that (quoting Scotus), "only the True is known, and only the proposition is True, as Truth consists in the [mental] composition and division [of mental terms]."⁵⁸ Pointing out that

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cut prius tractatum est, nec potest manere destructo visibili, nisi idem maneret sine se ipso, quia visio dicitur ista duo, scilicet: actum talem in sensu et obiectum existens extra. Ideo dicit Augustinus significanter non potest esse talis visio, quod ego intelligo de visione secundo modo dicta. Ista patet in exemplis, quia non potest Deus equitare facere sine equo, quia includit necessario equum; nec peditare sine pedibus, etc." Cf. also, p. 328, where Rodington responds to Ockham: "Dico quod istud <<argumentum>> procedit ex imaginatione alia quam ego habeo, scilicet quod notitia intuitiva intellectiva sit distincta ab illo quod intuetur, quod non est verum."

⁵⁵ Ibid. [Tweedale: pp. 332–33]: "nec peditare sine pedibus, etc. Istud videtur concordare cum Augustino, *De libero arbitrio* c.8, ubi probatur quod Deum non potest sic facere rectitudinem voluntatis ab ipsa, et tamen si rectitudo diceret praecise aliquid ex parte voluntatis creaturae, simpliciter posset destruere et auferre ... Sed quia rectitudo dicit plus quam aliquid ex parte voluntatis, quia connotat vel significat velle divinum, nam rectitudo illa est velle quod Deus vult ipsam velle, dico igitur quod quantum ad totum quod importat, non potest Deus destruere nec auferre, quia sequeretur contradictio, sicut patet."

⁵⁶ As was evident to the anonymous author (above, n. 32) of the *Sentences* commentary in Vatican, Vat. lat. 986, fols. 1ra–31vb. Thus (fol. 2rb–vb): "Correlarie infero quod Deus potest facere omnem notitiam intuitivam sine obiecto ... Ad hoc autem quod de facto sit notitia intuitiva sine obiecto nota argumenta Aureol, et per apparentias patet ... contra correlaria de notitia intuitiva, dicit Rodington quod ly 'intuitiva' est terminus connotativus, ita quod dicitur 'intuitiva' quando obiectum est presens, quando est absens dicitur abstractiva; et sic centies in die potest esse eadem notitia intuitiva et abstractiva."

⁵⁷ I *Sent.* prol. q.1 [Tweedale: p. 294; Brussels, fol. 2va]: "Tertium dubium, quoad eius obiectum, ubi est maior difficultas, et est hic una opinio que videtur Doctori Subtili VI *Metaphysicae* q.6, quod primum quod scitur est complexum, et sic idem est cui post adheret."

⁵⁸ Ibid.: "Preterea, tantum verum scitur; tantum complexum est verum, cum in

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among the grounds for Chatton's refusal to accept the mental proposition as the intellect's proper object, is his conviction that the intellect can contain propositions of which it is unaware, Rodington responds that this worry is ill-founded. Chatton's error lies in presupposing that the act of forming the mental proposition is distinct from the act of "apprehending" it—an act that must, moreover, by definition be intuitive.⁵⁹ By so understanding intuitions as apprehensions encompassing complex as well as incomplex objects, Rodington's denial of Chatton's position requires as well the rejection of Ockham's distinction between adjudicative acts regarding complex objects and intuitions of incomplex ones.⁶⁰ Such a distinction, Rodington thinks, renders predication inexplicable,⁶¹ hence, if one grants both Ockham's distinction and mental propositions as the objects

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compositione et divisione consistat veritas et falsitas; igitur etc." See above, chapter III, at n. 85.

⁵⁹ Ibid. [Tweedale: pp. 294–95; Brussels, fol. 2va]: "Contra (*arg.* Chatton) istam conclusionem sic: omni apprehensione complexi circumscripta, posito complexo in intellectu, natus est intellectus assentire, et non nisi rei; igitur, etc. Primum assumptum patet de demonstratione, ubi causatur assensus ex sola formatione demonstrationis. Secundum assumptum patet, quia intellectus non assentit nisi quia cognito ... Sed licet conclusio sit vera, argumenta tamen non videntur concludere. Ad primum, diceretur quod primum assumptum includit contradictionem, scilicet quod 'omni apprehensione circumscripto, posito solo complexo in intellectu, etc.' quia hoc est impossibile, quod complexum sit in intellectu et non intelligatur—et maxime tale complexum quod est conclusio demonstrationis ... Preterea, illa probatio non valet, scilicet quod non sit assensus nisi rei, quia non est assensus nisi cognito, quia necessario omnis propositio formata est cognita;" cf. also *ibid.* [Tweedale: pp. 299–300]: "dico quod tota propositio est cognitio sui, ita quod nec subiectum nec praedicatum est tota apprehensio totius propositionis. Ad argumenta contra respondebitur suo ordine postea ... Ad sextum ad idem, dico quod propositio non est nisi suae partes, et propositionem apprehendi non est nisi partes apprehendi, ita quod quaelibet pars sit apprehensio sui, cum hoc tamen stat, quod conceptiones sint simul vel in mente coniunctae ... Unde dico hic quod dicere quod duae sunt partes propositionis, vel tres, est improprius modus loquendi ..."

⁶⁰ *Ibid.*, prol., q.2 (Brussels, fol. 7ra; Vat. lat. 5306 fol. 8rb): "Sextum dubium: si actus iudicativus et apprehensivus sunt idem actus. Quod non <arguitur>, quia necessario iudicativus respectu complexi presupponit apprehensivum respectu eiusdem ... Argumentum apud precedentem <opinionem> non concludit ..." For Ockham, see above, chapter V, at nn. 12–16.

⁶¹ *Ibid.* (Brussels, fol. 5va; Vat. lat. 5306, fol. 6va): "Dicit Ockham quod veritates contingentes forte non possunt evidenter cognosci ... Contra ... predicatio est actus intellectus, et sic non potest competere rei nisi per extrinsecam denominationem. Preterea, posito sicut ponis actum reflexum distingui a recto, numquam possum predicare cognitum de incognito in actu extrinseco, verbi gratia, videndo Sortem et albedinem, et dicendo 'Sortes est albus,' hic non est predicatio obiecti de obiecto actu extrinseco, sed tantum conceptus de conceptu, qui conceptus non oportet concipi secundum predictam opinionem. Eodem modo, si concipere istos duos conceptus per actus reflexos predicaret actum reflexum de reflexo in actu extrinseco et sic non cognitum, etc. Ex hoc sequitur quod numquam affirmativa est vera ubi predicatur actus reflexus de alio, quia non pro se nec pro actibus rectis, quia unus non est alius;" also n. 72, below. Rodington may be indebted here to Campsall; see above, chapter VI, nn. 20–23.

of scientific knowledge, one would be forced to forego any ability to know scientifically whether there is any correspondence between such propositions and extramental reality.

Thus, while denying Ockham's distinction in order to preserve—against Chatton—the claim that an immediate awareness of a true proposition constitutes scientific knowledge, Rodington nevertheless concurs in Chatton's insistence that such a proposition is not the focus of one's assent or dissent. Rather, "assent is primarily of the thing itself, because assent is nothing other than the final resting of the intellect; and the intellect rests finally in nothing other than the thing."⁶² Again with Chatton, but for different reasons, Rodington repeatedly indicates that he does not consider this object of assent to be a "state of affairs." So, for example, he proposes that assent and dissent differ not on the part of the thing, but as different concepts, which rest in one-and-the-same thing.⁶³

Where do Rodington's views land him? The evidence of his recognition that Chatton's target is more directly Ockham than Scotus, is irrefutable; and here, as elsewhere on epistemological issues, Rodington deliberately rejects the Venerable Inceptor's position. Instead, Rodington urges against both, that the object of scientific knowledge and the object of assent differ; that is, as he says, "science is primarily of the proposition," specifically, "the conclusion of a demonstration," while "assent is primarily with respect to the thing."⁶⁴ In so determining, Rodington stakes out a *via media* between the positions of his two older confrères.

Because Chatton's arguments often serve as guides to the problematic aspects of Ockham's account, Rodington's understanding of the issues is at crucial junctures affected by Chatton's. What Rodington does not pursue in the latter's critique, however, is the interpretive route marked out by reading Ockham's thought through the prism of Aureol's. Drawing little connection in the Prologue between his views and Ockham's, in the

⁶² Ibid., prol., q.1 [Tweedale: p. 297]: "Dico igitur quod assensus est primo ipsius rei, quia assensus non est nisi ultimata quietatio intellectus, et in nullo quiescat ultimate nisi in re."

⁶³ Ibid. [Tweedale: pp. 296–97]: "Contra <arguitur> quod assensus non sit rei extra, quia tunc assensus et dissensus essent eiusdem rei ... Praeterea, eadem res significatur per istas propositiones, 'Deus est trinus et unus,' 'Deus non est trinus et unus' ... <Solutio obiectionis> Dicendum quod sub conceptu negativo et affirmativo assentio et dissentio eidem rei; et quando assentio et dissentio, est alius et alius conceptus, quia assensus non potest esse sine aliqua cognitione." For Chatton, see above, chapter VII at n. 84.

⁶⁴ Ibid. [Tweedale: p. 296]: "In isto articulo non videtur uniformiter dicendum de scientia et assensu, nec de notitia quam habet fidelis et de assensu suo; scientia enim est primo complexi, assensus autem primo respectu rei. Probatur: non assentio primo illi quo scio, sed illi pro quo scio. Unde potest dici quod scientia non est nisi conclusio demonstrationis in mente, quia ponam, sicut patebit infra, quod ipsa cognitio sit ipsa propositio cognita per eandem cognitionem, et illa scientia erit propositio scita."

questions on the second book Rodington reveals an at least indirect acquaintance with the Parisian Franciscan's theory of knowledge.⁶⁵ There, however, Rodington does not confront Aureol's definition of intuition and abstraction, but rather the hypothesis of the "apparent" or "objective being" formed by the intellect in the course of cognition. Such fictive entities, Rodington thinks, are superfluous; they are not required to represent the object to the intellect, because the object is known before being "placed" in such being.⁶⁶ Moreover, if reflexive intellectual acts of considering the objective beings themselves are taken into account, then the creation of objective beings *ad infinitum* cannot be ruled out analytically.⁶⁷ Finally, as Rodington endeavors to show along with Chatton, whom he quotes at one point, the experiential evidence adduced in

⁶⁵ II *Sent.* d.1, q.3, a.3, dub.4 (Brussels, fol. 88ra–rb): "Item aliud dubium est utrum intellectio ponat illud quod intellegit in aliquo esse obiectivo. Et probatur quod non sit dare aliquod esse fictum ..." Although this manuscript does not provide Aureol's name, there can be no doubt that the position enunciated in d.3 of his *Scriptum* (above, chapter IV, nn. 16, 19–23) is at issue here (fols. 88rb–va): "Sed contra istam opinionem arguitur per experimenta. Primo autem arguitur sic: non minus ponit intellectus obiectum suum in esse distincto quam actus sensus ponit suum obiectum in tali esse; sed iste facit hoc. Conclusio igitur patet, quia cum quis <portatur> in aqua, arbores in ripa videntur moveri. Ipse motus non est ipsa visio, etc., nec est in ripa, nec in aere; igitur est intentionaliter in esse viso. Similiter est de baculo fracto secundum apparentiam in aqua. Preterea, ex motu virge ignite videtur circulus igneus fieri ex baculo sic moto, et ille circulus non est in baculo, quia ille est rectus; nec in aere, quia aer non est coloratus. Preterea, de dualitate candelarum apparentium suo oculo elevato; sunt enim due candeles in esse apparenti et non est nisi una in esse reali. Preterea, <de> coloribus in collo columbe. Preterea, de ymaginibus que videntur in speculo, aliquando infra [sed in] speculum, aliquando in superficie speculi, aliquando extra in aere inter videntem et speculum, secundum quod sunt diversa loca ymaginis. Preterea, qui videt solem <apparent> quedam reliquie que paulatim evanescent. Preterea, aspicientes aliqua alia postquam aspexerunt multa rubea apparent eis rubea vel cancellata; et certum est quod non sunt talia in esse reali. Preterea, aliter non esset aliqua ludificatio; consequens falsum. Preterea, timidis audientibus sonos apparent terribilia." In I *Sent.* prol., q.2 [Vat. lat. 5306, fol. 6va], arguing against Ockham, Rodington notes: "Item secundo contra secundum dictum de esse obiectivo, non videtur rationabilis opinio, sicut alibi patebit. Preterea, sequitur quod adhuc inter predicatum et subiectum talis propositionis possit avis volare, quia illud esse obiectivum videtur esse in re extra."

⁶⁶ *Ibid.* (Brussels, fol. 88rb): "Preterea, non poneretur tale esse obiectivum propter representationem, quia prius intelligitur quam habet tale esse; nec propter causationem, quia actus est prior; nec propter terminationem actus, quia cognitio est prior tali esse ... Preterea, tunc nihil crearetur, quia illud cuius aliquod esse preedit suum produci non creatur, sed si producatur creatura et aliquo esse antequam sit, tunc aliquod esse suum preedit suum produci; igitur non creatur. Similiter implicat contradictionem, quia implicat quod sit antequam fit."

⁶⁷ *Ibid.* (Brussels, fol. 88rb): "Preterea, intelligendo unum obiectum produceret in fundatione obiectiva, quia cognoscendo lapidem producitur unum esse obiectivum, et illud esse ipse intelligit; igitur intelligendo illud producat aliud esse obiectivum; et sic in infinitum. Preterea, eadem ratione qua lapis habet in intellectu esse obiectivum, et sic semper minus et minus erit esse obiectivum, et per consequens erit dare esse obiectivum minus minimo esse obiectivo."

support of the posited "objective being" can be explained equally well as the effects of species.⁶⁸

Rodington's arguments for this claim establish that his references throughout the Prologue to his conviction that "concepts are natural similitudes or images of the objects they represent to the intellect,"⁶⁹ should be understood as implying at its root a commitment to the Baconian multiplication of species. Rodington himself treats the analysis of intuitive and abstractive cognition as part of an account of corporeal vision, from which the functioning in this life (*pro statu isto*) of man's intellectual faculties can be extrapolated. Corporeal vision is, in fact, a process to which Rodington expresses the hope of returning to provide a more systematic treatment:

It is clear what should be said concerning corporeal vision. There are many doubtful issues (*dubia*) concerning this material, but perhaps they will be treated elsewhere. The first is how the sense of sight excels all other senses. The second is whether vision is distinct from the species caused in the [sense of] sight. Third, whether [vision] is extensive. Fourth, whether vision occurs through extramission or through receiving something inside. Fifth, whether the visual power is located outside in the surface of the eye, or inside in the optic nerve. Sixth, if the vision itself can be sensed; [and] seventh, whether the object of the sense [of sight] is light or color.⁷⁰

If he never had the opportunity to examine these issues exactly as he sets them out here, Rodington nevertheless did deal with most of them in

⁶⁸ Ibid. (Brussels, fol. 88va): "Ad solutionem omnium istorum, pono istam conclusionem superius in primo <libro> probatam, quod scilicet nullus sensus exterior decipitur; sed deceptio tota est in sensu interiori ... Sed hoc <i.e., dubitare> facit principalis sensus interior, qui non scit bene distinguere inter rem et rei similitudinem. Ad argumentum primo dico quod species primo videtur, et deceptio <est> in fantasia et non in sensu exteriori, quia in illo quod vides non deciperis, sed illud est species, et quando hoc recedit ab arbore, apparet arbor moveri ad aliam partem (sicut est in speculo), et quando appropinquat, videtur appropinquare, unde in recidendo causatur species in maiori distantia ... Vel potest dici sicut dicit quidam, quod ibi sunt distincte visiones et propter diversi sensationes sibi succedentes videtur quod arbor moveatur ...". The "quidam" to whom Rodington refers is Chatton; see above, chapter VII, nn. 43–44. Rodington's reference to his own earlier treatment is to I *Sent.* d.3, q.3 [Tweedale: p. 425–27].

⁶⁹ I *Sent.* prol., q.2, a.2 [Tweedale: p. 311]: "Intellectus non habet conceptum alicuius nisi sui obiecti, cuius est naturalis similitudo; sed similitudines non sunt alterius rationis, nisi representata per ipsas sint alterius rationis, quia quod similitudines sint alterius rationis non habet nisi ex extremis; igitur, etc.;" again, *ibid.*, pp. 312, 317.

⁷⁰ Ibid. [Tweedale: pp. 333–34; Vat. lat. 5306, fol. 8ra]: "Patet quid dicendum est de visione corporali. De ista materia essent multa dubia, sed alibi forte tractabuntur. Primum, qualiter sensus visus omnes alios sensus excellit? Secundum de visione, an sit distincta a specie causata in visu? Tertium, si sit extensiva? Quartum, si visio fiat per extramissionem vel intus susceptionem? Quintum, si virtus visiva sit exterius in superficie oculi vel interius in nervo optico? Sextum, si ipsa visio poterit sentiri? Septimum, si obiectum sensus sit lux vel color?"

other sections of his *Sentences* commentary, particularly in the first two questions of the third distinction of the first book.⁷¹

This distinction provides the familiar locus for the extended analysis of human psychology in this life. Inquiring into the intellect's activity or passivity in acquiring knowledge, Rodington asserts that if, as some suppose, the object were the total cause of intellection, effecting it through the agency of a species or phantasm, then propositions could never be caused in the intellect. There are on his view, after all, no extramental propositions in reality to generate such species.⁷² Yet the opposite view accepting the intellect as the total cause of its cognitions, is equally unacceptable to Rodington, who points out that it is also contrary to Augustine. Hence, it is to the third possibility, "which is the Subtle Doctor's opinion," that Rodington adheres: intellection is effected "by both [object and intellect] as by two causes such that neither can [achieve] such an effect without the other—not, [that is,] like two moving a boat, but rather like mother and father."⁷³

This constitutes at least an implicit avowal of the multiplication of species as the causal mechanism in sensation, and thereby in intellection. In the following question, Rodington takes up the defense of species, and in the course of the discussion indicates his answers to most of the "doubtful issues" proposed in the Prologue.⁷⁴ Turning first to the objection that

⁷¹ Tweedale edits I *Sent.* d.3, q.3, in his pp. 420–37. The first two questions of the distinction occupy fols. 62va–70ra in the Vatican manuscript, and fols. 47ra–52vb in Brussels; I have not found any other extended discussion of these dubia in Rodington's commentary. As the following will show, Tweedale overstates (as, e.g., at his p. 110) Rodington's interest in a logical rather than psychological account of cognition. On the contrary, and with the majority of his colleagues, Rodington shared the goal of establishing a systematic psychology and epistemology.

⁷² I *Sent.* d.3, q.1 (Brussels, fol. 49ra; Vat., fol. 64va): "Quantum ad tertium articulum, movebo dubia. Primum: si intellectus sit causa activa sue intellectionis. Hii sunt tres opiniones. Prima, quod obiectum sit tota causa intellectionis; secunda, quod intellectus; tertia, quod ista duo consistunt unam causam totalem. <Arguit> Doctor <Subtilis> contra primam sic: illi de ista opinione ponunt quod species vel phantasma supplens vicem obiecti est causa totalis intellectionis. Tunc arguo: sequitur quod numquam causaretur intellectu propositio ..." See also (against Ockham) I *Sent.* prol. q.2 (Vat. fol. 6va): "Non videtur quod aliquod predicabile sit res, quia sic propositio componeretur ex rebus, quod non videtur, quia propositio non habet nisi triplex esse secundum Boethium super librum Perihermenias. Preterea, si res predicaretur ... sic subiectum posset comedere predicatum, <et> formando quod 'homo non est avis,' similiter avis posset volare inter predicatum et subiectum."

⁷³ I *Sent.* d.3, q.1 (Brussels, fol. 49rb–va; Vat., fol. 64vb–65rb): "Secunda opinio est quod intellectus est tota causa activa <intellectionis> etc. Contra hoc Augustinus ... Tertia opinio est Doctoris Subtilis, et est quam teneo, quod est <quod intellectio causatur> ab utroque ut a duabus causis, ita quod neutra potest sine alia in effectum talem—non sicut duo trahentes navem, sed sicut pater et mater. Vide in eodem libro, distinctione tertio." For Scotus, see above, chapter III, n. 49.

⁷⁴ Listed in note 70 above.

there are no intelligible species distinct from acts or habits, he responds by citing Scotus's rebuttal of Henry of Ghent's arguments. As Scotus had insisted, some remnant persists in the cognitive power after sensation, for the "order," i.e. process, of cognition is such that:

The [sensitive] vision itself is *immediately* caused by a species in the body and by the visual faculty. Afterwards, from that vision or from something left in the [sense of] sight after that vision, and from the phantasy, an image or 'actual phantasy' is caused. And from that 'actual phantasy,' in turn, or from something left in the phantasy, and from the agent intellect, an intellection is caused.⁷⁵

Rodington emphasizes that this means that vision is caused by an object's sensible species acting in concert with the visual faculty; but the impression of that species generates vision itself rather than some first species prior to the faculty's act. In other words, Rodington explains, the species in the sense is identical to the vision caused by the impression of the species in the medium.⁷⁶

While this claim yields a response to the second doubt advanced in the Prologue, whether vision is distinct from the species caused in the sense of sight,⁷⁷ the ontological problem thereby arises, whether the species, which is vision when in the sense, differs essentially from the species in the medium. If not, then does it not follow that the medium is formally seeing, that is, a sentient being?⁷⁸ Rodington responds instead that even if one held the species in the medium and those in the sense to be essen-

⁷⁵ I *Sent.* d.3, q.2 (Brussels, fol. 51ra–rb; Vat., fol. 67rb–vb): "Sed contra istam conclusionem <quod in nulla intellectione sit dare in intellectu speciem primam distinctam ab actu et habitu> arguitur a Doctore Subtili sic ... Potest dici quod ibi est talis ordo quod ipsa visio immediate causatur a specie in corpore et a potentia visiva; postea ex illa visione sive ex aliquo derelicto in visu post visionem cum virtute fantastica causatur ymago sive fantasia actualis; et ex ipsa fantasia actuali vel ex aliquo reliquo in virtute fantastica cum intellectu agente causatur intellectio."

⁷⁶ Ibid. (Brussels, fol. 51rb; Vat., fol. 67vb): "... ita quod non pono speciem primam ante actum in illa potentia cuius est actus. Et ex illo relinquitur aliquid in illa potentia modo iam dicta <supra, n. 75>, quod relictum potest vocari 'species' vel 'habitus' ut placet loquenti. Sic videtur imaginari Augustinus XI *De trinitate*, c.9 in principio ... Ex isto videtur quod visio causatur a specie corporis, per quam intellego albedinem vel nigredinem cum potentia visiva ... et sic ista visio in sensu causat aliquid in memoria." Holcot later made a similar point; cf. chapter IX, at n. 19.

⁷⁷ See n. 70 above.

⁷⁸ I *Sent.* d.3, q.2 (Brussels, fol. 51rb; Vat., fol. 68ra): "Adhuc contra unum dictum superius <allegatum>, scilicet quod species in sensu sit ipsa visio <arguitur>, quia aut illa est eiusdem rationis cum specie in medio, aut alterius. Si primum, igitur cum ipsa sit visio, et illa de medio erit visio; et sic medium erit formaliter videns. Si dicas quod preter istam que est in sensu que ponitur visio, sit alia alterius rationis ab ea et eiusdem rationis cum illa que est in medio, habetur propositum, quia licet illud quod est visio sit species, tamen aliam oportet dare primam."

tially the same, it would be fallacious to conclude that the medium itself sees the object, since the medium is innately incapable of seeing. Reminding his audience that Scotus had made this point, Rodington suggests that this was the chief motivation for Scotus's rejection of the view of the soul as the form of the body.⁷⁹

What Rodington does not note, however, is that the very objection to identifying species in the sense as vision is Scotus's own, quoted verbatim.⁸⁰ In fine, by granting the essential difference between the species in sense and in medium, Rodington adopts the position Scotus had refuted. Further, Rodington implies that claiming that there is no "first species" in the visual faculty preceding vision in no way entails the denial of prior "first species" in the medium between the object and its percipient. He presumably objects to their denial in the medium as a vitiation of the thesis that species multiply themselves.⁸¹

Is it nevertheless not inconsistent to argue as Rodington does that there is a multiplication of species in the medium such that there can be "first species" prior to any given species, and yet to deny such "first species"

⁷⁹ Ibid. (Brussels, fol. 51va; Vat., fol. 68ra): "Aliter, sic posito quod ipsa species <in medio> et visio sint eiusdem rationis, non sequitur quod si ista species sit in medio quod medium videret, quia in medio ista species non est visio. Contra: visio est ibi igitur denominat. <Responsio> Concedo quod denominat; non isto modo quod sit videns, sed quale Aristoteles II Topicorum 2 negat istam consequentiam 'albedo inest homini, igitur homo est albus,' quia si sit albus secundum dentes, est verum antecedens, et in consequente est fallacia secundum quid et simpliciter. Sed in talibus sit denominatio tertia, secundum quod respondet Doctor Subtilis, destructa media parte alba, et destructa media parte nigredinis, quia vel quod est album (quod non conceditur) vel quod ei inest albedo vel quod habet albedinem (et iste possunt concedi). Ita hic tria: vel quod medium sit videns, quod non; vel ei inest visio vel quod habet visionem, que duo possunt concedi. Per hoc patet ad argumentum quod maxime movebat Iohannem ad ponendum quod anima non erat forma corporis ..."

⁸⁰ Immediately after the arguments of n. 78, above, Rodington quotes against his own view: "Si dicatur quod species que est in medio differt ab illa que est in visu propter diversa recipientia, falsum est, quia sicut equus et lapis sunt formaliter alba secundum eandem rationem albi, ideo si illa qualitas que dicitur 'species' sit eiusdem rationis in medio et in oculo et dicatur de se 'visio' formaliter, visio formaliter erit in utroque. Preterea, in oculo caeco remanente tamen sic mixto et in oculo dormiente causaretur species, nec execaretur ab excellenti sensibili—et tamen non est ibi visio." Cf. Scotus, I *Ord.* d.3, p.3, q.2 [balic * III: pp. 282–84].

⁸¹ Ibid. (Brussels, fol. 51va; Vat., fol. 68ra): "Ad primum istorum ... dico sicut prius quod ad visionem non oportet dare speciem in oculo, quamvis in alio <sensu>, quia <species> in medio—que est species extra—cum potentia visiva causat visionem, et ita quod visio ista est alterius rationis a species illa. Et quando dicitur, 'oportet dare aliam speciem primam quam visionem,' concedo in medio, sed non in sensu. Unde sciendum quod Augustinus XI *De trinitate* c.2 aliquando vocat visionem 'speciem delatam ab obiecto' ad sensum, vel dicit quod 'a solo corpore quod videtur gignitur visio.' Et sic dicendo species corporis quod videtur non accipitur pro albedine vel nigredine, sicut prius dictum est, sed pro specie causata ab eisdem in medio, que partialiter causat visionem." Cf. Scotus, I *Ord.* d.3, p.3, q.2 [balic* III: 250–51, 290] and above, chapter III, nn. 14–15.

in the visual faculty prior to vision? Recognizing the difficulty, he asserts that whatever is the case in the other senses, because the external species requires the assistance of the *internal* visual faculty to cause vision, no species is impressed on the eye itself. More exactly, Rodington stresses, "I do not locate vision [i.e. the species in the sense] in the exterior surface of the eye, nor in the organ of sight, but within in some nerve"—that nerve, as he elsewhere specifies, being the optic nerve.⁸²

At first glance this may seem an opaque response, intended to hint at Rodington's resolution of the Prologue's first and fifth "doubtful issues," by distinguishing the sense of sight from other particular senses, and by dismissing the impression of species on the surface of the eye.⁸³ Rodington does not intend here merely to evade the acknowledged difficulty, but his motivation for denying species in the external organ is only belatedly clarified. In the course of the next article of the question, Rodington supplies his rationale by implication. If it can be argued that the existence of the species in the medium does not render the medium a sentient being on the grounds that the medium is not innately sentient, such an argument would be patently more difficult with respect to the external sense organ, in this case the eye. Yet if one were to grant the species in the eye, one could not insure the claim that there is no first species distinct from and prior to vision, except by locating that vision itself in the eye. The last step is undesirable, not least because given the ambiguous nexus of sensitive and intellectual vision that Rodington like his sources never entirely unravels, positing vision in the eye itself would appear to commit one to locating intellection in the eye. This is the ultimate issue behind the Prologue's third doubt concerning whether vision is innately "extensive."⁸⁴ Rodington's greater concern, however, is to defend the multipli-

⁸² Ibid. (Brussels, fol. 51va; Vat., fol. 68ra): "Ad secundum, non pono visionem in exteriori superficie oculi, nec in organo visus, sed interius in aliquo nervo. Et sic non sequitur: si ponatur species in pupilla alterius, igitur speciem primam in sensu, vel sic quod concessio quod species sit visio, diceretur quod vel causaretur quousque vigilaret, et posset recipere visum quantum ad cecum;" *ibid.*, a.2, dub.7 (Brussels, fol. 52rb–va; Vat., fol. 69rb): "Contra: sensibile positum supra sensum non sentitur, et sic talis species in pupilla non videretur ... Aliter <respondeo> sic: quod verum est si poneretur immediate super organum in quo est virtus visiva, quod non pono, quia pupilla non est <tale> [universale] organum, sed nervus opticus est infra," a point Rodington repeats, *ibid.* (Brussels, fol. 52va; Vat., fol. 69rb–va): "Octavum dubium: si utriusque oculi sit unus actus videndi ... Ex isto sequuntur alique conclusiones. Prima: quod duorum oculorum communiter est unus actus videndi ... Tertia: quod visio non est in pupilla, cum sint due pupille, idem inconveniens."

⁸³ See above, n. 70.

⁸⁴ I *Sent.* d.3, q.2, dub.3 (Brussels, fol. 51vb; Vat., fol. 68va): "Ideo aliter dicitur quod intellectio presupponit actionem virtutis sensitive in illo cui competit illi, igitur parti cui non competit operatio virtutis sensitive non competit intellectio. Contra: in pede est

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cation of species as a successful causal explanation of the physics of vision and the representative aspects of knowledge without incurring the recognized disadvantages of representation.

The objections to species as representatives that Rodington considers had by his time become standard. It had become virtually *de rigueur* to object—as, for instance, Olivi and Ockham each had—that a species would lead first to knowledge of itself rather than directly to knowledge of the object. Rodington simply concurs: a species does indeed lead first to cognition of itself.⁸⁵ Moreover, he proposes that far from being a disadvantage of the theory, this fact renders explicable a range of phenomena as, for example, double images of an object when viewed from certain angles, or the illusion of a flaming circle.⁸⁶

A further difficulty of the theory long generally admitted, seemed to be incurred by defining the species as an object's accidents. Rodington briefly wonders how species can represent the object's substance, since substance and accidents differ innately.⁸⁷ In answer, he distinguishes

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sensus tactus, etc. Ex visione sequeretur quod oculus intellegeret, et ideo dicitur aliter quod intellegere non tantum presupponit operationem virtutis sensitive, sed et operationem virtutis ymaginative. Et y maginatio non est in pede, nec in manu; ideo intellectio non potest igitur esse. Contra: tunc cerebrum vel organum ymaginative intellegeret. Ideo aliter sic: quod ponendo sensitiva et intellectiva formas distinctas in homine, quod aliter dicendum est de formis extensis et de aliis non extensis, quia actio forme extense competit parti in qua est, sicut de sensitiva et appetitive." See below, nn. 90–91, and Wodeham's discussion, below, chapter X, at nn. 20–21, 59. In refusing to locate vision in the eye itself, Rodington contravenes Ockham, III *Rep.* q.3, a.1 [OTh VI: pp. 105–14].

⁸⁵ Ibid. (Brussels, fol. 51va–vb; Vat., fol. 68rb–va): "Secundo, si esset talis species ponenda, prima duceret in cognitionem sui, cum sit intelligibilis ... Ad secundum, concedo consequentiam seu conclusionem, scilicet quod intellectio ducit primo in cognitionem sui."

⁸⁶ Ibid., dub.5, concl. 2 (Brussels, fol. 52ra–rb; Vat., fol. 69ra–rb): "quod species sit primum obiectum visus. Sive sit vera sive falsa, probatur: ponatur quod sol transeat per vitrum rubeum et veniat radius usque ad parietem album. Tunc videns rubedinem aut igitur <videt> speciem delatam, et <habetur> propositum; aut albedinem, quod non videtur, quia tunc albedo esset vel videtur rubedo nec album colorem, per positum, etc. Secundo, post excellens sensibile amoto obiecto, manent reliquie in oculo, et videtur per Augustinum II *De trinitate* c. 2, 'si ubi species,' etc. Preterea, respectu alicuius obiecti actus elicitur, et non nisi respectu speciei in casu <posito>; igitur etc. Preterea, si videtur primo res extra, puta albedo, hoc non est nisi quia species representat ipsam. Cum, igitur, illa species possit causari quasi ab infinitis partibus illius albedinis, qua ratione representaret unam partem et aliam, et sic omnes <partes> viderentur simul una visione. Preterea, si sic, et tunc semper videretur obiectum loco ubi est obiectum; patet, si videretur cum angulo et homo elevet oculum, videbitur quod sint duo et in duobus locis, tamen non est nisi in uno ... et non nisi species. Preterea, in circulo igneo, cum iste ignis parvus non sit in toto circulo, contra te est qui ponis esse obiectum. Non dico quod non, quia nullum pono quin sit substantia vel accidens et quin sit alicubi—et de hoc alias." See also n. 65 above. Here, in alluding to point-by-point radiation, and n. 82 above, Rodington relies on perspectivist views so familiar to his contemporaries that he need not specify their source.

⁸⁷ Ibid. (Brussels, fol. 51vb; Vat., fol. 68va): "Secundum dubium: qualiter intellego

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two sorts of similitudes, namely natural likenesses such as between individuals of the same species, and the likeness of a sign to its significate. Rodington claims that the difficulty originates in misconstruing the similarity between objects and their species as an instance of natural likeness. Mentioning in passing that Campsall had so misunderstood the sense in which species can be termed "likenesses" of their objects, Rodington insists instead that the relationship is of a sign to the thing it signifies.⁸⁸ Although not entirely useful, and even a contradictory element in his own account, the introduction of such precision in the notion of similitudo marks in Rodington's discussion as in Lawton's an important conceptual step in developing a causal connection between object and mental sign while diminishing the commitment to knowledge by representation.⁸⁹

The problems arising from accepting species as a representative required in vision constitute the first of a series of "doubts" about vision structuring the second article of the question. Their most noticeable feature is their systematic range, for they focus on the epistemological and psychological ramifications of visual theory as extensively as would be more usual in a *De anima* commentary.⁹⁰ Once again Rodington departs from Scotus, for despite some positions with easily discernible—and occasionally admitted—sources in the latter's *Ordinatio*, Rodington is ultimate-

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quod species, cum sit accidens, representet substantiam, cum sit dissimillima in natura?"

⁸⁸ Ibid. (Brussels, fols. 51vb–52ra; Vat., fol. 68va–vb): "Dicitur quod quedam est similitudo in natura, sicut inter ea que sunt eiusdem speciei, alia est ut signi ad significatum, per quam est species similis substantie ... Ad sextum dicit Campsall quod probabilius est poni eiusdem speciei et eque similes similitudine nature, non signi ad significatum—sed quare ex quo sunt similes in natura, quia representatur per unam et per aliam. Dicitur quod per aliam distinctionem accidentalem in eis, sicut Sortes et Plato sunt eiusdem speciei, tamen propter aliam distinctionem accidentalem aliquid competit uni et non alteri, ut currere. Contra: tunc omnes habitus essent eiusdem speciei, si habitus generaretur ex actibus ... quod non videtur. Preterea, illud per quod distinguitur una cognitio ab alia, aut est cognitio, aut non. Si sic, non est accidentaliter illi cognitioni, et sic per hoc non distinguitur accidentaliter; si non, tunc cognitio includit non-cognitionem, cum sit qualitas in anima simplex." Rodington returns to Campsall's understanding of similitudo again, d.30 (Brussels, fol. 81vb–82ra).

⁸⁹ See above, nn. 24–26.

⁹⁰ Thus, the further dubia that Rodington treats in I *Sent.* d.3, q.2 include (Brussels, fols. 51vb–52vb; Vat., fols. 68va–69vb): "Tertium dubium: cum intellectio sit in pede, quia anima intellectiva <est ibi>, quare pes non intelligit? ... Secundum dubium: de visus excellentia ad alios sensus ... Si visio gignitur ex vidente et visibile ... Sextum dubium: si visus reflectatur super actum suum ... Septimum dubium: si manet aliquid in viso post actum videndi ... parva dubia: qualiter sunt duo actus quando lucerne flamme variantur ... qualiter uno oculo clauso est una visio ... Nonum dubium: an <visio> moveatur ad actum per voluntatem ... Decimum dubium: quot modis de rebus visibilibus possumus iudicare ... Undecimum dubium: si species ponatur in intellectu distincta ab actu et habitu, an possit corrumpi?" Oxford *De anima* commentaries from the 1320s have not been the object of scholarly attention, and they may prove a fruitful—if rare—source for Rodington's choice of issues.

ly not engaged in defending the theory of the multiplication of species as mediated by Scotus. In this he differs from Chatton, and if Rodington considers himself a follower of Scotus, as he appears in the Prologue to do, his departures here from the Subtle Doctor's views are too significant to cast him as one.

Some of the issues on which Rodington departs from Scotus reflect a direct acquaintance with perspectivist theory, even if Rodington here names no perspectivist names. Thus, he affirms that the immediate subject in which vision inheres is the corporeal instrument of sensation, and that vision, i.e. the species in the sense, is not merely spiritual, but as Bacon had insisted, "in some way corporeal."⁹¹ Rodington reiterates the Prologue's affirmation of the capacity of species to be preserved after the act of vision, but denies that this permits vision of a non-existent.⁹² He hazards also that the sense of sight is capable of reflexive acts as, for instance, in calculating the distance of the extramental object when perceived.⁹³

More significantly, as evidence that vision is achieved not in the surface or, alternatively, in the pupil of the eye, but rather in the optic nerve,

⁹¹ I *Sent.* d.3, q.2 (Brussels, fol. 52ra; Vat., fols. 68vb–69ra): "de immediato subiecto actus videndi, dico quod subiectum immediatum [etc.] est aliquod instrumentum corporeum. Patet per Augustinum, II *De trinitate* c.2, ubi dicit quod quamvis non sentiat corpus ex anima, anima tamen coniuncta corpori per instrumentum sentit corporeum, et illud instrumentum 'sensus' vocatur. Igitur, posito quod totum non sit aliud a partibus, difficile est tenere <oppositum>. Ex isto sequuntur aliquae conclusiones: prima, quod visio non sit accidens spirituale pure, sed aliquantulum corporale ... secunda, quod visio sit extensa, quia nihil videtur in corpore esse subiective nisi extensam. Tertia, quod anima separata non potest videre tali visione, quia talis non retinetur nisi in organo corporis informato sensiti-va. Quarta conclusio: non omne accidens habet substantiam ita simplex sicut ipsum est ... quinta: quod visio non est intellectio, ut alias dixerunt." For Bacon, see above, chapter I, nn. 63–64; for Scotus, see above, chapter III, n. 14.

⁹² *Ibid.* (Brussels, fol. 52ra; Vat., fol. 69ra): "Quartum dubium: si visus potest habere actum respectu non existentis. Dicit Augustinus II *De trinitate*, c.2, quod destructa re que videtur, non est nec potest inesse visio. Sed sunt duo parva dubia, quia videmus celum et solem moveri. Sed visio est in instanti motus; igitur visio est non existentis. Secundo, quia quicquid potest Deus facere cum causa secunda, et <potest> sine ea; igitur, sine obiecto potest <causare visionem>. Ad primum, quod motus, si videatur, videtur in tempore sicut esse habet in tempore et non in instanti—et sic dicitur quod visio est successive. Ad secundum, concedo quod potest facere illum actum vel illam rem, sed non erit visio." See also Rodington's response to *dub.7* above, n. 82; for the discussion in the prologue, cf. nn. 37, 54–55 above.

⁹³ *Ibid.*: "Sextum dubium: si visus reflectatur super actum suum. Quod non per Augustinum ubi prius ... <Contra> Ex hoc videtur quod species corporis prius videatur, quia dicit quod tanta est propinquitas inter formam visivam et illam per quam videtur quod non potest distingui. Et cum nunc autem non est magna propinquitas inter formam per quam videmus et obiectum extra, et hoc dico semper, quia potest videri ad magnam distantiam, licet ista conclusio sit satis conveniens, potest tamen responderi quod duplex est distantia, scilicet distantie—et de tali non loquitur Augustinus—et de similitudine ..."

Rodington adduces the Galenic cavil that there would otherwise be two acts of vision. His source is not clear. Whereas the Baconian theory instead followed Alhazen in taking the glacial or crystalline humor of the eye as the initial locus of vision, Scotus alludes to illusion occurring in the "confluence of the [optic] nerves." He did so in a more general context, but one Rodington surely knew, to judge by his quotation of it in a later question.⁹⁴ But if he derives this view from Scotus, it is unlikely that Scotus is the source when Rodington grants that vision requires, presumably in addition to the intromission of species already established, the ex-tramission of visual rays. On this score, he is following neither Alhazen, who refuted extramission, nor Scotus who ignored it. Rodington's most plausible source is either Bacon or Pecham who, in the pursuit of synthesis, had welded the extramission of visual rays supported by Augustine to Alhazen's intromissionist theory.⁹⁵ Rodington's embrace of this aspect of the Baconian synthesis, unusual after Olivi's scorn, bespeaks a fundamental commitment to the psychological statements of Augustine.⁹⁶

This last may explain why, despite his detailed exploration of vision and the psychological processes based on it, Rodington's loyalties seem to rest with Scotus only insofar as they concur on the proper understanding of Augustine. If so, Rodington's departures from Scotus cannot be explained as having been stimulated by Ockham. Indeed, Rodington's attitude in the third distinction towards Ockham is unexpected. Not only does Rodington deal with issues the latter had not raised, but he ignores most of Ockham's *Reportatio* treatment of species. Although his views are cited by name, it is far from obvious that in the third discussion Rodington's chief contention is with the Venerable Inceptor at all.⁹⁷ Even when considering whether vision can be of a non-existent, Rodington's interest lies primarily in the Augustinian and perspectivist question of the perception of time and motion.⁹⁸ Rodington's explicit disagreements with con-

⁹⁴ Compare nn. 82, 93 above, and I *Sent.* d.3, q.3 [Tweeddale: p. 425] to Scotus, as quoted above, chapter III, n. 87. That Rodington knew the latter passage is evident from his discussion in I *Sent.* d.2, q.1 [Tweeddale: pp. 391–92]. On the significance of the controversy over the location of vision, cf. Lindberg, *Vision*, pp. 110, 176.

⁹⁵ Above, chapter I, n. 43. Lindberg discusses Bacon's lead and Pecham's acquiescence in the retention of visual rays, *Vision*, pp. 115, 117–18.

⁹⁶ Above, chapter II, n. 42.

⁹⁷ In I *Sent.* d.3, q.1, a.1 (Brussels, fol. 48rb) Rodington returns to Ockham's views on the primary object of scientific knowledge; nevertheless, in explicating vision, Rodington does not mention him. Moreover, Rodington does not raise the question of whether species are to be posited at all (rather than whether sensible species in the senses are identical to the acts of the senses); nor does he address the concomitant issues that Ockham had posed in defending action at a distance and the adequacy of cognitive habits in lieu of species.

⁹⁸ In addition to n. 92 above, see chapter I, at nn. 58–60.

temporaries are few in his questions on the third distinction. It is nevertheless plausible that, as with many unheralded quotations from Scotus, Ockham, or Chatton throughout the commentary, here too Rodington covertly incorporates contemporary disputes. If so, the "doubtful issues" he analyzes imply an ongoing debate at Oxford concerning vision, one in which Ockham had simply been a participant, rather than the single most important catalyst.

Richard FitzRalph

Another participant was Rodington's contemporary, Richard Fitz-Ralph, who was the most significant secular theologian to lecture on the *Sentences* at Oxford during the second half of the 1320s, and one whose views were of considerable interest to the generation of students who would present their own lectures in the opening years of the 1330s.⁹⁹ The stages of FitzRalph's academic career are unusually easy to trace, thanks in large measure to the rich documentation left by his patron, John Grandisson, bishop of Exeter. These records pinpoint the academic year 1328–29 for FitzRalph's stint as bachelor of the *Sentences*.¹⁰⁰ Although he would not

⁹⁹ Wyclif's modern editors first rediscovered FitzRalph, whereupon his career became the subject of a series of articles by Aubrey Gwynn, in *Studies*, 22–23 (1933–34), and his *English Austin Friars in the Time of Wyclif* (Oxford: 1940). These, together with K. Michalski's "Le problème de la volonté à Oxford et Paris au XIV siècle," (1937; repr. in Michalski, *Philosophie*), established FitzRalph's reputation as a central figure at Oxford. Since then, FitzRalph's *Sentences* commentary and its influence have been considered in J.A. Robson, *Wyclif and the Oxford Schools* (Cambridge: 1961), pp. 70–96; and G. Leff, *Richard FitzRalph, Commentator of the Sentences: A Study in Theological Orthodoxy* (Manchester: 1963). Katherine Walsh's otherwise magisterial *A Fourteenth-Century Scholar and Primate: Richard FitzRalph in Oxford, Avignon, and Armagh* (Oxford: 1981) relies primarily on Leff and Robson for her appreciation of FitzRalph's thought while at Oxford. None of these studies successfully explicates FitzRalph's intellectual relation to his Oxford contemporaries and sources. Other important discussions of FitzRalph include: L.L. Hammerich, "The Beginning of the Strife Between Richard FitzRalph and the Mendicants, with an edition of his autobiographical prayer and his proposition *unusquisque*," *Del Kgl. Danske Videnskabernes Selskab. Historisk-filogiske Meddelelser* 26 (1938); Jean-François Genest, "Le *De futuris contingentibus* de Thomas Bradwardine," *Recherches Augustiniennes* 14 (1979), 249–336.

¹⁰⁰ Grandisson's register is edited in F.C. Hingeston-Randolph, *The Register of John Grandisson, Bishop of Exeter, 1327–69*, 3 vols. (London: 1894–1899). In a letter issued sometime after May 17, 1328 [*Register* I: 173], bishop Grandisson referred to FitzRalph still as "magister <artium>" as K. Walsh correctly noted, "The Later Medieval Schoolman in Theory and Practice," *Innsbrucker historische Studien* 2 (1979), p. 174; idem, *FitzRalph*, pp. 4, 44–45. As she also noted, Grandisson wrote on his behalf in October, 1329, [*Register* I: 233]: "... Magistrum Richardum filium Radulphi, virum utique preclare sciencie et conversacionis honeste ... et eo gracios quo Magister in Artibus et in Sacra Pagi-na egregius bacularius." According to Oxford statutes, the baccalaureate lectures at Oxford on the Bible followed those on the *Sentences*; hence, FitzRalph must have accomplished the latter and at least have begun to lecture on the Bible during the academic year

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have presented lectures on the *Sentences* again while regent master of Theology, Wodeham indicates that FitzRalph began (but may not have completed) the process of revising his written commentary. The most likely period for the preparation of this *Opus correctum*—Wodeham's term—was FitzRalph's regency, which began with the academic year 1331–32.¹⁰¹

In his bachelor lectures FitzRalph devoted much of his commentary to epistemology and psychology, but because all known manuscripts of his commentary contain the later corrected work, his teaching as a bachelor usually can only be inferred.¹⁰² In this later version FitzRalph, quoting and amplifying the views of Thomas Aquinas, Henry of Ghent, and John Duns Scotus, affected to pay no overt heed to the specific opinions of his own contemporaries, except to remark from time to time on the views that "almost all contemporaries (*moderni*)" or "almost all contemporary secular [theologians]" espouse.¹⁰³ Yet it must have been clear to his audience that despite the anonymity he considerably offered his Oxford colleagues, FitzRalph was indeed aware of and responding to their views.

Most of FitzRalph's positions to which the younger bachelors who

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between the first and second letters. This corrects the dating of FitzRalph's lectures in my master's thesis (1975) and in Courtenay, *Wodeham*, pp. 75–78.

¹⁰¹ FitzRalph spent the academic year 1329–30 at Paris, but seems to have returned to Oxford in the following year. Walsh established, "Later Medieval Schoolman," p. 174, on the basis of a change in the titles accorded FitzRalph (from "bachalarius sacre theologie" on May 24, 1331 to "in sacra pagina doctor" on September 27, 1331) that FitzRalph's inception as master of Theology occurred in the summer of 1331. For Adam Wodeham's references to FitzRalph's correction of his *Sentences* commentary, cf. e.g., I *Opus Oxon.* prol., q.2 (Paris, Bibl. Mazarine 915, fol. 6va; Vatican, Vat. lat. 955, fol. 10r): "Ideo aliter posset dici, sicut *nunc scribit* unus doctor modernus, corrigens responcionem suam aliam;" again, d.1, q.14 (Mazarine, fol. 61va; Vatican, fol. 99v): "Dico igitur ad articulum quod voluntas veraciter non est nobilior intellectu nec e converso. Et nota quod Firauf tenet hoc idem, non in priori loco ubi tractat presentem questionem, sed in alia questione, dicens quod tam anima intellectiva est quaelibet sua potentia quam anima etiam sensitiva est sua potentia, et quod denominatur talis vel talis potentia ab actione quam exercet in tali vel tali organo. In illo articulo *correcti operis*, 'utrum memoria, intelligentia, et voluntas distinguitur ab invicem,' tenet tamen magis quod in homine sensitiva distinguitur ab intellectiva; nulla tamen potentia sensitiva ab ipsa, vel intellectiva ab intellectiva."

¹⁰² See Tachau, "Richard FitzRalph's Commentary on Peter Lombard's *Sentences*" (forthcoming). In what follows, except for I *Sent.* q.5, which I edit from all surviving manuscripts, I transcribe from the following manuscripts: Oxford, Oriel College 15; Paris, B.N. lat. 15853; Troyes, Bibl. comm. 505; Vatican, Vat. lat. 11517; Worcester Cathedral Q 71.

¹⁰³ FitzRalph, I *Sent.* q.2, a.2 (Paris: 14vb): "In isto articulo dicunt omnes fere moderni quod delectatio in voluntate est volitio;" q.5, a.3 (Oriel, fol. 18vb; Paris, fol. 31ra): "In isto articulo fere omnes moderni seculares conveniunt: tenent quod species que primo recipitur in memoria intellectiva sive in intellectu—qui idem est cum memoria secundum eos—post<ea>, quando intellectus considerat, fit actualis cogitatio, ita quod nihil novum fit in intellectu propter hoc quod considerat postquam non consideravit."

knew his lectures responded in the early 1330s are peripheral to the present discussion; moreover, Wodeham's citation of FitzRalph's revision of aspects of his psychological theory indicate the hazards of relying upon the *Opus correctum* for his earlier teaching. Nevertheless, it is improbable that he changed significantly his views on species, both sensible and intelligible, which throughout his commentary play a crucial role in cognition. Clearly, FitzRalph takes for granted the entire process of the multiplication of species and, despite some points of agreement with Henry of Ghent, extends that acceptance to intelligible species as well.¹⁰⁴ FitzRalph affirms, therefore, that objects generate species which are impressed on the senses before the senses themselves act; thus, the senses are first passive, and afterwards active.¹⁰⁵ "Lest there be disagreement over

¹⁰⁴ Thus, in addition to nn. 105–08 below, see I *Sent.* q.5, a.3 (Oriel, fol. 19rb; Paris, fol. 32rb): "cogitatio dependet a speciei sicut lux in medio pendet in esse a lucente corpore."

That FitzRalph's noetic largely derives from that of Henry of Ghent is the generally unpersuasive view of Robson, *Oxford Schools*, pp. 74–76, and Leff, *FitzRalph*, pp. 56–90. Not only does FitzRalph frequently argue against Henry, but on the inherent nobility of the will, FitzRalph sides with Scotus, I *Sent.* q.2 (Oriel, fol. 11ra; Paris, fol. 13rb; Troyes, fol. 4rb): "In isto articulo dico igitur sicut tenet Doctor Subtilis et tenent alii doctores concorditer, quod voluntas est potentia nobilior—ut voluntas est—quam intellectus. Unde teneo hanc partem, quamvis opposita pars sit valde probabilis." FitzRalph frequently refutes Henry of Ghent at length, as e.g., q.5, a.2 (Paris, ff. 29rb–30ra; Worcester, fol. 125v–126r): "Doctor Sollempnis IV *Quodl.*, q.7 et VIII *Quodl.*, q.12 et expressius questione 21, dicit quod intellectus materialis ab obiecto nullam recipit speciem impress[iv]am, sed solum express[iv]am qua de potentia intellectiva sit actu intelligens; et bene post [dicit] 'obiectum sensus et ymaginationis et intellectus est idem,' in hoc quod est obiectum visus ut est in re extra presens, obiectum ymaginationis ut est singulare absens et ut existens in anima tantum sicut in cognoscente, et obiectum intellectus ut sub ratione universalis quod conspicit in fantasmate absque omni specie impressa ... Et parvum ante <dicit quod> intentiones ymagine non movent intellectum materialem nisi quando efficiuntur actu universales ... istud dicit iste Doctor quantum ad sensibilia. Quantum autem ad intelligibilia, dicit I *Quodl.*, q.13, quod nihil omnino cognoscitur ab intellectu nisi per suam presentiam in intellectu vel per suam speciem a quo procedit verbum, quia species—dicit ipse—est sicut ydolum vel imago rei ... Contra istud primum <argumentum Doctoris Solempnis>: tunc anima quando separatur non cognosceret aliquod sensibile, quia non haberet in se species sensibiles; igitur nec actum. Consequentia patet secundum ipsum, et assumptum patet, quia intentiones iste que sunt subjective et 'impressive'—ut ipse loquitur—in ymaginativa non recedunt ab ea cum intellectus separatur, nec intellectus habet alias secundum ipsum; igitur etc. Falsitas consequentis patet per Augustinum ... <et> quia iste est articulus dampnatus Parisius cum excommunicatione ..."

¹⁰⁵ FitzRalph repeatedly stresses that what is the case for the intellect is also so for the senses, *mutatis mutandis* (see n. 110 below). Cf. I *Sent.* q.5, a.3 (Paris, fol. 31vb; Worcester, fol. 121v): "et propter hoc Commentator et Philosophus dicunt pluries quod sensus est virtus passiva, quia primo patitur a sensibili, et secundo agit ... et vocat primum sentiens ipsum organum sensus, et simili modo est de intellectu, scilicet quod primo est passivus per receptionem, et secundo est activus." Again, q.11 (Oriel, fol. 39va): "Contra <argumentum aliorum>, secundum dictam <eius> cogitatio et intellectio, que sunt actus intellectus, essent species—quod videtur falsum et contra communiter loquentes. Potest

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the words" employed, he elaborates,

I generally call ... an 'impressed species' in any power (*virtus*) [of the soul] some quality existing in that power by means of which it knows some object as through its similitude. And since every cognition of an object occurs through something present to the knower representing to him the known object, it is necessary that it be present thus in the cognizing power or in another subject presently joined to that power ... the species is impressed in its subject just as, perhaps, the image is in a mirror.¹⁰⁶

Again explicitly, FitzRalph affirms the creation of intelligible species and their storage by memory, which he takes to be intellectual.¹⁰⁷

The question that concerns FitzRalph is not, therefore, whether sensible and intelligible species are required for perceptual and cognitive processes (they are), but whether those impressed species or intentions are identical with the acts of sensation, cognition, or intellection. This identity he strenuously disputes. "When it is argued that sensation is the species in the sense, I say that it is not," he counters, for the species is insufficient to account for any instance of sensation. Even though a species is had in a sense, it is further required that the will or the appetite be intent on the object for sensation to be effected.¹⁰⁸ Similarly, the intellect must first receive a species before it produces "actual cognition," with the corequisite activity of the will.¹⁰⁹

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dici quod consequens est verum, ut patet per Augustinum XII *De trinitate* ... dicit quod incipimus a specie corporis et pervenimus ad eam que est in acie cogitantis."

¹⁰⁶ *I Sent.* q.11 (Oriel, fol. 39va): "Circa primum ne fiat contentio verborum, exponam quid intelligo per 'speciem impressam' et quid per 'memoriam intellectivam.' 'Speciem impressam' in quacumque virtute voco generaliter quancumque qualitatem existentem in illa virtute, per quam cognoscit aliquid obiectum tamquam per eius similitudinem. Cum enim omnis cognitio obiecti sit per aliquid presens cognoscenti representans sic illud cognitum, necesse est ut illud sit presens sic in ipsa virtute cognoscente vel in alio subiecto cui presentialiter coniungitur. Illa virtus cognitiva dicitur 'species expressa' vel 'representativa' respectu illius virtutis, licet sit impressa species sui subiecti in quo est, sicut forte est ymago in speculo."

¹⁰⁷ *Ibid.*: "'Memoriam intellectivam' voco illam potentiam anime intellective que retinet huius species impressas intelligibiles tam in presentia actualis intellectus quam post eam ..."

¹⁰⁸ *I Sent.* q.5, a.3 (Paris, fol. 31vb; Worcester, fol. 121v): "Ad primum argumentum, cum arguitur quod sensatio est species in sensu, dico quod non, quia habita specie in sensu, pluries non sentiret, quia voluntas vel appetitus est aversus ab isto obiecto, et intendit in aliud. Sed statim cum appetitus non intendit in aliud, sentit animal illud sensibile, et ideo tunc agit sensationem ..."

¹⁰⁹ *I Sent.* q.9 (Oriel, fol. 23rb; Paris, fol. 57rb): "Cum arguitur quod intellectus est virtus passiva, igitur voluntas similiter, concedo conclusionem, quia intellectus et voluntas sunt una potentia, sicut dictum est in alia questione; sed dico quod ista res, scilicet anima que est intellectus et voluntas, primo est passiva, recipiendo speciem; sed secundario est activo, agendo cogitationem actualem et similiter volitionem mediante specie in memoria ..."

FitzRalph's stance is complicated, however, by his conviction when lecturing on the *Sentences* as a bachelor, that the soul's faculties are not really distinct: they differ only in their functions or, one might say, in their *raison d'être* (*in ratione*). Although when revising his commentary, he later modified his position to accept that the sensitive and intellectual souls differed to some extent, FitzRalph did not abandon the identification of each part of the soul with its faculties.¹¹⁰ Hence, he argues,

Whether one posits only one soul or two in man, the sensitive faculties are the sensitive soul itself, I say, and the intellectual faculties are the intellectual soul itself ... It therefore seems to me better to say that the entire sensitive soul is its faculty—namely, the imaginative power and the sensitive power, and so forth—than to say that the sensitive part which is in the eye or in a certain part of it is the visual power, and another part [of the sensitive soul] is the common sense, and so with the others.¹¹¹

Thus, what we term diverse cognitive acts are in fact one-and-the-same act differently designated according to the organ through which it is exercised.¹¹²

It follows from positing one indivisible soul, he concludes, that even if

¹¹⁰ I *Sent.* q.5, a.1, "utrum memoria, intelligentia, et voluntas distinguantur ab invicem realiter" (Oriel, fol. 18ra–rb; Paris, fol. 27rb–vb; Vatican, fol. 80vb): "Ideo dico ad primum articulum ... quod quelibet istarum intentionum 'memoria,' 'intelligentia,' et 'voluntas' accipitur dupliciter ad propositum: uno modo pro actu; alio modo pro potentia a qua vel in qua est actus—et sic est ad propositum. Unde sic dico quod memoria, intelligentia, et voluntas non sunt distincte realiter in una mente, et intelligo per 'potentiam memorativam' in proposito 'memoriam intellectivam,' non sensitivam, quia de illa non est articulus ... quantum ad primam partem, scilicet quod omnes potentie sensitive et etiam intellective sunt una res distincta secundum hoc quod ista potest in varias operationes, scilicet ipsa substantia anime rationalis in homine, et in brutis, ipsa substantia anime brutalis, videtur mihi satis probabile in brutis et in homine similiter, si non sit anima alia sensitiva in homine distincta ab intellectiva, et prius generata ... Non tamen videtur propter hoc quod sensitiva et vegetativa in homine vel in animalibus sunt diverse forme, nec hoc est sequens ex obiecto istorum articulorum <a Kilwardby damnatorum>." According to Wodeham (above, n. 101), this is FitzRalph's revised opinion.

¹¹¹ Ibid. (Paris, fol. 27vb; Vatican, fol. 81rb): "Sive igitur ponatur una anima tantum in homine sive due, potentie sensitive dico sunt ipsa anima sensitiva, et potentie intellective sunt ipsa anima intellectiva; et similiter in animalibus brutis. Unde videtur mihi melius dicere quod tota anima sensitiva est sua potentia, scilicet virtus imaginativa et virtus sensitiva, etc., quam dicere quod pars sensitive que est in oculo vel in certa parte eius, est virtus visiva, et alia pars eius <est> sensus communis, et ita de aliis."

¹¹² Ibid.: "... et ideo tota per se vocatur 'potentia anime,' denominata ab illa actione quam exercet per organum certum; et alia potentia, quatenus exercet actionem per organum aliud; et ita tota dicitur distincta ... Sed de intellectu, si non ponatur alia anima in homine, est imaginandum quod ex hoc quod est presens uno organo sensitivo, et forma ultima illius organi, dicitur intellectio recepta in isto organo esse in ipso aliquo modo, ita quod ipse potest per istam intentionem sentire et habere actum sensus communis, quia actus est in ipso tunc, et non in organo subiective, quamvis pendeat in esse a forma que est in organo. Nec talem actionem potest exercere, nisi in tali organo."

specific acts can only be exercised in specific organs, nonetheless "the action of any one part is the act *per se* of the whole, and only accidentally (*per accidens*) of the part."¹¹³ In support of his stance, FitzRalph appeals to the authority of thirteenth-century authors, to Aristotle and Averroes, and above all to Augustine. His impatience with those who, in his view, misunderstand Augustine is undisguised, erupting eventually in the conclusion FitzRalph draws after two dozen citations from his works: "from these adduced [quotations] it will be clear enough to anyone who is not stupid that Augustine wanted to say that act is a thing other than the species in the intellectual memory."¹¹⁴

Against whom does FitzRalph argue so pointedly? As Ockham had denied any species whatsoever, and was unconcerned with the location of the sensitive powers, if FitzRalph is concerned with the Venerable Inceptor's views he is at most tangentially and indirectly so. FitzRalph, after all, not only ignores the attack on the very hypothesis of species, but he is also little interested in delineating intuitive and abstractive cognition, even if he does employ the distinction. He is more preoccupied with the correct understanding of Kilwardby's condemnation (1277) of the simple unity of man's soul. Dispute at Oxford over this issue had, by Chatton's count, elicited four interpretations by the early years of the decade.¹¹⁵

The only known proponent of the identification of the species in the senses and sensation to whom FitzRalph might be directing his arguments is Rodington, who also insists on the distinction of the sensitive powers, carefully locating the visual power in the optic nerve. Indeed, it would

¹¹³ Ibid.: "Ex quo tota anima sensitiva totius animalis est una forma indistincta specie in suis partibus, actio cuiuscumque partis est actio totius per se, et partis per accidens tantum; et ideo tota per se vocatur 'potentia anime.'"

¹¹⁴ Ibid., q.5, a.3 (Oriental, fol. 18vb; Paris, fol. 31vb): "Ex hiis allegatis satis liquet cuilibet non protervo quod Augustinus volebat dicere actum esse aliam rem a specie in memoria intellectiva."

¹¹⁵ Ibid., q.5, a.1 (Paris, fol. 27va; Vatican, fol. 81ra; Worcester, fol. 119r-v): "Unde a fratre Roberto de Kilwardby, est articulus damnatus in consilio generali regentium Oxonie, 'quod vegetativa, sensitiva, intellectiva, sint una forma simplex.' Et est alius articulus damnatus communi consilio regentium et non regentium, scilicet 'quod vegetativa, sensitiva, et intellectiva, sint simul tempore in embrione.' In libro tamen quem vidi, non dicitur quod excommunicati sunt omnes sustinentes istas, sed precepit ut sustinens, docens, vel defendens quelibet istarum ex propria intentione, si esset magister de communi consilio deponeretur; si bachelarius, non promoveretur ad magisterium, sed ab universitate expelleretur. Ideo potest ista sententia dici *probabiliter*. Videtur tamen quantum ad hominem multo probabilius esse dicendum quod homo habet animam extensam, sicut alia animalia ..." Left, *FitzRalph*, p. 56, mentions FitzRalph's concern. These condemnations were revoked, a fact evidently ignored by Chatton when preparing his *Ordinatio*: see his *Lectura* prol. q.2 [O'Callaghan: pp. 249–55]. When Wodeham responded to Chatton, he remarked that the condemnations were no longer in force; cf. chapter X below, n. 23.

have been usual for Rodington and FitzRalph, as bachelors lecturing on the *Sentences* within a couple of years of each other, if not even at the same time, to have disputed issues of current controversy. Franciscans and seculars alike were after all required to participate in public disputations in addition to lecturing on the *Sentences*.¹¹⁶ Whatever their role in shaping each other's commentaries, both Rodington and FitzRalph indicate that Oxford theologians continued to be exercised by difficulties within the received psychological and epistemological wisdom. Even if they found Scotus's decisions in need of emendation, they nevertheless discovered in his work—particularly in the refutations of Henry of Ghent and Peter Olivi—many of the specific rough edges of the theory that they hoped to make smooth. Their contemporaries' thought was usually measured by that ruler. And despite the problems with the theory based upon the multiplication of species, these did not appear such as to throw into serious doubt the very existence of those species—conceived, after all, as corporeal and, hence, physical entities.

¹¹⁶ Above, nn. 51–53, 75–76, 84. Pending a renewed and thorough study of FitzRalph's commentary, we should assume that his revisions were (like those of other scholars of the 1320s and 1330s who prepared *ordinatio* versions of their commentaries) not so major as to incorporate into the texture of his baccalaureate lectures systematic responses to arguments raised while he was regent by bachelors of the *Sentences*. After all, they debated each other, howevermuch they may have used regent masters' arguments as foils. Certainly Walsh infers too much from her reading of Courtenay's *Wodeham*, when she states (*FitzRalph*, p. 45) that during FitzRalph's regency, he "disputed with the bachelors Adam Wodeham, William Skelton, Reppes." The story may be different, however, where their older colleague Crathorn is concerned, for there are indications that he influenced FitzRalph's revisions; see below, chapter IX, nn. 60–61.

Chapter Nine— Oxford in the 1330s

The *Sentences* commentaries composed at Oxford at the beginning of the 1330s were the products of a generation of theologians who had been students during the years Ockham, Chatton, Rodington, and FitzRalph taught. Among the prominent members of this younger generation, colleagues whose lectures overlapped, were the Dominican friars Robert Holcot and William Crathorn, and the Franciscan Adam Wodeham.¹ More clearly than any Oxford scholars from the 1320s whose work survives, these three developed important aspects of their thought in response to each other, so that this very interweaving of their intellectual development raises problems of exposition similar to those that the œuvre of Ockham and Chatton present. For purposes of clarity more than chronology, it will be useful to consider the Dominican participants first.

¹ The most significant studies of Holcot are those of Heinrich Schepers, "Holcot contra dicta Crathorn, I: Quellenkritik und biographische Auswertung der Bakkalareats-schriften zweier Oxforder Dominikaner des XIV. Jahrhunderts," *Philosophisches Jahrbuch* 77 (1970), 320–54; idem, "Holcot contra dicta Crathorn, II: Das 'significatum per propositionem'. Aufbau und Kritik einer nominalistischen Theorie über den Gegenstand des Wissens," *Philosophisches Jahrbuch* 79 (1972), 106–36. Also important are: Ann W. Brinkley (Birk), "Robert Holcot: Toward an Empirical Theory of Knowledge," Ph.D. dissertation, Harvard 1972; Courtenay, *Wodeham*, pp. 95–106; idem, "The Lost Matthew Commentary of Robert Holcot, O.P.," *Archivum Fratrum Praedicatorum* 50 (1980), 104–12; Mario Dal Pra, "Linguaggio e conoscenza assertiva nel pensiero di Roberto Holcot," *RCSF* 9 (1956), 15–40; idem, "La proposizione come oggetto della conoscenza scientifica nel pensiero di Roberto Holcot," in *Logica e realtà: momenti del pensiero medievale* (Bari: 1974), pp. 83–119; Gelber, "Logic and Trinity," pp. 265–91, 299–317; idem, "Contingencies of Propositions;" idem, "Fallacy of Accident;" idem, "I Cannot Tell;" Richard E. Gillespie, "Robert Holcot's Quodlibeta," *Traditio* 27 (1971), 480–90; Onorato Grassi, "Le Tesi di Robert Holcot sul valore non scientifico della conoscenza teologica," *Rivista di filosofia neo-scolastica* 71 (1979), 49–79; Fritz Hoffmann, "Robert Holcot—die Logik in der Theologie," *Die Metaphysik im Mittelalter*, *Miscellanea Mediaevalia* 2 (Berlin: 1963), pp. 624–39; idem, "Der Satz als Zeichen der theologischen Aussage bei Holcot, Crathorn, und Gregor von Rimini," *Der Begriff der Repraesentatio im Mittelalter*, *Miscellanea Mediaevalia* 8 (Berlin: 1971), pp. 296–313; idem, *Die theologische Methode des Oxforder Dominikanerlehrers Robert Holcot*, BGPfM, n.f. 5 (1971); Nuchelmans, *Theories*, pp. 195–208; Heiko A. Oberman, "Facientibus quod in se est Deus non denegat gratiam. Robert Holcot, O.P. and the Beginnings of Luther's Theology," *Harvard Theological Review* 55 (1962), 317–42; Robert A. Pratt, "Some Latin Sources of the Nonnes Preeest on Dreams," *Speculum* 52 (1977), 538–70; Beryl Smalley, "Robert Holcot, O.P.," *Archivum Fratrum Praedicatorum* 26 (1956), 5–97; idem, *English Friars and Antiquity in the Early Fourteenth Century* (Oxford: 1960), 133–202.

Robert Holcot

Robert Holcot occupies an ill-defined position among these theologians of the 1330s, but he has generally been considered to be, next to Adam Wodeham, intellectually closest to Ockham.² Such an affinity is overstated in the realm of epistemology and psychology. In his *Sentences* commentary, which probably dates from 1331–33,³ and the *Sex articuli* and *Quodlibetal Questions* produced during the following two academic years,⁴ Holcot developed his views in the context established by the debates of Ockham and Chatton, the latter of whom had returned to Oxford,

² On Holcot's position as an Ockhamist, see Leff, *Dissolution*, pp. 52–53; Schepers, "Holcot contra," Nuchelmans, *Theories*, pp. 195–208; and Pinborg, "Some Problems of Semantic Representations in Medieval Logic," in idem, *Medieval Semantics*, p. 266. For the historiographic tradition of Holcot's alleged "radical Ockhamism," see Grassi, "Conoscenza teologica," 49–51; and Gelber, "Logic and Trinity," pp. 1–5, 260–70. In an unpublished paper of 1967, she first questioned the adequacy of such a characterization of Holcot, and Norman Kretzmann, "Medieval Logicians on the Meaning of the *Propositio*," *The Journal of Philosophy* 67 (1970), 767–87, construed Holcot's stance on the object of knowledge not as an extension of Ockham's view, but as a partial criticism (p. 781). F. Bottin concurs, *Scienza degli Occamisti*, pp. 162–66. Holcot has been further distanced from Ockham and Wodeham by Courtenay, *Wodeham*, pp. 100–106.

³ Schepers (in "Holcot contra, I") and Courtenay (*Wodeham*, pp. 75–81, 95–111) worked out the relative chronology of Holcot's and Crathorn's work; but until K. Walsh correctly dated FitzRalph's inception as master of Theology (above, chapter VIII, n. 101), both Courtenay and I erred in the absolute dates we presented for Wodeham's and Holcot's Oxford reading of the *Sentences*, which must take into account FitzRalph's inception. Moreover, as Gelber and I have established, some of the references in Holcot's oeuvre hitherto taken as to Crathorn are, rather, to the John Grafton who was Wodeham's fellow bachelor; this discovery allows us to recalculate the chronology of *Sentences* commentaries in the early 1330s. Thus, the present reckoning corrects my earlier dating in "Problem of Species," p. 414, and is explained in the introduction to Courtenay, Gelber, Streveler, Tachau, eds., *Robert Holcot on Future Contingents* (forthcoming).

⁴ The *Sex articuli* may have been produced during Holcot's second year as bachelor of the *Sentences* (below, n. 5); in any event, the *Quodlibetal* disputations followed the *Sentences* commentary and the *Sex articuli*. Holcot's *Quodlibetal* questions survive in three manuscripts: Cambridge, Pembroke College 236; London, British Library, Royal 10.C.VI; and Oxford, Balliol College 246. Only a few of these questions have been edited: I *Quodl.* q.1, in J.T. Muckle, "*Utrum Theologia sit scientia*. A Quodlibet Question of Robert Holcot, O.P.," *MedSt* 20 (1958), 127–53; I *Quodl.* q.6, in E.A. Moody, "A Quodlibetal Question of Robert Holcot, O.P. on the Problem of the Objects of Knowledge and of Belief," *Speculum* 39 (1964), 53–74 (reprinted in Moody, *Studies*, pp. 321–52), and revised in Courtenay, "A Revised Text of Robert Holcot's Quodlibetal Dispute on Whether God is Able to Know More Than He Knows," *Archiv für Geschichte der Philosophie* 53 (1971), 1–21; I *Quodl.* q.9, and III *Quodl.* q.7, in Paolo Molteni, *Roberto Holcot, O.P. Dottrina della grazia e della giustificazione con due questioni quodlibetali inedite* (Pinerolo: 1968); and I *Quodl.* qq.2, 3, 4 in Gelber, *Exploring the Boundaries of Reason. Three Questions on the Nature of God by Robert Holcot, O.P.*, (Toronto: 1983). In addition, the "sermo finalis" which marked the end of Holcot's lectures on the *Sentences* is edited by J. Wey, "The *sermo finalis* of Robert Holcot," *MedSt* 11 (1949), 219–23. I follow the numbering of Gelber, *Exploring*, 113–117, for I and III *Quodl.*, otherwise indicating the order in the Pembroke ms. followed by that of Royal.

as the Franciscan regent master, two years before Holcot began his term as bachelor of the *Sentences*. Holcot's appreciation of Chatton's and Ockham's views was, however, initially shaped by his reading of the distant authority of Aquinas and Scotus, as well as the more recent work of such Oxford authors as Campsall, Lawton, Rodington, and most recently, Richard FitzRalph, whose inception as regent master of Theology took place in the same autumn as Holcot's opening lectures at the Dominican convent. There he was one of two bachelors assigned to teach the *Sentences*, and William Crathorn, as the more senior, increasingly became the defining focus for the elaboration of Holcot's own positions as the two recognized that their ongoing (and presumably mandatory) debates were not producing any shifts of opinion.⁵

In all three of these works, Holcot repeatedly addresses the issue of positing species, their role in cognition, and the delineation of intuitive and abstractive cognition.⁶ His stance is clear: while consistently accepting Ockham's arguments for immediate intuitive knowledge of a present, existent object, Holcot insists that intuitive cognition cannot provide knowledge of non-existence, nor render the hypothesis of species redundant. Instead, Holcot maintains that sensible and intelligible species alike are necessary.⁷

⁵ On the basis of Crathorn's reference to an eclipse, Schepers established that he began to lecture on the *Sentences* during the academic year 1330–31 (n. 40 below). Inasmuch as these lectures preserve the views that, according to Holcot's *Sex articuli*, Crathorn had endeavored "iam per biennium" to prove, then the *Sex articuli* were composed in 1332—perhaps, as Schepers suggests, "Holcot contra, I" p. 343, in the summer. If so, Holcot had not yet finished lecturing on the *Sentences*, while Crathorn would have had time to deliver the opening Biblical lecture to which Holcot also refers (Royal, fol. 131vb). That Holcot's six articles were a *written* rejoinder Holcot expressly states (Royal, fol. 132ra): "Ista scripsi cum tedio et cum vericundia recito ne diceretur quod non dignarem recitare dicta socii contra me."

⁶ Holcot's retention of species was first noted by Gelber (n. 2, above); see also Brinkley, "Robert Holcot," pp. 4, 15. In addition to Holcot's *Quodlibetal* questions and *Sex articuli*, I base the following discussion principally on I *Sent.* prol., q.un. (Oxford, Oriel College 15, fols. 206ra–207rb; London, British Library, Royal 10.C.VI, fols. 129va–131va); I *Sent.*, q.2 (Oriel, fols. 127vb–131vb); and II *Sent.* q.3, a.3 (Oriel, fols. 157ra–159rb); and the *Tractatus de stellis* (Oriel, fols. 164ra–171vb).

⁷ Among the aspects of Ockham's account that Holcot does not appear to have disputed is the connection between intuitive and evident cognition; rather, he evidently takes for granted that intuitions are such "simple apprehensions" as yield the evidence for our assents to or dissents from propositions (see, e.g., below, n. 22–24). Holcot does not seem to have construed this connection as either peculiar to Ockham's definition or as requiring defense. Nor does Holcot indicate that the capacity of intuitions to produce certitude is controverted. Holcot treats as similarly uncontroversial the identification of "simple apprehension" and vision, III *Quodl.*, q.1 (Balliol, fol. 263ra–rb; Pembroke, fol. 179rb; Royal, fol. 157vb): "iste terminus 'videre' accipitur stricte vel large loquendo. Stricte, significat operationem potentiae visivae, et sic loquitur Aristoteles ... Large transumitur ad cognitionem imaginativam et intellectualem, tam complexam quam incomplexam, et sic

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Holcot's *Quodlibetal Questions* contain his clearest presentations of his own views on intuition, and his grounds for disputing Ockham's understanding of it. After remarking that the terminology of intuitive cognition was not employed by either the church fathers or the philosophic authorities, "but seems instead to have been invented by Scotus," Holcot suggests that a result, "from the [terms'] voluntary institution, therefore, it has been permitted that each use or not use these [terms] just as he wished."⁸ Correctly understood, however,

Intuitive cognition cannot be of non-existent things because this term is a connotative term that supposits for a certain quality, which is cognition, and it connotes that the cognized object is existent and present in-and-of-itself, on account of which connotation this cognition is called 'intuitive.' And therefore the same cognition, if it were to be miraculously conserved when the [extramental] object has been destroyed, would no longer be an intuitive cognition. And thus, the same cognition can be now intuitive, now abstractive, because what is connoted differs.⁹

Holcot's treatment of cognition as a relation rather than an absolute,¹⁰ his affirmation of its essential identity despite its extrinsic designations, and his appeal to intuition's "connotation"—that is, its subsidiary significates—as grounds for disputing the logical possibility of intuitive cognition without an existent object,¹¹ all align him with Rodington and, ultimately, Campsall.

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loquitur beatus Augustinus ... Et sic adhuc 'videre intellectualiter' est dupliciter: incomplexo vel complexo. Incomplexo, sicut apprehendere simpliciter; complexo, sicut quando formatur propositio affirmativa vel negativa. Et sic certa cognitio intellectualis complexa potest vocari 'scientia.'

⁸ I *Quodl.* q.1 [ed. Muckle: p. 130]: "Quia isti termini <<notitia intuitiva>> non sunt termini Sanctorum nec philosophorum, sed videntur adinventi a Scoto, <<voluntaria institutione>> ideo licet cuilibet uti eis sicut voluerit, vel non uti."

⁹ I *Quodl.* q.1 [ed. Muckle: p. 130]: "Contra hoc quod ponit Guillelmus quod per notitiam intuitivam rei non existentis possum evidenter scire rem illam non esse, ita quod notitia intuitiva est causa totalis illius iudicii, et notitia cum re est causa iudicii oppositi quando res est ... Unde videtur quod notitia intuitiva non possit esse <<de>> non-existentis, quia iste terminus est unus terminus connotativus qui supponit pro quadam qualitate quae est notitia, et connotat obiectum cognitum esse existens et praesens in se, propter quam connotationem illa notitia vocatur 'intuitiva.' Et ideo eadem <<notitia>>, si <<conservaretur>> miraculose re destructa, iam non erit notitia intuitiva. Et sic eadem notitia potest esse modo intuitiva, modo abstractiva, quia illud quod connotatur aliter et aliter se habet."

¹⁰ Implicit in Holcot's expression "illud quod connotatur aliter et aliter *se habet*," in his generation a standard way of describing a relation; cf. e.g., Ockham, VI *Quodl.* q.15 [OTh IX: p. 637–38].

¹¹ As is introduced by the reference to "miraculous conservation," inasmuch as this is an instance of what Holcot terms a "special dispensation" from the normal course of events. For Holcot, such abrogations of divinely ordained law fall within the scope of the *potentia Dei absoluta*, in I *Quodl.* q.8: "Quod Deus posse aliquid facere dicitur dupliciter: vel de potentia ordinata vel de potentia absoluta. Hanc distinctionem intelligo sic: non quod in Deo sit duplex potentia vel quod Deus habet duplicem potentiam, sed istae duae determi-

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At the same time, Holcot's critique of Ockham's extension of the scope of intuition to cover the awareness of non-existence, puts Holcot in the same camp with the anonymous author of the Erfurt commentary.¹² Willing with the latter to grant that we perceive that Socrates is not in the room when he is not, Holcot points out that this is insufficient evidence for concluding that Socrates does not exist at all:

It seems impossible that this should be *evident* to me: Socrates does not exist (*non est*), because it does not follow [from the fact that] he is not in *this* place [that], therefore, he does not exist. Similarly, [it does not follow that] I do not see him or touch him, therefore he does not exist.¹³

This is hardly a minor quibble with Ockham; rather, Holcot's recognition of the fallacious interchanging of presence and existence in Ockham's notion of intuitive cognition, and the consequent error of inferring from non-presence to non-existence, is a serious worry. Indeed, as Holcot notes, to accept the inference from non-presence to non-existence is inconsistent with Ockham's own insistence that the knowledge grounded on intuitions is *evident*.

Moreover, in so arguing, Holcot has implicitly presented an argument against Ockham's denial of species. His elimination of species on the grounds of the lack of experiential knowledge of them is not, according to Holcot, adequately motivated; the fact that one is unaware of them in the cognition of individuals that are present is not sufficient grounds for denying the existence of those species, given that their existence will "save the phenomena" and their absence, Holcot thinks, will not.¹⁴ The phenomena that the Dominican considers extensively are *not* those of light's

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nationes ... Si autem dicatur quod Deus potest producere A de potentia absoluta et non de potentia ordinata, tunc denotatur quod Deus est quaedam potentia quae sufficit ad constituendum A in esse sine aliqua alia causa sibi addita, sed non potest constitui A in esse servando omnem legem quam modo statuit, quia non potest facere contradictoria esse simul vera et potest illud facere quod fieri non includit contradictionem esse vera." I am indebted for this text and for an understanding of Holcot's views to Paul Streveler, who made available his unpublished paper, "Robert Holcot: God's Absolute and Ordained Power—With an edition of the Quodlibetal Question *Utrum caritas beatorum in patria possit corrumpi*." For Rodington, see above, chapter VIII, at nn. 42–56; for Campsall, see above, chapter VI, at nn. 14–18.

¹² See above, chapter VI, at nn. 28–30.

¹³ I *Quodl.* q.1 [ed. Muckle: p. 130]: "Contra: impossibile videtur quod haec sit mihi evidens: 'Sortes non est,' quia non sequitur 'Sortes non est in <<hoc>> loco, ergo <<Sortes>> non est.' Similiter, <<non sequitur>> 'non video eum nec tango, ergo <<Sortes>> non est.'"

¹⁴ Holcot evidently countenances greater limits to the adequacy of perception than had Ockham; cf. I *Sent.* prol., q.un., "De obiecto actus credendi, utrum sit ipsum complexum vel res significata per complexum" (Oriel, fol. 206rb; Royal, fol. 129va): "Nec homo inter causam et effectum aliquam moram percipit, sicut nec inter approximationem esse lucidi ad medium et illuminationem ..." For Ockham, see above, chapter V, n. 75.

transmission, although he does indicate in his question *De stellis* that luminous bodies multiply their species through the medium.¹⁵ Holcot is more concerned with cognitive phenomena that cannot be explained satisfactorily without recourse to species. In the prologue of his *Sentences* commentary, for example, he turns to "recordative cognition," or memory, and stresses that, contrary to Ockham, "many appearances in our actions can be saved by positing species in the memory that cannot be saved when their existence is denied. Nor is his argument conclusive when he argues that since any thing causes cognition of itself before cognition of another thing, if a species were posited, it would first cause cognition of the species itself, and neither an intention nor habit nor the like [would do so]."¹⁶ If mediators are problematic, Holcot thus urges, then no cognitive entity escapes the thrust of arguments against mental representatives.

What are these species in Holcot's view? Caused by objects rather than creations of the cognitive faculties, species are only qualities, albeit called by many names: in the intellect they are "concepts," "intentions," or "words;" in the memory they are "species," "idol," "image," or "exemplar," even though they are not properly speaking a similitude of the object outside the mind.¹⁷ Holcot tells his audience elsewhere in his *Sentences* commentary that,

¹⁵ *Tractatus de stellis* (Oriel, fol. 170rb): "Sed hoc non videtur posse stare, cum sol non agat ad nos causando lumen hic, nisi prius causando lumen in medio; igitur illud medium erit illuminatum. Si dicatur quod in isto medio interstitio aeris ambientis terram sit multitudo vaporum elementarum a terra, et ideo fit ibi densitas nimia medii, et sic non potest illuminari a sole, contra hoc ... quia tunc posset sol ulterius multiplicare speciem sive lumen suum versus terram ..."

¹⁶ *I Sent. prol.*, q.un. (Oriel, fol. 207ra; Royal, fol. 131rb): "(*marg.* Contra Ockham): Quantum ad ista, credo quod ... salvantur enim multe apparentie in factis nostris ponendo species in memoria, que non salvantur eas negando. Nec concludit argumentum suum quando arguitur: 'quolibet res prius causat notitiam sui quam alterius; si igitur species poneretur, citius causaret species notitiam sui; nec intentio, nec habitus, nec huiusmodi;'"

¹⁷ *Ibid.* (Oriel, fol. 207ra–rb; Royal, fol. 131va): "Speciei in intellectu que vocatur 'conceptus' et 'verbum' ... Illa res, que est species in intellectu, non est naturalis similitudo obiecti eo modo quo duo alba dicuntur similia vel alia huiusmodi, quibus demonstratis vere dicitur: ista sunt similia. Sed 'similitudo' omnino dicitur equivoce de talibus qualitatibus spiritualibus et qualitatibus extra. Immo due species sunt similes inter se vere, et una species est similitudo alterius, sed non est similitudo obiecti sive rei extra proprie loquendo et univoce, quia sic forent eiusdem speciei; sed quia sic experimur in nobis et quando habemus notitiam alicuius rei absentis et occurrit nobis alia res sibi consimilis, causatur in nobis actualis notitia rei absentis. Sicut si vidi prius Herculem, et postea videam unam statuam que est figurata et colorata sicut Hercules fuit quando eum vidi, iam statim moveor ad cogitandum de Hercule ita quod ista similitudo est causa illius cogitationis actualis de Hercule. Et propter hanc experientiam transtulerit philosophi ista nomina: species, ydolum, imago, exemplar, ad significandum tales qualitates requisitas ad intelligendum, licet in nullo sunt similes rebus extra in essendo; et dicuntur apud philosophos 'similes in representando,' non in essendo, idest quod non sunt essentie talis nature qualis nature sunt obiecta extra;" again, nn. 19, 26 below.

I do not much care about this [argument] because I do not posit that the species is a natural similitude of the thing of which it brings about cognition, such that in an angel the similitude of a stone would be a stone. But I do posit a quality causative of the cognition of a stone when the stone is not present. For that reason it is called 'representative' of the stone, or a 'likeness' of the stone, or its 'species;' and the same thing can be called a 'habit' because it facilitates or inclines the intellect toward the abstractive cognition of the stone.¹⁸

He goes a step further: "... these qualities that I call 'species' could reasonably enough be called 'scientific habit;' and since the thing is not affected, there is no worry concerning its names."¹⁹

The acceptance of "concepts," "intentions," and "words," as synonyms of species is a clue to phenomena that, in addition to memory, Holcot considers the retention of species to save. Where Ockham saw the species as inimical to the understanding of knowledge as propositional and non-representational in character, Holcot like Chatton before him, instead embraces them for their utility in explaining how propositions, or complex knowledge, derive from perceptions, or incomplex knowledge. Holcot proposes that,

Just as in speaking of incomplex knowledge—in the way in which Augustine and Saint Thomas [Aquinas] do—the similitude or species of a thing is called 'what is known first' (*primum cognitum*), so in complex knowledge, such as in the act of knowing, believing, or opining, what is known first is the proposition (*complexum*).²⁰

So, Holcot continues, "just as incomplex knowledge is nothing other than the species or some concept, so complex knowledge is many species ordered [together], or many cognitions ordered [together]."²¹ This com-

¹⁸ II *Sent.* q.3 (Oriel, fol. 159ra): "Parum curo de hoc quia non pono speciem naturalem similitudinem rei cuius cognitionem facit, ut similitudo lapidis in angelo si[cut] lapis. Sed pono unam qualitatem causativam notitiae lapidis quando lapis non est presens. Propter quod dicitur 'representativa' lapidis et 'similitudo' lapidis, vel eius 'species;' et eadem res potest vocari 'habitus,' quia faciliat vel inclinat intellectum ad cognitionem abstractivam lapidis."

¹⁹ *Ibid.* (Oriel, fol. 159rb): "Ideo iste qualitates quas ego voco 'species' possunt satis rationabiliter dici 'habitus scientialis.' Et cum de re constat, de nominibus non est cura."

²⁰ I *Quodl.* q.6 [ed. Courtenay, "Revised Text": lin. 35–38]: "Dicitur quod sicut primum cognitum est similitudo vel species rei, loquendo de cognitione incomplexa secundum Augustinum et Sanctum Thomam, ita primum cognitum cognitione complexa, puta actu sciendi, credendi, vel opinandi, est ipsum complexum;" again, I *Quodl.* q.1 [ed. Muckle: p. 152]: "et universaliter in omni cognitione, primum cognitum est conceptus vel similitudo rei cognitae secundum Avicennam, Algazalem, et S. Thomam."

²¹ I *Quodl.* q.6 [ed. Courtenay, "Revised Text": lin. 38–40]: "Et sicut cognitio incomplexa non est nisi ipsa species vel conceptus quidam, ita cognitio complexa est multae species ordinatae sive multae cognitiones ordinatae;" cf. also *Quodl.* 50 (52) (Balliol 71, fols. 216va–218rb; Pembroke 236, fols. 159ra–160rb), "Utrum aliqua propositio possit

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posite of ordered cognitions can be considered the very act of knowing scientifically (*actus sciendi*) when and only when, as a result of other evident propositions, it is evident to the intellect that external reality is as it is designated to be by this composite.²² The intellect, however, is not always certain of such correspondence; hence, the same proposition can be known, or merely believed, or doubted, depending upon the intellect's certainty that extramental reality is as the proposition signifies. The same reasoning induces a significant restriction of the identification of species with cognitive acts and habits, for "this thing (*res*) which is the species of a stone is not *always* the act of knowing, nor all at once a habit, just as it is not always a part of a proposition, nor always what the intellect uses."²³ The species is the act of knowing intellectually or apprehending only when the intellect uses it in place of the extramental object in order to know.²⁴

Holcot's recognition that the intellect is not at all times in a state of certainty is, of course, not an admission of skepticism.²⁵ On the contrary,

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componi ex intentionibus et speciebus in anima naturaliter significantibus rem extra."

²² I *Quodl.* q.6 [ed. Courtenay, "Revised Text": lin. 40–46]: "... hoc complexum sive compositum aliquo modo ex cognitionibus, est actus sciendi quando evidens est intellectui propter alias propositionibus evidentes, quod sic est sicut per eam denotatur;" I *Quodl.* q.1 [ed. Muckle: pp. 129, 134]: "... pono distinctiones de hoc nomine 'scientia' ... Secundo modo dicitur scientia notitia evidens alicuius veritatis sive contingentis sive necessarii ... tertio accipitur scientia pro notitia evidenti alicuius necessarii nati fieri evidens per propositiones necessarias ad ipsum demonstrative applicatas ... (p. 134) Septima conclusio ... illa propositio cuius subjectum est compositum ex multis terminis qui sibi invicem non conveniunt evidenter, vel est terminus simplex aequivalens tali composito ex multis quorum unum non praedicatur evidenter de alio, illa, inquam, propositio non potest esse evidenter nota ..."

²³ I *Quodl.* q.6 [ed. Courtenay, "Revised Text": lin. 346–62]: "Sciendum est quod ista res quae est species lapidis non semper est actus intelligendi, nec statim est habitus; sicut non semper est pars propositionis nec semper est illud quo utitur intellectus. Sed ista res est actus intelligendi quando anima utitur ea pro re et intelligit. Et si eadem res sit de difficili mobilis, ipsa est habitus ipsius animae; hoc est, tunc vocatur habitus, et iste terminus [vel] 'habitus' non verificatur nisi de re de difficili mobili. <<Similiter>>, propositio scibilis non semper est <<scientia>>, quia propositio scibilis aliquando est dubitatio. [Sed] iste terminus 'scientia' est unus terminus supponens pro aliquibus signis ordinatis ad significandum verum vel falsum, et simul cum hoc connotat sive importat quod certum sit intellectui quod sic est in re sicut per eam denotatur. Iste vero terminus 'dubitatio' supponit <<ante>> pro eadem propositione, et simul importat vel connotat quod intellectus non fuit certus utrum sic esset in re, sicut per illam denotatur, vel non. Et ideo quando eadem propositio est <<primo>> dubitata et postea scita, eadem erit scientia quae fuit dubitatio."

²⁴ Ibid. [Courtenay, "Revised Text": lin. 306–11]: "Quando autem intellectus utitur illa similitudine pro re, tunc dicitur intellectus intelligere vel apprehendere illam rem simpliciter cuius est illa similitudo, vel cuius foret si talis res esset. Non quod simplex apprehensio vel intellectio incomplexa sit aliqua alia res de novo distincta ab intellectu et specie, sed illa species vocatur 'apprehensio simplex.'"

²⁵ Leonard Kennedy, "Scepticism in England," pp. 41–42 has resuscitated Michal-

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his own anti-skeptical convictions had persuaded him that Ockham's understanding of intuition and of cognition more generally, described a process that—were it thus completely as delineated—would be inadequate to provide the certainty that, Holcot was convinced, we do experience. For Holcot, one element of that certainty is the correspondence between mental propositions, to which the mind assents as true, and extramental objects. In his view, then, the important advantage in accepting species lies in the provision of a causal mechanism for that correspondence. That is, because propositions are ordered composites of concepts (intentions) that signify not merely by convention, but naturally, as likenesses of their producing objects, the propositions themselves consequently represent the ordering of reality.²⁶

If one were inclined to read Holcot as in essential agreement with Ockham on the proposition's role as the immediate object of knowledge, surely Holcot's insistence on the proposition's representational character should give one pause. Nor is his stance easily construed as a "radical" extension of Ockham's own, not only because Holcot relies greatly upon a theory Ockham had endeavored to refute, but also because he sides with Chatton against Ockham on at least one point. While species are not superfluous, Holcot argues, it is redundant to posit concepts having objective being in addition to acts of knowing, as Ockham does. Such acts or concepts (explicable as species) are real things, Holcot insists, and they inhere in the soul just as accidents in their subjects. They therefore have "subjective" being (*esse subiectivum*), since real entities have no other sort of being.²⁷ Holcot evinces no awareness that Ockham had eventually

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ski's charge on the basis of Holcot's response elsewhere, *Quodl.* q.53 (58) (Pembroke, fol. 167ra) to the *dubium* "an posset probari evidenter quod aliqua res posset esse causa effectiva alterius rei." Kennedy quotes the faulty early printed edition (Lyons 1515, where this question is *Determinatio*, q.3) as reading: "*Ideo dico in hoc articulo quod nulla est regula ad probandum certitudinaliter unam rem esse causam effectivam alterius, sed tenetur probabiliter;*" Pembroke reads, rather, "*Non dico in hoc articulo ...*"

²⁶ I *Quodl.* q.6 [ed. Courtenay, "Revised Text": lin. 291–302]: "Et ideo vult Philosophus dicere quod verum est enuntiatio sive intentio existens subiective in intellectu, quando sic est totaliter sicut per eam denotatur. Et hoc est quod dicit, primo *Perihermias*, ubi vult quod similitudines rerum, quae aliquando vocantur conceptus, vel species, vel imagines, vel idola, aliquando intellectus, aliquando intentiones, aliquando verba mentalia, aliquando cognitiones, aliquando passiones animae ... quia tales similitudines causantur a rebus et non significant ad placitum, sed naturaliter, res quarum sunt similitudines." Holcot's understanding of truth therefore differs from Ockham's, as Bottin notes, *Scienza degli Occamisti*, p. 163.

²⁷ In addition to n. 26, above, cf. I *Sent.* prol., q.un. (Oriental 15, fol. 207ra–rb; Royal, fol. 131rb–va): "Dicit enim Ockham super primum <*Sent.*>, d.21, quod actus intelligendi et habitus esse in mente certum est, et dicit quod <non> est species realiter distincta ab habitu et actu, vel precedens intellectionem, quia quod potest fieri per pauciora, etc. Dicit etiam quod probabile est sibi quod in intellectu praeter actum intelligendi sit aliquis

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yielded on this point, nor that both Chatton and Ockham were disputing Aureol at this juncture. And if Holcot lands here in Chatton's camp, the alliance is not often congenial to the Dominican who, after all, disputes Chatton's opinion on the immediate object of knowledge more than Ockham's in concluding:

The proposition (*complexum*), and not the thing signified, is the object [that is] scientifically known or believed or opined, because it is not usual [that] 'I know a rock scientifically' or 'I know a wood scientifically' [is] appropriate speech among Philosophers; rather [we speak] thus: 'I know that the rock is hard,' or 'I know that the wood is soft,' and so on ...²⁸

In accepting the mental proposition as the object of knowledge, however, Holcot may have been stirred more directly by a conviction that Lawton's denial of the semantic role of species was unwarranted, than by any agreement with Ockham.²⁹ Further, although Chatton and Holcot concur in denying Ockham's inclusion of awareness that an object does not exist or is not present within the scope of intuitive cognition, Holcot ulti-

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conceptus formatus in esse obiectivo ... (*mag.* Contra Ockham) Quantum ad ista, credo quod primum sit verum sed secundum est falsum ... De secundo, videtur mihi quod tale esse obiectivum nihil est, et quod includit contradictionem ponere tale esse obiectivum vel rem in tali esse. Quod probro breviter sic: ... sive sit substantia sive accidens est vera res, et habet esse subiectivum, quia nihil aliud est esse subiectivum quam [quod sit alia] vera res subsistens ... De tertio, quod dicitur quod omnis cognitio habet pro obiecto ens tale fictum vel speciem talem subiective in intellectu, non videtur verum de ficto, quod per argumentum eorum commune probat <quod> omnia salvantur ponendo actum intelligendi solum in anima; ergo illud fictum superfluit."

²⁸ I *Quodl.* q.6 [ed. Courtenay, "Revised Text": lin. 11–12, 80–85]: "Alia <opinio>, quam tenet Chatton, quod complexum non est obiectum actus sciendi nec credendi, sed res per complexum significata ... Sic ergo teneo in isto articulo, ad praesens, quod obiectum scitum, creditum, vel opinatum est complexum et non res significata, quia non solet esse appropriata locutio apud philosophos, 'scio lapidem,' 'scio lignum,' sed sic: 'scio quod lapis est durus,' 'scio quod lignum est molle,' et sic de aliis;" again, I *Sent.* prol. q.un. (Oriel, fol. 206ra; Royal, fol. 129va): "Et tenet <Chatton> [*ms. habet tarenter*] quod uniformiter scientie et opinionis et fidei et cuiuscumque talis assensus obiectum est res significata per partes propositionis sive res significata per complexum, et non ipsum complexum ... Contrarium tenent multi ... per obiectum actus credendi non intellego aliud nisi illud quod denominatur 'creditum;' et per obiectum actus sciendi, illud quod denominatur 'scitum.' Et quia nulla res extra excepto Deo proprie dicitur scita—non enim scio lapidem, sed lapidem esse gravem, ita quod 'lapis est gravis' est scitum a me—ita quod nec hoc verbum <scire> nec aliquod talem participium sicut est 'scitum' vel 'creditum' predicatur de aliquo incomplexo, sed tantum de complexo ..." This is the passage on the basis of which Moody ("Objects of Knowledge," pp. 323–24), first signalled Holcot's disagreement with Chatton. See above, chapter VII, nn. 81–89.

²⁹ Above, chapter VI, nn. 21–26; I owe this suggestion to H. Gelber's "Contingencies of Propositions." As Holcot himself indicates, he was prompted to defend his views because of their rejection by his *socius* Crathorn; see below and, more extensively, in the insightful study of Schepers, "Holcot contra, II." Nuchelmans, however, in his *Theories*, 203–08 construes Holcot as in primary agreement with Ockham.

mately understands the distinction between intuitive and abstractive cognition, not as had Chatton, but as had Campsall.

Indeed, Holcot's position on intuitive cognition and the existence of species is remarkable for the number of fences it straddles. In the first place, Holcot enumerates the synonyms that from Grosseteste and Bacon onwards had been catalogued for "species," adding to the list Ockham's (and Henry of Ghent's) "scientific habit." Holcot conspicuously treats "species" synonymously with "habit" as if this were a mere quibble.³⁰ Nevertheless, this is not easily reconciled with Ockham, for whom the terms clearly were not interchangeable. The abandonment of species in favor of a non-representational habit seemed a major step to Ockham's contemporaries, as the responses from Reading and Chatton witness; both argued at considerable length that habits were not species, and that the former did not render the latter unnecessary.³¹ Why, then, given Ockham's deliberate rejection of representation and of species as the instrument of that representation, did Holcot argue for both and in the same discussion hold that species were habits?

In the first place, unlike Reading and Chatton, Holcot was not prevented from doing so by a devotion to Scotus's view. Although Holcot knew the Subtle Doctor's theory, as the attribution to him of the very notion of intuitive cognition illustrates, Holcot neither depends upon him nor cites him frequently. Instead, Holcot's familiarity is with Campsall, Ockham, Chatton and with contemporary opinions, as well as with Thomas Aquinas. For Aquinas, the terms "habit" and "species" could in some contexts be interchangeable, and Holcot's stance seems to be the result of his attempt to reconcile Aquinas's views with the other major influences on his own thought. Chief among these was Campsall, even if his name does not often appear in Holcot's pages.³² This reconciliation of Aquinas

³⁰ See above, nn. 18–19, 23; no less an authority than Gregory of Rimini would later proceed along the same route, *I Sent.* d.3, q.2, additio 19 [*Lectura* I: p. 379 lin. 1–18]. It is difficult to gauge the extent to which Holcot deliberately evokes the views of Henry of Ghent, inasmuch as the Dominican does not side with Ockham in denying species. Moreover, Holcot rarely mentions Henry, and on the one clear occasion that he does so in this context, it is to take strong exception; cf. *I Quodl.* q. 1 [ed. Muckle: p. 138].

³¹ Above, chapter VI, nn. 75–76; chapter VII, nn. 68, 73–77.

³² Campsall does, however, appear in the discussion of the object of knowledge, when Holcot examines the signification of propositions with empty terms, *I Sent.* prol., q.un. (Oriol, fol. 206va; Royal, fol. 130rb): "tenet Camsale quod hec est falsa, 'rosa intelligitur,' rosa non existente, et sua opposita est vera, videlicet 'nulla rosa intelligitur.' Si teneatur quod si terminus supponens respectu verbi de presenti cuiuscumque fuerint conditionis non supponunt nisi pro non existentibus, patet quod tales sunt false: 'Antichristus intelligitur' vel 'rosa intelligitur.'" The distinction that Holcot draws in using the term similitudo (above, n. 17) may also be indebted to Campsall, as reported by Rodington (chapter VIII, n. 88). For the influence of Campsall's supposition theory

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with the new directions in Oxford thought, Holcot was at pains to achieve throughout his *Sentences* commentary, and *Quodlibetal Questions*: thus, Holcot justifies his adherence to the view that the primary object of knowledge is propositional by appeal as much to Aquinas as to Ockham.³³ He does so not as a Thomist, however, for at least in adopting intuitive cognition he accepts terminology he believes to postdate Aquinas.

If the equation of species and habits reflects attention to Ockham and Aquinas, Holcot's view that species are "sensible qualities" may express an effort to chart a course between Ockham, who admitted that in vision there occurs an impression of "some quality" by the sensible object, and Bacon, who announced that species were qualities. Holcot refers on at least one occasion to Bacon's *Perspectiva*, and is not entirely comfortable with his theory. Indeed, Holcot's insistence that the species are merely qualities, and not "natural similitudes," i.e. likenesses by virtue of a shared nature, betokens a fundamental discomfort with the Baconian model, a discomfort that he elaborates in the *Sex articuli* and *Quodlibetal Questions*.

Holcot read Bacon's claim that the species were somehow material and corporeal to mean that species were really (*realiter*), and thus substantially, the same in nature as the object (*res*) from which they multiplied.³⁴ Holcot concluded, as had others before him, that the consequence of considering the species a natural similitude of the object from which it derived was untenable, because such species would entail real changes in the incorporeal internal faculties of the soul whenever the object was perceived, pondered, imagined, or remembered.³⁵ Thus, in the case of angelic cognition—which is, of course, entirely immaterial if our internal faculties in this life are not—if the species were a natural similitude then,

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upon Holcot, see: Gelber, "Logic and Trinity," pp. 199–200, 209–10, 610–12, 260–70; idem, *Exploring*, pp. 26–28; and idem, "Fallacy of Accident;" and Tachau, "Influence of Campsall," pp. 118–21.

³³ Cf. above, n. 20. On Holcot's efforts to reconcile Aquinas and Oxford thought, see Gelber, *Exploring*, pp. 24–25; idem, "Contingencies of Propositions;" Grassi, "Conoscenza teologica," 75–79; Muckle, "Utrum Theologia," 141–43. On Aquinas' willingness to call species "habits," cf. O. Fuchs, *The Psychology of Habit According to William Ockham* (St. Bonaventure, N.Y.: 1952), p. xv.

³⁴ *Quodl.* 50 (52), (Pembroke 236, fol. 160ra; Balliol 71, fol. 218ra): "Alia conclusio est ista: similitudo naturalis rei cognite est eiusdem speciei cum re illa cuius est. Et hec est opinio Rogeri Bakonis in sua *Perspectiva*, d.6, c.3;" see also below, n. 36.

³⁵ See, e.g., Walter Burley, *Tractatus de sensibus* [ed. H. Shapiro and F. Scott, in *Mitteilungen des Grabmann-Instituts der Universität München* 13 (1966), pp. 9–10]: "De specie rei sensibilis per quam fit sensatio est duplex opinio. Una ponit quod species illa est eiusdem speciei cum subiecto. Ponit enim quod intentio lucis in medio, ut in oculo, est lux, et colorum color, et ita de aliis ... Contra ... si sic, intentiones memorabilium in memoria essent eiusdem speciei cum rebus memorativis, et tunc intentio colorum in memoria esset calor. Consequens falsum, quia talis calor cito extingueretur in cerebro frigido et humido ..."

according to Holcot, depending on the known object, angels would sometimes be cold, sometimes hot, sometimes black, sometimes white, and so forth.³⁶ Furthermore, given the Aristotelian principle that every heavy body tends naturally to descend to its natural place, Holcot points out that upon seeing a stone, an angel should become heavy; why, then, do the angels not descend from heaven?³⁷

That such consequences were absurd was generally conceded; for Ockham they were a further argument against the positing of any species, while for those who were committed to them—but not to an earlier appreciation of cognition as a process of *assimilation* strictly speaking—Bacon's stress upon their material, corporeal nature had become a major embarrassment.³⁸ In such concerns lay the origin of the notion of intentional or objective existence, and the usual evasion of the difficulty was the route Holcot took: simply to deny Bacon's view that species, at least in the mind, were material at all.

Yet the evasion, though general, was not universal. At least one of Holcot's colleagues, his Dominican confrère William Crathorn, not only held with Bacon that the species was a natural similitude of the extramental object, but denied the absurdity of these materialist consequences, defending them instead at great length. It was against Crathorn's arguments that Holcot framed his *Sex articuli* and the *Quodlibetal Question* treating the issue, as well as, presumably, the caveat in his *Sentences* commentary noted above.³⁹

William Crathorn

Crathorn was the more senior of the two Dominican bachelors, having begun to lecture on the *Sentences* at Oxford in the academic year 1330–31,

³⁶ *Sex articuli* (quoted in Schepers, "Holcot contra, II," p. 113n): "Ponit <<Crathorn>> etiam in materia ista, quod species in anima intellectiva vel in angelo est vere realiter eiusdem speciei cum re extra. Et consequenter concedit, quod angelus est aliquando calidus, aliquando frigidus, aliquando albus, aliquando niger, et quod vera natura lapidis est in caelo empyreo cum angelo, non tamen <<qualitas>> vel accidens in angelo, sed est substantia dependens ab angelo ... Concedit etiam, quod anima est vere et realiter colorata per colorem quando intelligit colorem ... sicut dicitur sive vere sive fabulose de chamaeleonte ... quod vario modo mutat colorem ad aspectum coloris quem videt."

³⁷ *Quodl.* 50 (52), (Pembroke 236, fol. 159va; Balliol 71, fol. 217ra–rb): "Igitur, color in cerebro vere videtur. Item, omne grave naturaliter descendit; sed species lapidis in mente angeli est gravis; quare igitur non descendit?"

³⁸ For Ockham, see above, chapter V, n. 82.

³⁹ Above, nn. 17–18. Schepers, "Holcot contra, I" first established that Chatton was not Crathorn, and discerned that the latter was Holcot's target in the *Sex articuli* and *Quodlibetal* dispute.

and probably continuing for a second year along with Holcot.⁴⁰ If so, this would not have been unusual, to judge from Holcot's mention in his concluding speech of both his own successor and a colleague who had read concurrently, thus indicating that the Dominicans supported two sets of lectures on the *Sentences* by each year introducing a new bachelor for a two-year reading. What remains of Crathorn's commentary, however, is less usual. Too brief to constitute a record of the entire course of lectures, the surviving text comprises a selection of questions dealing with problems at the forefront of Oxford discussion.⁴¹ As the foundation for consideration of indivisibles and the continuum, the re-evaluation of Aristotelian categories, the logic of the Trinity, and future contingents, Crathorn undertakes in his opening questions to lay out a theorematologically-structured, systematic account of human knowledge.

Rodington's work may have provided Crathorn with a model for what is a more explicit elaboration of the physiological aspects of the apperceptual and cognitive processes, than is usual within the confines of a *Sentences* commentary. Throughout his treatment of the acquisition and nature of human knowledge, Ockham's epistemological views figure prominently, usually as the subject of some impatience. In that regard, his opinions at times share center stage with those of Scotus and, more frequently, Aquinas and FitzRalph. Further crowded with discussions of the theses of several contemporaries, whose works are not extant or only recently discovered, Crathorn's commentary also contains invisible allusions to

⁴⁰ Schepers, "Holcot contra, I" p. 340, on the basis of the datable reference to the eclipse (below, n. 48).

⁴¹ Holcot, "Sermo finalis" [ed. Wey: pp. 221–23]: "Et licet de domo Praedicatorum isto anno in lectura sententiarum cucurrerunt duo simul, ille tamen alius discipulus, qui Granton nominatur, usus favore, quia gratiam universitatis de cito terminandis lectionibus habuit, citius praecurrit iuxta illud *Io. 20, currebant duo simul, et ille alius discipulus praecurrit citius Petro* ... Unde cursus consummavi ... et omnis homo cum ad consummationem pervenerit de suo recogitat successore, ideo baccalarium reverendum et cursorem futurum ... in scolis Praedicatorum, quae mihi hereditarie debebantur, succedet, specialiter recommendarem ... Nomen enim suum in vulgari est Roger ... dicitur enim de *Gosford*." The jocular tone of Holcot's "sermo finalis," has often been construed instead as harshly critical in tone; thus Courtenay, *Wodeham*, p. 98, reads the reference to "Granton's" speed in finishing the course of lectures as "invidious and somewhat gratuitous." With Schepers interpreting "Granton" as Crathorn, Courtenay correctly finds Holcot's purported "charge" that the latter had not "run the full course" puzzling. The reference is, however, to John Grafton; hence, the probable order of bachelors teaching the *Sentences* in the Dominican convent: 1330–31, Crathorn (first of two years) and an unknown bachelor (second of two years); 1331–32, Holcot (first of two years) and Crathorn (second of two years); 1332–33, Grafton (first and only year) and Holcot (second of two years); 1333–34, Roger Gosford. Moreover, because Holcot refers to Grafton rather than to Crathorn, the "sermo finalis" sheds no light on the issue of whether Crathorn's commentary is suspiciously brief (relative, say, to Wodeham's) or of the usual length (in comparison to those of FitzRalph, Kilvington, and Holcot himself).

other scholars, such as to Rodington and Holcot. Thus, it is not entirely surprising that despite the structure and methodical intent of Crathorn's commentary, his account of cognition has seemed to Holcot and to modern readers alike to be, perhaps more than any other in his generation, laced with difficulties and contradictions.⁴²

An appraisal of the coherence of Crathorn's positions is therefore difficult, but it is clear that, as purposively as Aureol or Ockham, Crathorn was engaged in creating his own theory of knowledge, and not primarily in defending a received view. Species, both in the medium and in the soul, were at the core of that account, and the consequences—in Holcot's appraisal absurd ones—to which Crathorn willingly assented have correctly been remarked as a measure of the importance he attached to the species.⁴³

Crathorn maintains that for vision to occur, the object and viewer must be separated by some distance, and that the object must act on the viewer through the medium. He is thus quite clear in refuting Ockham's claim that action can occur at a distance without a medium, and the corollary assertion that a mover and what it moves need not even be contiguous. Although Crathorn does not refer explicitly to Ockham at this juncture, there can be no doubt that his views are at issue. This is readily apparent from Crathorn's careful rebuttal of the arguments that the sun can illuminate the air adjacent to the earth and that a magnet can effect the motion of iron, each without any action in the intervening medium. Ockham had adduced both examples,⁴⁴ and when Crathorn later returns to the issue

⁴² On Crathorn's thought, in addition to studies listed in n. 1 above, see: J. Kraus, "Die Stellung des Oxforder Dominikanerlehrers Crathorn zu Thomas von Aquin," *Zeitschrift für katholische Theologie* 57 (1933), 66–68; idem, *Quaestiones de universalibus Magistrorum Crathorn, O.P., Anonymi O.F.M., Joannis Canonici, O.F.M.*, Opusculus et textus, series scholastica 18 (Munster: 1937); V. Richter, "Handschriftliches zu Crathorn," *Zeitschrift für katholische Theologie* 94 (1972), 445–449. Except for Crathorn's *I Sent.*, q.2, which I quote from the edition of J. Kraus, *Quaestiones*, my references to Crathorn's commentary are to Basel, Univ. B.V.30 (as corrected by Wien, Österr. Nationalbibl., palat. lat. 5460, and Erfurt, Wiss. Bibl., C.A. 4.395a).

⁴³ Schepers, "Holcot contra, II," p. 113.

⁴⁴ Crathorn, *I Sent.* q.1, concl. 6 (Basel, pp. 16–17): "Sexta conclusio <est> quod obiectum extrinsecum immutat medium inter videntem et obiectum, et non immediate ipsum videntem ... Contra istam conclusionem ... arguitur sic: sol causat lumen in parte inferiori aeris non illuminando omnem partem superiorem ... tertio sic: si due candele obiciantur in diversis sitibus uni foramini parietis vel tabule causabunt ex alia parte foraminis radios tendentes ad situs distantes et oppositos ... quarto sic: magnes attrahit ferrum a quo distat localiter; igitur movens proximum et motum non semper sunt simul localiter ... Ad primum tamen dicendum quod sol non illuminat partem inferiorem aeris nisi prius natura vel tempore illuminet partes superiores et sibi immediatiores aliquo gradu luminis, quia non omne lumen est visibile a nobis ... Philosophus intendit quod movens et motum sunt simul situatiter, ita quod nihil mediet localiter inter movens et motum proximum ... ad quartum, dicendum quod magnes prius immutat medium quam ferrum, licet forma impressa aeri medio non sit ita perfecta sicut forma impressa magnetis." For Ockham, see above, chapter V, n. 87.

of the simultaneity of mover and moved, which Ockham had considered to be the axiom governing the denial of action at a distance, the Dominican specifies the precise location in Ockham's *Ordinatio* where he defends solar action at a distance.⁴⁵ Crathorn counters that illumination occurs through the multiplication of species from object to viewer, a process incorporating the actualization of the medium and the impression of species upon the percipient's sensitive or visual faculty.⁴⁶

If species are required to explain the propagation of light, they are equally important to an account of cognition. Crathorn stresses that "sensible species, which are caused by sensible things in the sentient, are not superfluous, because sentient beings, while they are able to sense sensible qualities when actually before them, need also naturally to know or imagine absent things, and to remember sensible things in their absence. This they could not do unless the reception of species occurs."⁴⁷ Natural experience offers evidence of such an impression and retention of species, and the "experiences" that he introduces are those already familiar to Oxford audiences. He does not explicitly inquire whether such instances of extramental reality "appearing" other than it is suggest the cognitive faculties' formation of an "apparent being," but his rejection elsewhere of Ockham's arguments that concepts are mental creations (*ficta*), makes clear that Crathorn would reject Aureol's hypothesis as well. For the Dominican, what these experiences indicate is that there is a species, or "similitude" impressed on the sensitive faculty in the process of perception; thus, the multiplication of species can account for the discrepancy between what is and what is seen.⁴⁸

⁴⁵ I *Sent.* q.16 (Basel, pp. 140–41): "Sed istam rationem solvit Willielmus Ockham suo modo, questione quam movit super distinctionem 37, dicens quod non est verum generaliter quod movens et motum sunt simul. Et ad hoc probandum, adducit unam experientiam probans 'quod sol immediate causat lumen in aliquo corpore hic inferius, et tamen non est presens alicui corpori.'"

⁴⁶ I *Sent.* q.1, concl. 4 (Basel, p. 15): "Quantumcumque medium esset illuminatum, nisi lumen ipsi colori esset unitum, color non videretur; unde lumen ad hoc quod color videatur est necessarium ex parte obiecti;" *ibid.*, concl. 6 (Basel, p. 18): "species nigredinis in extremo aeris iuxta albedinem multiplicabuntur, et sic in illa parte aeris generabitur una species nigredinis intensa que naturaliter reagit immutando partes aeris versus nigredinis et versus videntem, et sic ut videtur imprimetur videnti species nigredinis et non sola species albedinis, ut supra dictum est." Crathorn also refers, *ibid.*, concl. 7 (Basel, pp. 19–20) to "species genita in potentia visiva."

⁴⁷ *Ibid.*, concl. 4 (Basel, p. 15): "Dicendum quod species sensibles, que causantur a rebus sensibilibus in sentiente, non superfluent, licet sine illis possent qualitates sensibles actualiter sentiri, quia animalia sensitiva non solum indigent ut actualiter sentiant res sibi prius naturaliter obiectas, sed ut possint naturaliter cognoscere vel ymaginare res absentes, et memorari et reminisci rerum sensibilium ipsis absentibus. Quod fieri non posset nisi per receptionem talium specierum."

⁴⁸ *Ibid.*, concl. 3 (Basel, pp. 12–13; Erfurt, fol. 2vb–3ra): "Tertia conclusio est quod

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Not only is cognition inadequately explained without resort to species, but in fact the species *is* cognition, according to Crathorn. That is, the term "cognition" (*cognitio*) can designate the cognitive power; and, because Crathorn considers the soul and its faculties indistinct from each other, the term can also designate the knowing soul itself.⁴⁹ In addition, the term "cognition" can designate the extramental thing (*res*) that is known. Most properly, however, "cognition" designates the known object's likeness within the knower. Crathorn stresses that this similitude is itself known *immediately*; termed by him an "immediate material cognition," it is the species.⁵⁰ If, moreover,

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predicta similitudo existens in cognoscente que est verbum et naturalis similitudo qualitatis sensibilis et existentis extra cognoscentem, [an] cognoscitur et sentitur, non cognita intuitive nec sensata alia re cuius est similitudo. Quod probo sic: ad motionem circularem virge ignite in extremitate, videtur unus circulus, vel color circularis, nullo tali circulo existente extra videntem; ergo circulus ille visus est in anima vel in capite videntis. Dicitur forte ad istud, quod quando talis virga ignita in extremitate circumagitur, nullus color circularis figure videtur, sed tantum *apparet* videnti illum ignem circulariter motum quod videat colorem circularis figure; sed nullum talem colorem videt. Sed istud non est bene dictum, quia nisi videns illum ignem circumagitur videret colorem circularem existentem in vidente vel extra, numquam iudicaret videns se videre colorem circularem. Ideo dicendum est quod color partis virge ignite existens in uno situ causat similitudinem suam in capite videntis ... ita quod color partis ignite ipsius virge circulariter mote generat in capite videntis multos colores et multas similitudines suas ex quibus invicem contingunt fit unus color circularis ... Secundo arguo sic: videns collum columbe potest videre diversos colores ... Tertio sic: videns rem aliqua mediante speculo fracto vel mediantibus speculis diversis videbit tot imagines et similitudines rei istius quot sunt specula vel partes speculi fracti ... Quarto sic: si rotus motus fuit depictus multis coloribus specie distinctis, videns totum motum videbit colorem mixtum ... Quinto sic: multi experti sunt isto anno fuit eclipsis solis, scilicet 17 kal. Augusti in vigilia beati Alexii, quod respicientes solem et postea convertentes se et respicientes herbas virides ... apparuit eis quod herbe habuerunt colorem consimilem et consimile apparuit de nubis ... Dico igitur quod species qualitatum sensibilium que sunt extra videntem frequenter videntur quando qualitas cuius sunt species non videtur." The passage includes an explicit reference to the multiplication of species (Basel, p. 13): "speculum aliquo modo est causa multiplicationis specierum visibilium vel visarum que sunt in vidente." For Crathorn's attack on Ockham's notion of concepts as ficta, cf. *I Sent.* q.2 [ed. Kraus: pp. 32–39]: "Septima opinio est de universali, quam tenet Ockam ... quod universale non est aliquid habens esse subiectivum nec in anima nec extra anima et est quoddam figmentum habens tale esse in esse obiectivo quale habet res in esse subiectivo extra animam ... (p. 37) ideo dicendum est, quod illud quod vocatur 'verbum,' 'conceptus,' 'ymago,' et 'similitudo' rei est vera res in anima realiter existens et non tantum obiective, sicut iste ponit."

⁴⁹ Ibid. (Basel, p. 2): "Istud nomen 'cognitio' aliquando supponit in propositione pro illa re qua cognoscens cognoscit formaliter ... cognitio primo modo accepta potest vocari 'cognitio formalis' ... unde quando quis videt parietem album, visio sua primo modo accepta est sua potentia visiva vel videns;" *ibid.*, concl. 1 (Basel, p. 3): "Prima <conclusio> est quod omnis cognitio humana primo modo accepta est potentia cognitiva vel cognoscens;" *I Sent.* q.7, concl. 3 (Basel, p. 103): "Tertia conclusio est quod potentia memorativa, intellectiva, et volitiva est ipsa anima ..." Cf. Holcot's criticism, quoted in Schepers, "Holcot contra, II," p. 109n.

⁵⁰ *I Sent.* q.1 (Basel, p. 2): "<Secundo modo> aliquando supponit pro illa re que est

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'Cognition' is accepted for the species of a sensible or cognizable thing that is immediately sensed or known, which species is called 'cognition,' 'concept,' 'word,' 'similitude,' or 'image,' of sensible or cognizable things, then our natural knowledge is effected mediately or immediately by sensible things. And with respect to 'cognition' thus accepted, the cognitive power ... [is] passive only, supposing that such cognitions [i.e. species] are received in that power.⁵¹

As a further synonym for the species, Crathorn adds "vision," which he considers not intellectual but corporeal. Thus defined, what we label "cognition" is absolute, and any dependence it may have on an external object is severable.⁵²

Once received in the senses and stored in the memory, which Crathorn locates in the posterior ventricle of the brain, these species in turn produce a "generated cognition" (*notitia genita*), or "mental word." This mental word, he argues, is really distinct from the generating species, and is eventually impressed on the middle ventricle of the brain. There it is seen intuitively by the soul; and so the soul is enabled to think about or remember objects that have previously been sensed.⁵³

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similitudo rei cognite, que similitudo est in cognoscente et immediate cognoscitur; <tertio modo> aliquando vero hoc nomen 'cognitio' supponit pro re cognita que est extra cognoscentem et mediate cognoscitur, scilicet mediante sua similitudine quam gignit in cognoscente vel aliquid quod supplet vicem ipsius ... Unde talis cognitio <secundo modo accepta> potest dici modo predicta 'cognitio materialis immediata,' vel 'cognitio obiectiva,' vel 'obiecti immediata.' Cognitio tertio modo accepta potest dici 'materialis mediata' ... secundo modo accepta est similitudo albedinis que est in pariete, que similitudo gignitur in vidente ab albedine visa, que similitudo vocatur 'conceptus' albedinis vel 'verbum albedinis' et 'visio genita,'" *ibid.* (p. 6): "Dico generaliter quod cognitio non est aliud quam potentia cognitiva, et hoc vocando 'cognitionem' id quo cognoscens cognoscit formaliter, quod propriissime vocatur 'cognitio;' et quod potentie cognitive nostre non sunt distincte <ab> [superaddite] animabus nostris ... concedo quod anima hominis cognoscentis est cognitio, anima hominis videntis visio ... et omnes conclusiones consimiles dico esse veras."

⁵¹ *Ibid.* (Basel, p. 5): "Si autem cognitio accipiatur pro specie rei sensibilis vel cognoscibilis, que immediate sentitur vel cognoscitur, que species vocatur 'cognitio,' 'conceptus,' 'verbum,' [vel] 'similitudo,' <vel> 'ymago' rei sensibilis ... sic cognitio nostra naturalis est effective <causata> mediate vel immediate a rebus sensibilibus. Et respectu cognitionis sic accepte, potentia cognitiva ... <est> tantum passiva, supposito quod talis cognitio <i.e. species> in ipsa potentia cognitiva recipiatur."

⁵² In addition to n. 49, above, cf. *I Sent.* q.1 (Basel, pp. 10–11): "Sed eadem res que modo est alicuius cognitio potest esse et manere, licet non sit alicuius cognitio; et eadem res que modo non est alicuius cognitio potest postea esse alicuius cognitio, sicut enim calor existens in ligno est formalis calefactio ligni ... et cum si lignum potentia Dei destrueretur vel aliud alium locum moveretur conservato calore in eodem loco vel alio distante a loco ligni, [si] remaneret idem calor <sed> non foret alicuius calefactio ... potest li 'cognitio' supponere pro aliquo quod est vel erit cognitio in eodem situ vel tempore quo ponitur potentia cognitiva esse, ut iste sit sensus propositionis, ista sunt compossibilia: 'potentia cognitiva est,' et 'nulla res est que sit visio vel cognitio.'"

⁵³ *I Sent.* q.2 (Basel, p. 33): "Cellula memorialis realiter immutatur a propositione ex-

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Although Crathorn claims that such species are qualities within the knower, he is far from accepting Ockham's notion of qualities required for perception. As mental entities, Crathorn stresses, species are not objectively existing, but instead are subjectively, i.e. really, existing entities in the mind or "in some part of the brain." Such a species is, moreover, immediately known—not formally, but "by reflection and representatively, namely because the thing of which this is a word (*verbum*) is reflected and represented."⁵⁴ While cognitive acts are therefore identical with the cognitive faculties in which they occur, they are distinct from the species received in them.⁵⁵

Among the reasons for rejecting the identification of species and cognitive acts is Crathorn's conviction that the formation of a mental proposition—or the formation of its parts when these are complex—presupposes both temporally and innately the formation of the "mental word" of the thing (*res*) from which it is formed. Such a mental word or concept, Crathorn continues, is what is first known to the intellect, and as such is the first terminus of the act of knowing intellectually. The object from which the concept is formed is neither the proposition itself nor a part of

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trinseca audita, sed impossibile est quod propositio extrinseca prolata, cum distet localiter et situatiter a memoriali cellula, immutet cellulam memorialem immediate; aliter, movens et alterans naturale non tangeret proximum alteratum, quod est contra Philosophum et veritatem ... ergo, propositio extrinseca prolata et audita prius immutat organum audiendi et cellulam fantasticam, idest primam cellulam cerebri, et cellulam syllogisticam, idest mediam cellulam cerebri ... antequam immutet cellulam memorialem, que est in posteriori parte capitis, quia est postrema pars vel postrema cellula cerebri. Ergo similitudo propositionis extrinsece audite imprimit similitudinem suam organo sensus auditus, a qua similitudine sensus imprimitur alia in anteriori cellula mediante immutatione nervi, qui descendit a pia matre ad oculos versus aurem vel aures ... ab ista autem similitudine prime cellule immutatur cellula memorialis, que est conservativa specierum rerum sensatarum ... et eodem modo a colore viso causantur in vidente similitudines solo numero et subiecto distinctes. Et similiter ymaginandum est de omni re extrinseca sensata;" *ibid.*, q.7, concl. 8 (Basel, p. 106): "Dico igitur quod notitia genita vel verbum mentale differt realiter a specie conservata in memoria; est enim una qualitas genita a specie conservata in memoria simillima sibi. Quantum mihi videtur imprimitur medie cellule, ubi impressa intuitive videtur ab anima cogitantis;" *ibid.* (Basel, p. 102): "sed quia est causa illius verbi mentalis in quo res cognoscitur quando absens cogitatur."

⁵⁴ *I Sent.* q.1 (Basel, p. 11): "Alio modo hoc nomen 'cognitio' supponit pro verbo rei cognite, quod verbum in mente nostra est una qualitas subiective existens in mente vel in aliqua parte cerebri, que immediate cognoscitur, que quidem (*ms.* quedam) qualitas vocatur 'cognitio' non formaliter sed relucenter et representative, quia scilicet in ista qualitate res cuius est verbum relucent et representatur."

⁵⁵ *Ibid.*, concl. 2 (Basel, p. 12): "Secunda conclusio probanda est quod cognitio humana secundo modo accepta, scilicet res immediate cognita, non est potentia cognitiva vel cognoscens. Probo, quia impossibile est quod una res numero sit plures res numero distincte specificè vel genere. Sed species sensibilis albedinis et species nigredinis sunt plures res distincte specificè ... igitur potentia cognitiva humana non est cognitio secundo modo accepta ... <i.e.> species rerum cognoscibilium immediate cognitive, vel alia signa ad placitum rerum cognitivarum vel cognitarum, ut postea patebit."

it; consequently, each mental word that is thus formed represents a single object and not a state of affairs.⁵⁶ As a result, these mental words are not initially generated within mental propositions; instead, such propositions are generated later. Even then, the components of mental propositions are not the object-generated "actual cognitions," but "generated cognitions" multiplied from them.⁵⁷

To understand why Crathorn thinks that this final generation must be added, it is instructive to take as an example the term "white." It is readily obvious that this term can be a part of several mental and vocal propositions, some of them nearly simultaneous. If one is to avoid positing that one-and-the-same word, as a mental *entity*, can be distinct predicates and subjects in several propositions simultaneously—that is, in several "places" at once—then one must assume that signs representing the mental word can be multiplied from it just as are species from objects.⁵⁸ On Crathorn's account, then, the process by which propositions are formed requires several steps, each requiring the passage of time, however short, as well as the continuing duration of the mental entities thereby produced.

This understanding of propositions is, of course, incompatible with those of both Chatton and Ockham.⁵⁹ Nevertheless, they are not Crathorn's sole focus here. In stressing the distinction between the received species or "actual cognition," and the "generated cognition" or mental

⁵⁶ I *Sent.* q.2 [ed. Kraus: p. 38 lin. 10–28]: "Formatio propositionis mentalis et partium eius presupponit duratione vel natura cognitionem actualem rei, de qua formatur. Sed illud, quod primo intelligitur et primo terminat actum intelligendi, est verbum mentis vel conceptus mentis. Ergo formatio propositionis mentalis vel partium eius, quia propositio mentalis non est aliud quam partes propositionis mentalis, presupponit tempore vel natura formationem verbi mentalis illius rei, de qua formatur. Ergo verbum mentis, quod est similitudo rei, que non est propositio nec pars propositionis, sed illud, de quo propositio formatur, non est propositio mentalis nec pars eius." I here summarize a discussion explicated more fully by Gelber, "Contingencies of Propositions."

⁵⁷ See, e.g., I *Sent.* q.7, concl. 8 (Basel, p. 105): "Notitia actualis genita gignitur et efficitur a specie conservata in memoria; igitur notitia genita non est species conservata in memoria ... si verbum vel notitia genita non fieret a specie in memoria, de nullo videretur servire species conservata in memoria."

⁵⁸ I *Sent.* q.2 [ed. Kraus: p. 38 lin. 29–p. 39 lin. 7]: "Posita una intellectione tantum albedinis et per consequens uno solo verbo albedinis, quod est naturalis similitudo albedinis, potest intelligens albedinem formare plures propositiones vocales et mentales, quarum sunt plura et distincta subiecta et predicata. Ergo tales propositiones mentales, quas intelligens format de albedine, non fiunt ex tali verbo albedinis nec sicut ex subiectis nec sicut ex praedicatis. Antecedens patet per experientiam; consequentia patet, quia impossibile est, quod unum et idem sit distincta subiecta vel distincta predicata diversarum propositionum simul et semel."

⁵⁹ Schepers, "Holcot contra, II," pp. 118–22 first demonstrated the incompatibility of Crathorn and Ockham on the nature of mental propositions; but because Holcot treated Crathorn's arguments and Chatton's as variants of the same view, the distance between their positions has not been clear. Compare, however, Crathorn to Chatton, above, chapter VII, nn. 84–89.

word, Crathorn is at least as concerned to refute FitzRalph. From Crathorn's standpoint, if Ockham is wrong to deny sensible species altogether, FitzRalph errs equally in assimilating them to the "generated cognition."⁶⁰ Perhaps Crathorn misrepresents the secular scholar's views, for the latter's *Sentences* commentary reveals an acceptance of the distinction between "actual" and "generated" cognition. In 1330, however, when Crathorn formulated his critique, the *extant* version of FitzRalph's commentary did not yet exist. Hence, it is more likely that the position defended in his *opus correctum* results from revision and reflects a shift encouraged by the younger Dominican bachelor's arguments.⁶¹

If FitzRalph found Crathorn persuasive, the same cannot be said for Holcot. The two Dominicans concur to some extent as, for instance, in accepting species as "what is known first" and as the parts of mental propositions, and in distinguishing the act of perceiving from that of forming such propositions. Yet, such points of agreement probably stem from what is common to their reading of such sources as Campsall and Aquinas, inasmuch as Holcot more generally finds his colleague's views on the object of knowledge, like his understanding of species, unconvincing.⁶² For Crathorn does indeed insist that the species is a natural similitude of the object from which it derives—albeit only of the object's accidents, and not of the substance.⁶³ Thus, Crathorn admits, to Holcot's astonishment:

Speaking, however, of accidental form, I do not see that it is absurd (*inconueniens*) to say that form naturally separated from corporeal matter is specifically the same as the form which naturally perfects the corporeal matter. Hence, when an angel intuits color, the species of color which is naturally in the angelic mind during the vision, and which is separated from all corpo-

⁶⁰ Above, n. 53, and I *Sent.* q.7 (pp. 105–06), as Schepers discussed, "Holcot contra, II," pp. 115–22. Part of FitzRalph's discussion is quoted above, chapter VIII, nn. 105–09.

⁶¹ See above, chapter VIII, nn. 101–02.

⁶² Thus, for example, Crathorn quotes Aquinas on scientific habit, I *Sent.* q.1 (Basel, p. 11–12): "Beatus Augustinus accipit ibi scientiam pro similitudinibus rerum, non pro illo quo sciens scit formaliter. Et idem est dicendum ad omnes auctoritates doctorum que sonant quod cognitio humana est res distincta a potentia cognitiva, quia ipsi per 'cognitionem' intelligunt species intelligibiles que a rebus sensatis causantur. Unde beatus Thomas *Contra Gentiles* libro primo, c.56, loquens de scientia habituali dicit: 'habitus vel est habitatio quoad recipiendum species intelligibiles quibus actus fiat intelligens, vel ordinata aggregatio specierum.'" Cf. Holcot, above, n. 33; also nn. 16, 20–21.

⁶³ *Ibid.*, concl. 7 (Basel, p. 19): "Alia conclusio est quod ista qualitas que est verbum et similitudo naturalis rei coniungit existentis extra animam <et> est eiusdem speciei cum re illa cuius est similitudo, quod probro sic: impossibile est unam qualitatem esse similitudinem alterius a qua specie differt;" again (Basel, p. 21): "Ad quintum, dicendum quod Philosophus vocat 'speciem' lapidis similitudinem accidentis lapidis; non autem similitudinem substantie lapidis, quia nulla talis est in anima humana pro statu isto."

real matter, is specifically the same as the color that the angel intuits—supposing that in the mind of an angel there is such a species of the known thing.⁶⁴

This is a supposition Crathorn does not doubt, and he therefore nonchalantly concedes that "the soul seeing and knowing color is truly colored, not with color existing outside the soul, but with its similitude which is truly color. And the same must be said concerning the knowing soul whenever the natural word of that color is formed within it."⁶⁵ Holcot, amazed by this conclusion, ascribes the view's origin to Bacon, and guides readers to the chapter of the *Perspectiva* in which Bacon claims that the species is material and corporeal, not merely a spiritual quality.⁶⁶ We will be less amazed if we consider what motivates Crathorn to depart from the tendency of his contemporaries to minimize the assimilationist aspects of cognition, and to return to the sort of frank acceptance of them that had characterized thirteenth-century accounts.

Underlying Crathorn's treatment of knowledge is an interpretation of the distinction between intuitive and abstractive cognition as thoroughly unlike those of his contemporaries as of Ockham's. Crathorn quotes the Venerable Inceptor's opinion that "in this life, the intellect has, with respect to incomplex objects, two specifically distinct cognitions, of which one can be called 'intuitive' and the other 'abstractive,' and which differ, according to him, in that by virtue of intuitive cognition one can know evidently whether a thing is if it is, or is not if it is not; and by virtue of abstractive cognition one cannot know whether a thing is or is not."⁶⁷

⁶⁴ Ibid. (Basel, p. 20): "Loquendo tamen de forma accidentalī, non video inconveniens dicere quod forma separata naturaliter a materia corporali sit eiusdem speciei cum forma que naturaliter perficit materiam corporalem. Unde, quando angelus intuetur colorem, species coloris que stante visione naturaliter est in mente angelica et ab omni materiali corporali separata, est eiusdem speciei cum colore quem angelus intuetur—supposito quod in mente angelis sit talis species rei intellecte."

⁶⁵ Ibid.: "Ad secundum, dicendum quod argumentum concedit verum: anima videns et intelligens colorem est vere colorata nullo colore existente extra animam, sed ipsius similitudine que est verus color. Et idem dicendum est de anima intelligente quodcumque formatur in ea verbum naturale ipsius coloris."

⁶⁶ Above, n. 34.

⁶⁷ I *Sent.* q.1 (Basel, pp. 24–25): "Ex predictis patet quod ille quinque conclusiones quas Willelmus Ockham nititur probare prima questione sua sunt false, quarum prima est quod intellectus noster pro statu isto respectu eiusdem obiecti et sub eadem ratione potest habere duas notitias incomplexas specie distinctas, quarum una potest vocari 'intuitiva' et alia 'abstractiva.' Pro qua conclusione prima arguit sic ..." which introduces an extensive quotation of Ockham's arguments from I *Ord.* prol. q.1 [OTH I: pp. 22–23, 28–30] concluding: "contingit igitur quod intellectus respectu incomplexi pro statu isto habet duas notitias specie distinctas quarum una potest vocari 'intuitiva' et alia 'abstractiva,' que notitie isto modo differunt, secundum eum, quia notitia intuitiva est ista virtute cuius potest cognosci evidenter an res sit si sit vel quod non sit si non sit; notitia abstractiva est ista virtute cuius non potest cognosci evidenter an res sit vel non sit." For Ockham, cf. above, chapter V, nn. 37, 53–54.

Remarking that "it is not difficult to respond to his arguments," Crathorn maintains that intuitive and abstractive cognition are not distinct. Rather, intuitive cognition is the cognitive faculty itself, and is as well abstractive cognition, "such that the same thing numerically is called 'intuitive' and 'abstractive' with respect to the same object known in different ways." When an object really exists (*in re*), and is presented to the cognitive faculty in-and-of-itself (*secundum seipsam*), and not just through its image or similitude, then the object is known intuitively. The same cognitive faculty is called "abstractive" vis-à-vis the same object when it does not exist or is not thus present to the faculty but instead, "its similitude or image, or something that is by convention its sign, is presented and placed before the cognitive faculty."⁶⁸

Thus far, Crathorn's assertions lie within the interpretive directions established over a decade before by Campsall. So far as available evidence informs us, however, the conclusion that Crathorn draws from the numerical identity of intuition and abstraction is entirely his own:

With respect to the similitude, image, or conventional sign, this faculty is called 'intuitive' or 'intuiting;' but with respect to the thing of which this is an image, it is called 'abstractive' or 'abstracting.' Hence, the same thing numerically is simultaneously intuitive and abstractive with respect to different objects.⁶⁹

As in accepting the material, corporeal nature of species generated by material objects, what is original in Crathorn's conclusion here is his embrace of a consequence that other scholars had offered as presenting ma-

⁶⁸ Ibid. (Basel, p. 25; Erfurt, fol. 9ra): "Sed videtur mihi quod notitia intuitiva et abstractiva non sunt due notitie specie distincte, nec etiam numero, sed eadem res omnino, quia notitia intuitiva est ipsa potentia cognitiva; et similiter, ipsa notitia abstractiva, ita quod eadem res numero vocatur 'intuitiva' et 'abstractiva' respectu eiusdem obiecti diversimode cogniti. Dicit enim ipsa potentia cognitiva 'intuitiva' vel 'intuens' respectu obiecti rei existentis et presentis ipsi potentie cognoscentis; quando scilicet aliqua res secundum seipsam presentatur et obicitur ipsi potentie et non solum secundum ymaginem et similitudinem suam. Et ita eadem potentia vocatur 'notitia abstractiva' vel 'abstrahens' respectu eiusdem rei quando secundum seipsam non est presens nec obiecta ipsi potentie cognoscentis, sed ipsi potentie cognitive presentatur et obicitur ipsius similitudo vel ymago vel aliquid quod est ipsius signum ad placitum ... Ad rationes Ockham non est difficile respondere." See also I *Sent.* q.2 (Basel, p. 32; Erfurt, fol. 11vb): "Secundo modo dicitur aliquid cognitum abstractive, et isto modo cognoscitur id quod non est vel id quod non est presens cognoscenti, sed aliquid a cognoscente videtur que est eius signum ..."

⁶⁹ I *Sent.* q.1 (Basel, p. 25; Erfurt, fol. 9ra): "Respectu similitudinis vel ymaginis vel signi ad placitum, ipsa potentia dicitur 'intuitiva' vel 'intuens;' sed respectu cuius est ymago, dicitur cognitio 'abstrahens' vel 'abstractiva.' Unde eadem res numero est simul intuitiva et abstractiva respectu diversorum obiectorum;" *ibid.*, q.2 (Basel, p. 32; Erfurt, fol. 11vb): "aliquid dicitur esse cognitum intuitive, sicut albedo lapidis que videtur, et similitudo albedinis que est in vidente et immediate videtur." Cf. also n. 52 above.

major difficulties yet surmounted by any analysis of cognition that took species into account. After all, in his view, only the species is known immediately, or intuitively, in this life; the objects that the species represent to the knower are known only mediately. Thus, to the question how the objects of intuition and abstraction could be precisely the same, Crathorn's response must be that, in fact, the objects differ.⁷⁰ The species is not only the *means* by which an object is known, but in the case of intuitive cognition, *what* is known. Yet among Ockham's arguments against species, was the claim that, if this were the case and if there were species, then we should have intuitive awareness of the species' existence. While Crathorn asserts that the presence of species is *inferable* from the phenomena of perception, abstractive cognition, memory, and imagination, he readily admits that the mind is not experientially aware of them as it is of their generating objects.⁷¹ That is, they are what the mind knows, but they are not themselves known—in part because they are so similar to the objects they represent that the cognitive faculties cannot distinguish between species and object.⁷²

It therefore follows that the fact that one has an intuitive cognition of an object is not sufficient to provide *evident* knowledge that the extramental object exists, nor of such contingent accidents as, for example, the object's location.⁷³ This conclusion, too, Crathorn accepts. Indeed, he is dissatisfied on several counts with the Venerable Inceptor's reasoning in concluding that intuitive cognition results in evident knowledge of whether an ob-

⁷⁰ As he states in the passage quoted, n. 69 above; see also above, chapter IV, n. 71; chapter V, n. 31.

⁷¹ I *Sent.* q.1, concl. 9 (Basel, p. 22): "Probo istam conclusionem sic: videns albedinem simul et indistincte videt albedinem et speciem albedinis. Igitur ... ex hoc solo quod eam videt, non potest certificari utrum sit extra;" *ibid.*, concl. 10 (Basel, p. 22): "Multi videntes colorem ignorant utrum vident mediante specie vel non, quod non contingeret si visio esset sufficiens causa ad probandum aliquem speciem coloris esse in vidente."

⁷² *Ibid.* (Basel, p. 21): "Ratio quare videns albedinem non potest eo ipso quod illam videt distinguere inter albedinem et speciem albedinis, est similitudo speciei albedinis ad albedinem;" *ibid.*, concl. 4 (Basel, p. 14): "Quarta conclusio: licet homo pro statu isto non videat colorem nisi per speciem, tamen homo posset naturaliter videre colorem ... Probo: quando res extrinseca que est extra videntem videtur mediante sua specie a vidente, eadem res numero est visio speciei et istius cuius est species, sicut quando aliquis videt albedinem mediante specie eadem visione videt speciem immediate et albedinem mediate, quia mediante specie."

⁷³ *Ibid.* concl. 9 (Basel, p. 21; Erfurt, fol. 8ra): "Nona conclusio est ista, quod ex cognitione sensitiva non potest viator habere cognitionem certam et omnino infallibilem de existentia cuiuscumque accidentis extra animam. Et istam conclusionem sic intelligo, quod viator pro statu isto non potest cognoscere evidenter et infallibiliter huiusmodi complexa: 'aliqua albedo, aliquis color, aliquis sonus, est vel fuit extra sentientem,' et sic de aliis ... et quia situs speciei albedinis virtute visionis speciei a vidente non percipitur, nec etiam situs albedinis existentis extra animam potest cognosci evidenter a cognoscente vel vidente."

ject exists. Disputing at the outset Ockham's definition of evident cognition as exclusively of true propositions, Crathorn notes that the blessed soul's awareness of God is evident but does not have a proposition as the object. Moreover, Crathorn insists, if one recognizes that the formation of propositions is a successive process requiring time and several steps, then it is clear that "the incomplex awareness of the terms of a given proposition cannot be sufficient" to cause the cognition of that same proposition.⁷⁴

More important, Crathorn considers Ockham's derivation of evident cognition from intuitive cognition circular. According to Ockham, "that an intuitive cognition be able to cause the evident knowledge of such propositions [as] 'this thing exists (*est*)' or 'this thing does not exist' presupposes that the knowledge is intuitive; hence it is not said to be intuitive because it is able to cause the evident knowledge of such propositions."⁷⁵ It is clear from Ockham's own words, Crathorn argues, that the intuitive cognition is "temporally or naturally prior" to the effect it causes, that is, the evident cognition of a proposition concerning that object. To Crathorn it seems, however, that Ockham had also made what is causally prior (intuitive cognition) dependent upon its effect (evident cognition). Suppose nevertheless that such a dependence were to be granted, Crathorn proposes, and cognition were to be called "intuitive" because it is a

⁷⁴ Ibid. (Basel, p. 1): "Dicit Ockham quod 'notitia evidens est notitia vel cognitio veri [in]complexi, ex notitia terminorum incomplexa immediate vel mediate nata sufficienter causari, ita scilicet quod quando notitia incomplexa terminorum aliquorum ... in quocumque intellectu habente talem notitiam sufficienter causat vel nata est causare mediate vel immediate notitiam complexi, tunc illud complexum evidenter cognoscitur.' Contra istud arguo tripliciter. <Primo> non omnis notitia evidens est notitia complexi ... igitur male describit notitiam evidentem dicendo 'notitia evidens est notitia complexi,' etc. ... quia notitia intuitiva qua Deus videtur a beato est notitia evidens, et tamen non causatur nec est nata causari ab aliqua notitia incomplexa aliquorum terminorum, nec est notitia alicuius complexi ... Secundo sic: notitia incomplexa terminorum non potest esse causa sufficiens notitiae eiusdem propositionis, cuius oppositum innuit iste. Assumptum probo, quia si notitia alicuius propositionis posset causari sufficienter ex notitia incomplexa terminorum eiusdem propositionis, hoc maxime foret verum de propositionibus per se notis. Sed notitia propositionis per se nota cuius est ista, 'omne totum est maius sua parte,' et consimiles non potest causari sufficienter ex notitia incomplexa terminorum eiusdem propositionis; igitur nec notitia aliarum propositionum ... minorem probo, quia notitia evidens istius propositionis, 'omne totum, etc.' dependet ex notitia intuitiva rerum significatarum per istos terminos 'totum' et 'pars' ... tertio contra hoc quod dicit <Ockham> ... arguo sic: alia est notitia terminorum propositionis incomplexa et alia notitia complexa propositionis. Sed notitia incomplexa terminorum propositionis non potest causare notitiam evidentem alterius propositionis nisi mediante notitia istius propositionis cuius sunt termini." See also n. 76, below.

⁷⁵ Ibid. (Basel, p. 27): "Preterea, notitia intuitiva posse causare notitiam evidentem talium complexorum, 'hec res est,' 'hec res non est,' presupponit ipsam esse intuitivam; igitur cognitio non dicitur intuitiva esse quia potest causare notitiam evidentem talium complexorum. Consequentia est plana; antecedens patet per istum Doctorem ..."

cognition capable of causing evident cognition of such propositions. In that case, on Ockham's own theory, "cognitions which can in no way cause such evident cognitions of such propositions are in no way intuitive." What, then, becomes of Ockham's hypothesis of an "imperfect intuitive cognition?" Clearly, since Ockham admits that it cannot cause such evident cognition, on his own terms it is not intuitive, but only abstractive.⁷⁶

As had several earlier critics of Ockham's account, Crathorn raises the issue of divine intervention in the natural course of events. Pointing out that if, as Ockham claims, it is within God's power to preserve vision in the absence of an object, Crathorn argues that one could never be infallibly certain whether God is intervening to conserve the species in any given instance.⁷⁷ As Crathorn appreciated, in admitting the possibility of an intuitive cognition of a non-existent by God's absolute power, Ockham had invoked the traditional criterion of absolute possibility, showing that the occurrence of such cognition would involve no logical contradiction.⁷⁸ Thus, the object's presence cannot be described as absolutely—

⁷⁶ Ibid.: "Consequentia est plana; antecedens patet per istum Doctorem, quia prius tempore vel natura cognoscens intuetur albedinem quam possit cognoscere evidenter hoc complexum 'hec albedo est,' quia cognitio intuitiva secundum eum est causa notitia evidentis istius complexi. Sed omnis talis tempore vel nature precedit suum effectum. Preterea, si cognitio diceretur intuitiva quia potest causare notitiam evidentem talium complexorum, tunc ista notitia que nullo modo potest causare notitiam evidentem alicuius talis complexi nullo modo esset intuitiva; sed secundum eum, notitia intuitiva <aliqua> est ita imperfecta quod non potest talem notitiam evidentem causare; igitur ex dictis suis sequitur quod alia est notitia intuitiva que nullo modo est intuitiva."

⁷⁷ Ibid.: "Quinta conclusio sua est quod ... 'cognitio intuitiva est illa qua potest cognoscens evidenter cognoscere rem sic cognitam esse vel non esse; cognitio vero abstractiva est illa qua cognoscens non potest evidenter cognoscere rem abstractivam cognitam esse vel non esse ... secundo potest argui sic: omnis res absolute distincta loco et tempore ab alia re absoluta potest per potentiam divinam conservare sine illa ... Sed contra istam viam arguitur sic: viator potest aliquam rem cognoscere, et tamen tali re sic cognita non potest evidenter cognoscere utrum res illa sit vel non sit; igitur cognitio non dicitur intuitiva ... probo, quia pono quod aliquis videat albedinem existentem extra videntem, sicut albedinem panis vel lapidis. Videns talem albedinem non potest infallibiliter et omnino evidenter cognoscere istam albedinem esse ex sola visione, quia si species albedinis conservaretur per potentiam Dei, vel etiam in vidente, albedine prius visa ad nihilata crederet videns solam speciem albedinis albedinem prius existentem et prius visam se videre, et ipsam adhuc esse, et tamen deciperetur. Sed videns albedinem non potest ex sola visione certificari utrum talis conservatio speciei fieret a Deo vel non; igitur sola visione albedinis non potest videns evidenter cognoscere, et infallibiliter, talem rem esse si sit."

⁷⁸ See above, chapter V, n. 58; for Ockham's definition of the dialectic of divine omnipotence, cf. his VI *Quodl.*, q.1 [OTh IX: p. 585 lin. 14–p. 586 lin. 30]: "Aliter accipitur 'posse' pro posse facere omne illud quod non includit contradictionem fieri, sive Deus ordinaverit se hoc facturum sive non, quia multa potest Deus facere quae non vult facere, secundum Magistrum Sententiarum, lib. I, d.43; et illa dicitur Deus posse de potentia absoluta. Sicut Papa aliqua non potest secundum iura statute ab eo, quae tamen absolute potest."

that is, logically—necessary, but only as contingent because it is dependent upon God's established order. For Ockham, however, the fact of contingency does not admit that God would abrogate that order. Ockham had therefore seen no need to include in his analysis a means for determining whether in any given instance God is acting absolutely. Indeed, if Ockham consistently employs the notion as he defines it, then for him the suggestion that God *acts* absolutely would be a contradiction in terms.⁷⁹ That Crathorn, like Rodington, finds a lacuna here in Ockham's theory is indicative of a looser distinction, whereby appeal to God's absolute power introduces the consideration of supernatural intervention in the natural order.⁸⁰

Crathorn's aim in disputing Ockham's formulation of intuitive cognition goes further than severing it from evident judgments. The Dominican bachelor contends that although according to Ockham intuitive cognition is had with respect to incomplex objects, to know that, for example, a white thing exists, or that it does not exist, is not to know something simple. Rather, what is known is complex, i.e. propositional.⁸¹ More-

⁷⁹ According to Courtenay, "Nominalism and Late Medieval Religion," pp. 37–40. That is, Courtenay insists (p. 40), Ockham's *definition* of the distinction between God's absolute and ordained power "did not markedly depart from previous usage," common to most previous theologians, who (p. 37) "acknowledged an area of initial possibility for divine action, limited only by the principle of contradiction, out of which the things God did do or is going to do were chosen." See also the more extensive discussion in Courtenay's "The Dialectic of Omnipotence in the High and Late Middle Ages," in T. Rudavsky, ed. *Divine Omniscience and Omnipotence in Medieval Philosophy* (Dordrecht/Boston: 1985), pp. 243–69.

⁸⁰ If Crathorn did so interpret the dialect of divine omnipotence, he had ample contemporary support: Holcot seems to have such a notion of God's absolute power as enabling him to act absolutely (see nn. 9, 11 above). Similarly, such an understanding would have provided Rodington with ample motivation for his insistence that a contradiction would be involved in a supernaturally caused intuition of a non-existent (see above, chapter VIII nn. 42–56). That this was the case is suggested by Rodington's generally Scotist inspiration, for Courtenay, "Dialectic of Omnipotence," suggests that (p. 253) "the tendency to interpret *potentia absoluta* as a type of action rather than ... unconditioned possibility was ... aided by Duns Scotus's treatment of the distinction." Recently, Eugenio Randi has shown that several Scotists in the first decades of the fourteenth century propounded various explanations of divine power as encompassing the ability to intervene in the normal course of nature; see, e.g. his "A Scotist Way of Distinguishing Between God's Absolute and Ordained Powers," in *From Ockham to Wyclif*, pp. 43–50; idem, "*Lex est in potestate agentis*. Note per una storia dell'idea scotista di *potentia absoluta*," in *Sopra la volta del mondo. Omnipotenza e potenza assoluta di Dio tra medioevo e età moderna* (Bergamo: 1986), 129–38.

⁸¹ Ibid. (Basel, p. 27): "Secundo arguo sic <contra viam Ockham>: cognitio intuitiva est respectu alicuius incomplexi ut albedinis vel alicuius alterius; sed albedinem esse vel albedinem non esse non est aliquid incomplexum, sed complexum. Igitur cognitio intuitiva non dicitur intuitiva respectu talium complexorum 'albedo hec est,' 'albedo hec non est,' et consimilium."

over, such a state of affairs (*totale significatum*), rather than a proposition that intuitive cognitions are sufficient to cause, as Ockham had proposed, is for Crathorn the immediate object of scientific knowledge. Thus, to him it seems that Ockham's account of cognition is inadequate to explain how this total significatum of a proposition is known.⁸²

It can be argued that Crathorn does not do justice to the Venerable Inceptor's arguments—in itself *prima facie* evidence that Crathorn's intent is not to adopt Ockham's theory of cognition, or even to take it as a refinable point of departure for his own.⁸³ Moreover, in rebutting Ockham's grounding of existential knowledge, via evident judgments, upon intuitive cognition, the Dominican presents himself with the problem of establishing that deception of the senses does not lead ineluctably to deception of the intellect.⁸⁴ Because the extramental *res* is never, in this life, known except through the mediation of species; and because these can and, in the cases of illusions and hallucinations, afterimages, or memory, do occur without a present object; and especially because the *species* themselves are what are known intuitively, Crathorn holds that one can never be cer-

⁸² I *Sent.* q.3 (quoted in Schepers, "Holkot contra II," p. 123n): "Et sicut dictum est de conclusionibus, eodem modo intelligendum est de principiis et intellectu principiorum, quia non omne quod intelligitur est propositio mentalis vel vocalis, sed illud quod per propositionem mentalem vel vocalem significatur. Unde intelligens istud principium 'omne totum est maius sua parte' non proprie intelligit, secundum quod intellectus dicitur esse principiorum, istam propositionem ... sed intellectus est proprie totalis significati istius propositionis 'omne totum est maius sua parte.'—Ideo per istam propositionem, quae habetur a philosophis et allegatur: 'intellectus est principiorum et scientia conclusionum,' debet intellegi ista propositio: 'intellectus est illorum, quae significantur per principia, et scientia est illorum, quae significantur per conclusiones.'" again, *ibid.* (p. 125n): "Sciens vero significatum istius propositionis 'omne mixtum est corruptibile' potest scire hanc propositionem esse veram ... per tale medium: 'omnis propositio, quae ita significat esse sicut est vel fore sicut erit, est vera' ... Sed id, quod scitur per illud medium, non est haec propositio 'omne mixtum est corruptibile,' sed totum significatum istius propositionis conclusae: 'haec propositio est vera "omne mixtum est corruptibile" vel illud totale significatum, quod exprimitur per istud complexum: 'haec propositio "omne mixtum ex contrariis est corruptibile" est verum signum.'" Crathorn's notion of the "totale significatum" of a proposition is explicated by Schepers, "Holkot contra, II," pp. 122–25; see also: Nuchelmans, *Theories*, pp. 212–19; Bottin, *Scienza degli Occamisti*, pp. 173–79.

⁸³ For a contrary appraisal see, e.g., Hoffmann, "Satz als Zeichen," pp. 308–09.

⁸⁴ I *Sent.* q.1, concl. 11 (Basel, p. 22): "Alia conclusio est, scilicet undecima, quod videns albedinem potest habere notitiam evidentem et omnino infallibilem de huius complexis, 'video albedinem,' 'albedo est aliquid,' 'illud quod video est aliquid,' 'audio sonum,' 'sonus est a me auditus,' 'sonus qui a me auditur est aliquid in rerum natura,' 'sonus auditus a me est vera res,' et idem est dicendum de omni sensatione. Istud probatur sic: si videns ex hoc quod videt non posset habere notitiam evidentem et infallibilem de huiusmodi complexis iam dictis, sequeretur quod nullum complexum posset cognosci a viatore evidenter et infallibiliter. Et per consequens, non haberet infallibilem et evidentem <notitiam> de huiusmodi complexis, 'omne totum est maius sua parte;' et sic periret tota cognitio et scientia humana, quod est inconveniens dicere."

tain in this life that the extramental object both exists and is present when it is perceived.⁸⁵ He thus precludes an analysis of intuitive cognition by which it would serve—as it had for Scotus, Ockham, Chatton, and Rodington—as the guarantor of existential certainty regarding extramental reality. For Crathorn, intuitive cognition is instead a cause of uncertainty regarding what is outside the mind. He does not dispute the existence of intuitions; on the contrary, their importance to him is underscored by his refutation of an unidentified colleague who had argued that intuitive cognition is not, properly speaking, cognition.⁸⁶ Nor does Crathorn dispute assigning the attainment of certitude to intuition; where he does diverge from the growing consensus is with respect to the *realm* of intuition's efficacy.

If certitude regarding extramental objects cannot be guaranteed, the situation is quite different where the mind's contents are concerned: for of these, intuition does, indeed, on Crathorn's view, yield certainty.⁸⁷ The route by which Crathorn reaches this conclusion is historically interesting, not least for its parallels to the steps that Descartes claims to have followed.⁸⁸ Crathorn grants that in this life one cannot, from sensitive cognition alone, have "evident," that is, "clear, not obscure" and "entirely infallible knowledge" that such qualities as have been sensed in fact exist extramentally.⁸⁹ Nevertheless, Crathorn proposes, the principle, "God or the first cause does nothing superfluously (*frustra*) and in order to lead people into error," is a proposition one can know *per se*. This rule,

⁸⁵ See above, nn. 48, 52, 71–73, also *I Sent.* q.1, concl. 8 (Basel, p. 21): "Pro statu isto non poterimus habere cognitionem naturalem evidentem et omnino infallibilem de huiusmodi complexis: 'lapis est,' 'panis est,' 'aqua est,' 'ignis est,' et sic de aliis ex cognitione quacumque sensibili ... viator per existentiam accidentium non potest infallibiliter cognoscere aliquam substantiam corporalem esse. Sed cognitionem naturalem de existentia substantie corporalis non habet viator nisi per cognitionem accidentium;" concl. 9 (Basel, p. 21): "videns intense colorem viridem et subito se convertens ad locum obscurum iudicabit se videre colorem extra se existentem, et tamen decipitur, quia non videt nisi specie coloris que adhuc pro aliqua morula remanet in anteriori cellula cerebri."

⁸⁶ *Ibid.* (Basel, p. 9): "Ad sextum respondet <quidam> et dicit quod cognitio intuitiva non est proprie cognitiva, sed improprie ... Contra: cognitio intuitiva est illud quo formaliter intuens intuetur ... Preterea, si nulla esset cognitio intuitiva proprie loquendo, ut iste dicit ibi, vanum laboraverunt Doctores antiqui et moderni circa distinctionem inter cognitionem intuitivam et abstractivam, cum nulla talis sit."

⁸⁷ *I Sent.* q.1 (Basel, p. 22): "quilibet potest experiri in seipso quod sine omni dubitatione eo ipso quod vidit, assentit huiusmodi complexis, 'ego video,' 'aliquid a me videtur,' 'quod videtur a me est aliquid,'—supposito quod intelligat quid per talia complexa significetur."

⁸⁸ Descartes presents at least two accounts; cf. René Descartes, *Discours de la Méthode*, 4ième partie [in *Oeuvres et Lettres* (Paris, Gallimard: 1953)] pp. 147–53; *Méditations touchant la première philosophie* 1–3 [*Oeuvres*], pp. 267–300.

⁸⁹ Below, n. 90; Crathorn defines "evident" cognition, *I Sent.* q.1 (Basel, p.1): "Dico igitur quod notitia evidens est notitia manifesta sive clara non obscura; iste enim terminus 'evidens' importat negationem obscuritatis."

then, is the measure against which to gauge the experience of the senses in this life and, Crathorn insists, in doing so one will thereby conclude evidently that perceived extramental objects exist.⁹⁰ After all, to guarantee that, throughout our lives, we would see only such qualities existing within us, would require that there be a constant (*generalis*) conservation of sensible species. This would not only be miraculous and superfluous, but would also result "in many errors." So many, indeed, "that anyone who is sane would judge this to be incompatible with divine goodness."⁹¹

Thus, by appealing to premises known *per se* as correctives to non-veridical experience, and as instruments that allow anyone, by virtue of his own natural intellectual powers, to avoid invincible error, Crathorn resorts to the solution Duns Scotus had offered against Henry of Ghent's arguments.⁹² Still, it is not at all obvious that Crathorn, who differs from Scotus in his view of the soul and its operations, has provided any mechanism for attaining *per se* knowable information.⁹³ Moreover, such premises as Crathorn cites contravene Scotus (as well as Ockham), and exemplify a divergence in their demarcations of what is known *per se*—a divergence that arises from the Dominican's recognition of a difficulty that Scotus, at least, had overlooked. Crathorn suggests that we examine the claim that not every proposition can be the object of error.⁹⁴ As

⁹⁰ Ibid., concl. 12 (Basel, p. 23): "Duodecima conclusio est ista, quod licet viator ex sola cognitione sensitiva non possit habere cognitionem evidentem et omnino infallibilem quod tales qualitates sensate sint extra videntem, tamen ex cognitione sensitiva et isto complexo per se noto: 'Deus vel prima causa nihil agit frustra et supernaturaliter ad inducendum homines in errorem,' potest evidenter concludere tales res sensatas esse ..."

⁹¹ Ibid.: "Quia conservatio specierum ita generalis—scilicet quod homo per totam vitam suam nihil videret nisi tales qualitates existentes in vidente—foret miraculosa et vana et effectiva multorum errorum quale actionem quilibet sane mentis iudicat divine bonitati repugnare."

⁹² See above, chapter III, at nn. 83–88.

⁹³ Scotus's solution requires that sense and intellect be distinct enough that deception of the former not entail error in the latter, but this route would not appear to be available to Crathorn, who identifies intellection and sensation with the cognitive soul. See his I *Sent.* q.1 (Basel, p. 6): "Nono arguo sic: secundum omnes, quedam est cognitio sensitiva, quedam intellectiva, quedam est visio, quedam auditio; et sic de aliis ... concedo quod anima hominis cognoscentis est cognitio, anima hominis videntis est visio, anima <audientis> auditio, anima scientis scientia;" again, q.7 (Basel, p. 110): "Ad tertium, dicendum quod operatio sensitiva in homine est ita perfecta sicut operatio intellectiva, quia eadem res [est] que est operatio sensitiva respectu unius obiecti est intellectiva respectu alterius obiecti." Among the examples of purported *per se nota* that Crathorn adduces (Basel, p. 31) is the divine Trinity; for Ockham's explicit denial that the latter is known *per se* (rather than *per priorem*), see his I *Ord.* prol. q.1 [OTh I: p. 73].

⁹⁴ I *Sent.* q.1, concl. 13 (Basel, p. 23): "Alia conclusio est ista, scilicet tredecima, quod non omne complexum nec signum cuiuscumque complexi potest esse obiectum erroris."

examples, Crathorn offers propositions that by his day had a long history as self-evidently true: "for one-and-the-same object simultaneously to exist and not to exist is impossible;" "every whole is greater than its part;" and "for contradictories to be simultaneously true is impossible." Nevertheless, Crathorn reports, not only might someone deny the truth of such premises, or at least, fail to assent to them, but in fact there are those who do reject these premises.⁹⁵ As he reminds his audience, "many who wish to solve liar paradoxes (*insolubilia*) say that the same proposition is both true and false; hence ... contradictories are simultaneously true."⁹⁶ Mathematical axioms fare no better, for "there is a principle in the mathematical sciences that 'what are equal to one and the same, are equal to each other,' but some deny that this holds of multitudes and infinities."⁹⁷ Indeed, Crathorn reports, "once I heard one who considered himself intelligent who nonetheless denied the principle that 'all right angles are equal.'"⁹⁸

To find some indubitable principle from which to block an infinite regress, Crathorn turns finally to Augustine's solution: that ultimately, no one—no matter how much else he doubts—can be in doubt as to whether he exists:

For if one were to be in doubt concerning some proposition, such as 'I am,' it would follow that he exists, because 'I doubt that I am, therefore I am,' follows, since who is not, does not doubt. Hence, no one can be in doubt concerning this proposition: 'I am.'⁹⁹

⁹⁵ Ibid.: "Probat: vel homo assentit huiusmodi principiis 'impossibile est idem simul esse et non esse,' 'omne totum est maius sua parte,' 'impossibile est contradictoria esse simul vera,' vel non assentit. Si assentiat, manifestum est quod talia complexa non sunt obiecta erroris. Si non assentit talibus principiis, nec eorum oppositis nec aliquibus aliis, sicut quando homo dormit vel quando vigilat, non tamen alicui complexo assentit; et sic non assentire alicui complexo non arguit tale complexum esse obiectum erroris ... Tertio modo potest aliquis non assentire predictis assentiendo eorum oppositis; nec isto modo talia complexa sunt obiectum erroris, sed eorum opposita ... Concedo igitur quod aliquis potest sic disponi quod iudicaret hoc complexum esse falsum: 'impossibile est contradictoria simul esse vera.' Et idem dicendum est de aliis complexis, tamen obiectum iudicii est hoc totum: 'hoc complexum "impossibile est contradictoria simul esse vera" est falsum,' et non istud: 'impossibile est contradictoria simul esse vera.'"

⁹⁶ Ibid., concl. 14 (Basel, p. 23): "Non est aliquod complexum quin homo posset disponi sic quod illi assentiret ... Hoc probo sic: multi volentes solvere insolubilia dicunt quod eadem propositio est vera et falsa; et per consequens, sua contradictoria est vera et falsa. Igitur, secundum tales contradictoria erunt simul vera."

⁹⁷ Ibid.: "Secundo <probo conclusionem 14> sic: istud est unum principium in mathematica scientia, 'que uni et eidem sunt equalia, ista inter se sunt equalia;' et tamen istud principium aliqui negant de multitudinibus et infinitis."

⁹⁸ Ibid.: "Quinto sic: ego semel audivi de uno qui reputavit se ingeniosum et tamen negavit istud principium, 'omnes anguli recti sunt equales.'"

⁹⁹ Ibid. (Basel, pp. 23–24): "Non est processus in infinitum in propositionibus evidentibus; igitur est devenire ad aliquam qua nulla est evidentior; igitur illi necessario assen-

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Although Crathorn does not spell out how to proceed from this indubitable principle, the rejection of a *Dieu trompeur* must rest upon it in order to be a useful criterion for distinguishing deception from veridical experience.¹⁰⁰ In the event, Crathorn's concern for establishing the mind's certainty with respect to its internal acts and contents, reveals that his understanding of intuition proceeds from Augustinian tenets newly appreciated. Considered from this standpoint, Crathorn's apparently idiosyncratic account takes on a new coherence, and indicates that he, even more than Rodington and FitzRalph, is motivated by aspects of Augustine's epistemology that had been peripheral to most discussions since the mid-thirteenth century.

Augustine's centrality to philosophical inquiry was only to increase during the fourteenth century, reaching an even more seminal proponent than Crathorn in the Augustinian hermit, Gregory of Rimini. The latter, however, probably would not have cited any Oxford Dominican as the pre-eminent source of his own appreciation of the "new English theology" of the 1320s–1330s. Instead, Rimini undoubtedly would have named Holcot's and Crathorn's Franciscan colleague, Adam Wodeham.¹⁰¹

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titur. Consequentia ultima patet, quia si illi non assentiretur, hoc esset propter aliquam evidentiorem. Secundo <arguo> sic: Augustinus XV *De trinitate* c.3 dicit quod nullus potest dubitare de huiusmodi 'scio me vivere,' 'volo esse beatus' ... Quinto sic: si aliquis dubitet de aliqua propositione, puta de ista 'ego sum,' sequitur ipsum esse, quia sequitur 'ego dubito me esse, igitur sum,' quia qui non est, non dubitat. Igitur nullus potest dubitare de ista propositione: 'ego sum.'"

¹⁰⁰ The most famous use of the expression "Dieu trompeur" is that of Descartes, *Méditations*, 1, pp. 270–72. Crathorn concludes, *I Sent.* q.1 (Basel, p. 31): "Ad questionem principaliter quesitam, respondeo et dico quod viator virtute luminis naturalis potest cognoscere evidenter esse tres personas in divinas, Deum esse incarnatum, et omnes articulos fidei. Quod probro sic: quicumque potest cognoscere evidenter aliquas premissas potest cognoscere evidenter illud complexum esse verum quod necessario sequitur ex premissis, si cognoscat evidenter talem complexum necessario sequi ex premissis. Sed viator potest in virtute luminis naturalis nullo lumine supernaturali sibi infuso evidenter cognoscere ista complexa esse vera: 'Deus nullum effectum spirituales producit ad verificandum mendacium vel ad inducendum multitudinem hominum in errorem;' hoc enim bonitati sue repugnet."

¹⁰¹ See below, chapter XII; and, on fourteenth-century Augustinianism, cf. Courtenay, "Augustinianism at Oxford in the Fourteenth Century," *Augustiniana* 30 (1980), 58–70.

Chapter Ten— Adam Wodeham at London and Oxford

However important the voices of Holcot and Crathorn were for their younger contemporaries at Oxford in the 1330s and, shortly thereafter, at Paris and other *studia*, their noetic views were overshadowed by those of the Franciscan who was their fellow bachelor of the *Sentences*: Adam Wodeham. Starting his Oxford lectures in the same autumn term as FitzRalph's inception as regent master and Holcot's opening *Sentences* lectures, Wodeham brought to his teaching in 1331 views shaped over nearly a decade of active participation in the intellectual life of his order.¹ His impact on English theology reaches to the early 1320s when, at the Franciscans' London convent, he produced a *reportatio* copy of Chatton's lectures on the *Sentences*. Perhaps he also acted as secretary for Ockham, as some later fourteenth-century scribes indicated while copying the *Summa logicae* and the Venerable Inceptor's *reportatio*.² Probably, however, at the time of Chatton's and Ockham's London debates Wodeham was further advanced in his own preparation for the baccalaureate in theology than historians have generally assumed. Not only does Chatton's *reportatio* record Wodeham's objections to the author's arguments at various junctures, but the *Lectura* incorporates Chatton's responses to some of Wodeham's criticisms as well.³ Moreover, Wodeham himself claimed intellec-

¹ On Wodeham, see in addition to Courtenay, *Wodeham*: idem, "Ockhamism among the Augustinians: the Case of Adam Wodeham," *Cassiciacum* 30 (1975), 267–73; Gelber, "Logic and Trinity," 227–64; Murdoch and Synan, "Two Questions;" G. Gál, "Adam of Wodeham's Question on the 'Complexe significabile' As the Immediate Object of Scientific Knowledge," *FrSt* 37 (1977), 66–102; Tachau, "Wodeham on Intentions;" G. Nuchelmans, "Adam Wodeham on the Meaning of Declarative Sentences," *Historiographia Linguistica* 7 (1980), 177–87; Marilyn Adams and Rega Wood, "Is To Will It As Bad As To Do It? The Fourteenth Century Debate," *FrSt* 41 (1981), 5–60; O. Grassi, "Il problema della conoscenza di Dio nel commento alle Sentenze di Adam Wodeham (Prologo eq.1)," *Medioevo* 8 (1982), 43–136; Rega Wood, "Adam Wodeham on Sensory Illusions with an Edition of 'Lectura Secunda,' prologus, quaestio 3," *Traditio* 38 (1982); M.E. Reina, "Cognizione intuitiva ed esperienza interiore in Adamo Wodeham," *RCSF* 41 (1986), 19–49, 211–44; A. Stephen McGrade, "Enjoyment at Oxford After Ockham: Philosophy, Psychology, and the Love of God," in *Ockham to Wyclif*, pp. 63–88.

² Courtenay, *Wodeham*, pp. 34–36, 160–64; see also the introduction to Ockham's *Summa logicae* [OPh I: pp. 36*–44*, 53*–54*].

³ Courtenay, *Wodeham*, pp. 66–74; p. 66n, quotes passages from Chatton's *reportatio* where the *reportator* has noted Wodeham's counter-arguments; see also Gál, introduction, Ockham, *Summa logicae* [OPh I: pp. 53*–54*]. For Chatton's response in his *Lectura*, see above, chapter VII, n. 39, and below, nn. 54–55.

tual priority for the views on the continuum that Chatton attacked as Ockham's.⁴

The period of study at London with Chatton and Ockham was crucial for Wodeham. He, alone of all the fourteenth-century scholars whom historians have at some time labelled an "Ockhamist," can be demonstrated to have numbered the Venerable Inceptor among his teachers.⁵ But Chatton was an equally significant teacher for Wodeham, who came to respect and disagree with both of his senior confrères. From each he could have gained his esteem for the views of Scotus, but it was probably thanks to Chatton rather than Ockham that Wodeham came to explore and respect Peter Aureol's opinions. That Chatton inspired Wodeham's inquiries into the French scholar's work is suggested by the fact that, like Chatton, Wodeham read Ockham's initial understanding of concepts as entailing the same consequences as Aureol's "apparent being."⁶ Whatever the route, Aureol's œuvre found in Wodeham its most sympathetic, careful and extensive reader documented anywhere on the English side of the channel in the 1320s.⁷

Yet, while Wodeham's thinking was shaped by a consideration of the views of each of these theologians, he was as he and his medieval readers realized, independent of them. Much more concerned than Holcot or even Crathorn with accounting for visual perception, Wodeham's divergence from the Venerable Inceptor's views on cognition is evident already in the *Abbreviation* that Wodeham prepared of his teacher's *Sentences* commentary,⁸ and throughout the *Ordinatio* of his own Oxford commentary, delivered 1331–33.⁹ Nevertheless, when he lectured on the *Sentences* at

⁴ Wodeham, *Tractatus de indivisibilibus* (quoted in Courtenay, *Wodeham*, p. 35n): "Et haec argumenta fere omnia fuerant tua antequam Ockham aliquid scriberet de indivisibilibus." The "tua" refers to Wodeham, and Courtenay argues (pp. 35–36) that this treatise is the earliest of Wodeham's surviving works; cf. also *ibid.* pp. 72–73.

⁵ That Chatton, Ockham, and Wodeham were together at the London *studium* has been established by Courtenay, *Wodeham*, 160–64; and G. Gál, intro. to Ockham's *Summa logicae* [OPh I: 53*–56*].

⁶ See above, chapter VII, nn. 79–80; for Wodeham's connection of Ockham's and Aureol's views, see text cited in Adams, "Unreal Entities," p. 151n.

⁷ See, e.g. below, at nn. 42–50, 63–65.

⁸ R. Wood, introduction, Ockham, *IV Rep.* [OTH VII: pp. 18*–19*, 21*–27*]; the copy preserved in Paris, Bibl. Nat. lat. 15 904, has several marginal notes critical of Ockham as, e.g., 121vb: "istam questionem male determinat Okam sui, unde non teneo eum sed Scotum suum adversarium."

⁹ This corrects the dating in my earlier "Wodeham on Intentions," and "Species in medio." The evidence adduced in Courtenay, *Wodeham*, pp. 76–79, that Wodeham's opening lectures coincided with FitzRalph's regency, is not affected by Walsh's demonstration that FitzRalph incepted a year later than Courtenay and I earlier supposed (see above, chapter VIII, nn. 100–101). Wodeham's Oxford lectures survive in both *reportatio* and *ordinatio* forms, as Courtenay establishes, *Wodeham*, pp. 12–30, 183–98. For the *Ord.*

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Oxford, he had already done so at Norwich and London, perhaps during the three academic years 1328–31, if not even earlier.¹⁰ If the Oxford lectures were readily accessible to Wodeham's audience and fellow bachelors, his most extended and original treatment of epistemology is to be recovered from the *Sentences* commentary known as his *Lectura secunda*. While its present form may postdate the Oxford lectures, its contents—at least in the questions of interest here—were already articulated in the earlier London commentary.¹¹

The *Lectura secunda* progresses through an unprecedented examination of psychology and epistemology spanning the six questions of the prologue and three of the first distinction.¹² These questions are overtly designed to be systematic, for the conclusions of each are linked to those of preceding or subsequent questions; what is more, Wodeham stresses his purpose at every stage. Inquiring at the prologue's outset "whether, for the act of scientific knowledge in us, some simple apprehension that is really distinct from any sensation is necessarily presupposed,"¹³ Wodeham

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I rely upon Paris, Bibl. Mazarine 915; Paris, Université 193; and Vatican, Vat. lat. 955.

In addition to passages cited in notes below, cf. I *Ord.* d. 1, q. 12, a.3, Z (Mazarine, fol. 57ra; Univ., fol. 68va): "Ad primum istorum dicendum est quod respectu visionis causande hic multiplex occurit efficientia requisita per se vel per aliud supplens vicem eius. Primo, generalis Dei efficientia, sine qua nihil causari potest; secundo, generalis <efficientia> propria intellectus et vitalis principii; tertio, secundum multos, efficientia habitus vel speciei; quarto, secundum veritatem, efficientia propria obiecti visibilis. Secunda et quarta sunt ita necessarie quod sine illis non potest visio aliqua causari sensitiva vel intellectiva, quam solemus vocare 'notitiam intuitivam,' nisi miraculose;" also I *Ord.* d.3, dub. 1 (Université, fol. 81va–vb); II *Ord.* q.2 (Mazarine, fol. 132rb); q.5 (Mazarine, fol. 152ra); q.8, a.2, F-G (Mazarine, fol. 161ra–va); III *Ord.* q.10 (Mazarine, fol. 191rb–va).

¹⁰ Despite Courtenay's efforts, *Wodeham*, pp. 164–72, it does not yet seem to me to be possible to establish these dates more precisely without further evidence than we have at present.

¹¹ The *Lectura secunda* exists in a single manuscript: Cambridge, Gonville and Caius College 281 (674), fols. 105ra–250vb. Courtenay lists its questions in *Wodeham*, pp. 210–14 and, by matching Rimini's citations against the text, has established that the *Lectura secunda* both contains parts of and is not identical to the London lectures; cf. *ibid.* pp. 123–30, 171.

¹² I am grateful to Rega Wood, the editor of the forthcoming critical text of the *Lect. sec.*, who graciously provided a copy of her edition of the prologue's questions. This I have used to correct my own transcripts, portions of which I have quoted in earlier studies; thus, I have generally adopted her readings, indicating my own by use of <<>> only when they are retained because sense is affected. Wodeham's opening questions were, on Rimini's witness, the initial questions in the London lectures; cf. Courtenay, *Wodeham*, p. 127.

¹³ The prologue occupies fols. 105ra–128rb of the manuscript: *Lect. sec.* prol., q.1, "utrum, actui scientie in nobis, necessario presupponatur aliqua simplex apprehensio realiter distincta a omni sensatione;" q.2, "utrum anima nostra in via naturaliter cognoscere possit actus suos cognitionibus intuitivis realiter distinctis ab abstractivis;" q.3, "utrum notitia intuitiva sensitiva vel intellectiva possit naturaliter causari vel conservari sine existentia rei visae;" q.4, "quarto quero de articulo omissio prioris questionis: utrum

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finally reaches scientific knowledge, the explanandum with which he is concerned, in the first distinction. There, he describes the questions of the prologue as regarding the psychological "acts prior to the act of scientific knowledge" which, he explains, "is the adjudicative act. Now," he continues, "the question is whether the act of scientific knowledge has as its immediate object a thing or a sign, that is, the proposition (*complexum*) in the mind or the things signified by the proposition."¹⁴ With his answer, that the object of scientific knowledge is "only complexly signifiable" (*complexe significabile*), Wodeham introduced his most important epistemological doctrine—one to which the Oxford lectures contain only a few references, and these without extensive explanation or argumentation.¹⁵ Thus, the very structure of the *Lectura secunda* shows us either how Wodeham arrived at the notion, or how he wanted to explain the foundations upon which it rests. With this as the framework for Wodeham's discussion, we may summarize his examination of the initial apprehensive acts quickly.

The Account of Knowledge in the *Lectura Secunda*

Wodeham, like most of his contemporaries, accepts a distinction between intuitive and abstractive cognition; but his notion of these two modes of knowing is not Ockham's. Instead, Wodeham rejects Ockham's definition on nearly every count in which it differs from that of

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per visionem causetur 'esse aliquod apparens' vel 'esse visum' distinctum a visione et visibili;" q.5, "utrum viator possit, stante statu viae, apprehendere Deum apprehensione aliqua simpliciori et propria;" q.6, "Habito ex quinta questione quod Deus potest sine visione sui causare <notitiam> abstractivam simplicem sui, nunc sexto quero et ultimo quoad prologum: utrum Deus sine visione sui possit immediate causare in intellectu omnem evidentiam complexam quam potest causare mediante visione sui."

¹⁴ *Lect. sec.* d.1 occupies fols. 128va–137va, as follows: d.1, q.1, "Quoniam secundum beatum Augustinum, *De Doctrina Christiana* cap. 1, 'omnis doctrina vel rerum est vel signorum,' ut allegat Magister distinctione prima, ideo quaesito circa *Prologum* de actibus praeviis actui scientiae, iam quaerendum est de ipso actu sciendi, qui est actus iudicativus quidam, de quo habitum est immediate. Et primo quaero, iuxta auctoritatem allegatam, utrum actus sciendi habeat pro obiecto immediato res vel signa, id est complexum in mente, vel res significatas per complexum;" q.2, "Habito ex praecedenti quaestione quod scientia realis causata per apprehensiones tantum rectas habet pro obiecto 'sic esse a parte rei' et non complexum, nec tantum 'sic esse sicut significatur per conclusionem,' sed etiam 'sicut significatur per praemissas,' dummodo sit scientia evidens evidentia intrinseca, iam restat descendere in speciali ad notitiam theologiam ubi primo quero: utrum aliqua scientia theologica sit scibilis scientia proprie dicta;" q.3 (= q.2, a.2), "secundo principaliter restat videre quid intelligendum sit per veritatem scibilem, et vertitur hic in dubium precipue: utrum omnis veritas scibilis sit dubitabilis."

¹⁵ See below, nn. 93–113; modern scholars are indebted especially to Hubert Elie, *Le complexe significabile* (Paris: 1936) for the initial appreciation of the significance of the notion and its association with Gregory of Rimini.

Scotus.¹⁶ Wodeham does approve the Venerable Inceptor's stress on intuition as providing the sufficient basis for evident existential judgments; still, he takes this to be the point of Scotus's position too. Wodeham himself principally distinguishes intuition from abstraction by evoking the Scotistic analogy between exterior sensation and imagination.¹⁷ This does not, however, make of Wodeham a Scotist, for he denies the view that there are two simultaneous, really distinct intuitive cognitions and, concomitantly, two abstractive cognitions of a perceived object. He argues instead that the intellectual acts of evident assent or judgment concerning the existence of a sensible object or its attributes require no simple apprehension distinct from sensitive intuitive vision.¹⁸ Lest his reader

¹⁶ *Lect. sec. prol.*, q.2, concl. 1 (Gonville & Caius, fol. 109ra): "Prima conclusio quam pono est ista, quod anima respectu eiusdem cognoscibilis singularis potest habere duos actus absolutos proprios realiter et specificè distinctos. Et ad placitum hominum unus illorum ab aliquibus vocatur 'intuitivus' et alius 'abstractivus.' Et aliis non placet sic vocare, nec de hoc est altercandum. Probatio, et est argumentum in forma Scoti, libro IV, d.45, q.3, et Ockham, prologo, q.1, 'omnis notitia incomplexa aliquorum que potest naturaliter esse causa notitie evidentis respectu propositionis contingentis de presenti, vel rei significate per talem propositionem, realiter et specificè distinguitur a notitia incomplexa illorum que quantumcumque intendatur, non potest esse causa assensus evidentis respectu eiusdem, vel dissensus;" *ibid.* concl. 6 (Gonville & Caius, fol. 110rb): "Ex dictis patet conclusio una correlaria, scilicet quod rationalis est illa differentia quam ponit Scotus ubique, licet alias ponat etiam minus bonas, inter intuitivam et abstractivam; quod videlicet abstractiva potest esse indifferenter existentis et non existentis, presentis et non presentis, intuitiva tantum presentis realiter et existentis. Ponit naturaliter esse differentia, quia hec naturaliter requirit presentiam rei, illa non." See also nn. 25–30 below.

¹⁷ *Ibid.* concl. 3 (Gonville & Caius, fol. 109rb): "Tertia conclusio sit quod ille actus incomplexus qui natus est causare evidentem assensum de veritate contingentis de presenti, et qui naturaliter requirit existentiam et presentiam, est intuitiva notitia. Et quelibet alia simplex apprehensio propria vel etiam communis est abstractiva. Ista non potest probari, sicut nec significata vocabulorum, nisi per placitum utentium vel loquentium. Tamen persuadeo sic: omnis actus qui est sensatio exterior, vel se habens ad suum obiectum quoad iudicium natum causari virtute eius et quoad dependentiam ab illo, sicut se habet sensatio exterior ad suum, congrue vocatur notitia intuitiva, nam sensatio exterior est intuitio obiecti sui ... Igitur, omnis autem imaginatio sensitiva et actus conformiter se habens ad obiectum suum sicut actus imaginandi ad suum est abstractiva cognitio;" for Scotus's analogy, see above, chapter III, n. 72. I was alerted to this passage by Reina, "Esperienza interiore," p. 27.

¹⁸ *Lect. sec. prol.*, q.1 (fol. 105vb): "Prima conclusio, quam opinative hic teneo, est quod alicui assensui evidenti intellectus in nobis de re sensibili, nulla necessario presupponitur simplex apprehensio sive notitia incomplexa intuitiva rei significate per subiectum propositionis cui assentitur vel mediante qua assentitur, distincta realiter ab omni sensatione ... Si enim alia talis necessario requireretur, hoc maxime deberet poni ut ista mediante intellectus possit habere evidens iudicium de existentia sensibilis et aliis eius conditionibus contingentibus. Sed propter hoc non requiritur, quia accipimus assensum evidentem et certum quo intellectus iudicat hoc esse—demonstrata aliqua albedine visa—probo quod illud iudicium non requirit aliam notitiam simplicem intuitivam quam ipsam visionem sensitivam, quia idem quod immediate recipit illam intuitionem huius albedinis nullam aliam indiget recipere ad hoc quod iudicet hanc albedinem esse, nisi forte quod illa, si sit obscura vel imperfecta, intendatur. Sed illud idem quod immediate recipit istum

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wonder who are the targets of his denial, Wodeham points out that "I hold this conclusion ... in opposition to two writing [on the matter] namely, Scotus and Ockham, [who] hold the opposite. Each of them posits two intuitive cognitions of a sensible thing and, similarly, two abstractive cognitions which are really distinct, namely, sensitive and intellectual, which does not seem to me true ..."¹⁹

Unlike Reading and Chatton, who had also considered Ockham's intellectual intuitive cognition superfluous for existential knowledge in this life, Wodeham did not conceive his position as a defense of Scotus against Ockham. Rather, Wodeham saw both of them as motivated to posit dual intuitive and abstractive cognitions by their acceptance of a distinction: the former distinguishing between the soul's faculties and the soul, the latter between the intellectual and sensitive souls. Beyond the distinction between intellectual and sensitive souls, Wodeham further denied any between the soul and its faculties;²⁰ thus, for him Scotus's formal and

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assensum evidentem quo certitudinaliter iudicatur hoc esse immediate recipit illam <<intuitionem>> huius albedinis, visionem scilicet sensitivam; igitur <etc.>."

¹⁹ Ibid.: "Istam conclusionem negativam <supra, n. 18>, et illam que sequitur de abstractiva, teneo per oppositum ad duos scribentes tenentes oppositum, scilicet Scotum, in quarto libro, d.45, q.3, et Ockham in primo, questione prima, quorum uterque ponit duas intuitivas de re sensibili, et similiter duas abstractivas distinctas realiter, scilicet sensitivam et intellectivam, quod mihi non videtur verum, licet illi habeant hoc dicere, ut post patebit."

²⁰ Ibid. (Gonville & Caius, fol. 106ra): "Minorem probo, quia si illud quod immediate recipit sensationes exteriores vel interiores distingueretur ab isto quod immediate recipit intellectiones, hoc esset vel quia sensitiva distinguitur ab intellectiva, vel quia potentia distinguitur ab anima;" *ibid.*: "Huic rationi posset probabiliter dupliciter responderi, etiam tenendo quod in homine sit tantum unica anima, secundum principia Scoti. Primo, quod potentie anime, etsi non sint distincte res nec inter se nec ab anima, tamen sunt distincte realitates eiusdem rei simplicis, sic quod licet sint idem realiter, distinguuntur tamen aliquo modo a parte rei. Secundo, posset etiam probabiliter multum dici, et est via Scoti, quod idem quod immediate recipit quamcumque sensationem non est alia forma viva, sed compositum ex forma viva et determinato organo, et illud compositum est res una, quod videtur sufficere ad hoc quod in <illo> immediate recipiat actum vitalem. Et ex isto patet quare Scotus habet respectu eiusdem rei sensibilis ponere duas intuitivas;" *ibid.* (Gonville & Caius, fol. 107vb): "Igitur, si sensitiva et intellectiva sint nature distincte realiter, numquam per hoc quod sensitiva novit A, nisi ipsam etiam intellectiva noverit A, poterit intellectus componere A cum aliquo aut ab eo dividere <ut complexum formare>. Et propter hoc Ockham, qui ponit in homine duas animas, consequenter ponit respectu eiusdem duplicem intuitivam et duplicem abstractivam." Wodeham argues against the distinction between the soul and its powers, *ibid.* (Gonville & Caius, fol. 106ra): "Si potentie distinguerentur ab anima—sive essent substantie sive accidentia—non essent forme vive, et tunc non reciperent immediate actus vitales cuiusmodi sunt omnes actus apprehensive et appetitive. Vel si distinguerentur, et nihilominus essent forme vive, iam haberemus in nobis plures animas; omnis enim forma viva in nobis est anima. Ex hiis arguo: omnes actus vitales in nobis recipiuntur immediate in forma viva; sed omnes sensationes tam interiores quam exteriores, et omnes intellectiones in nobis

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Ockham's real distinction were equally misguided, since "in order to save [i.e. account for] all acts which we experience in ourselves, one soul suffices in us."²¹ This soul acquires existential knowledge of sensibles immediately via external sensations, which are intuitive cognitions; after all, Wodeham remarks, "to sense" is commonly used in lieu of "to perceive."²²

In seeing the distinction between sensitive and intellectual souls as the basis of Ockham's adherence to an intellectual cognition additional to sensitive cognition, Wodeham was anticipated by Chatton.²³ On this point, Ockham had appealed to the authority of Scotus against his critics; and it is with those critics that Wodeham aligns himself, later mentioning that, "like Chatton," he opposes "Scotus, Ockham, and Peter Aureol, who posit an intellectual intuitive cognition accompanying the sensitive."²⁴ Nor does he accept Ockham's "imperfect intuitive cognition." Positing such a "third simple cognition" violates the principle of economy, Wodeham says, since in order to know evidently that some object has existed,

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sunt actus vitales;" and fol. 106va: "Sequitur <argumentum Ockham> tamen necessario ex uno quod tenet in quo discordo ab eo, scilicet quod in homine intellectiva et sensitiva sunt forme distincte, quod falsum reputo."

²¹ *Lect. sec. prol.*, q.1 (Gonville & Caius, fol. 106ra): "Primum non est dandum, quia ad salvandum omnes actus quos in nobis experimur, sufficit una anima in nobis."

²² *Ibid.*, q.2 (Gonville & Caius, fol. 111ra): "Aliter adhuc <potest dici> quod accipitur forte 'sentire' pro percipere, sicut communiter accipitur;" cf. also n. 17, above. Wodeham's position in effect rejects what had been the dominant trend after Roger Bacon towards greater distinction between sense and intellect. According to Gregory of Rimini, Wodeham propounded the identity of sensitive and intellective souls (and consequently the immediate reception of sensation in the soul) in his earlier London lectures (see below, chapter XII, n. 37).

²³ Throughout the first question, Wodeham quotes and largely refutes Chatton's acceptance of the distinction of the souls in man; against Chatton's understanding of Kilwardby's (1277) condemnation of the doctrine that there is only one "forma simplex," Wodeham urges (Gonville & Caius, fol. 106va–vb): "nunc autem ex quo conclusio opposita consueta est dici in illa et in aliis Universitatibus approbata, et etiam successor eius, Peckham, qui rediit super articulos ab illo <Kilwardby> condemnatos, istum articulum et alios in idem sonantes non condemnavit, videtur mihi quod satis secure potest teneri oppositum illius articuli, quia omnes glosse <quas Chatton innuit> sunt extorte." For Chatton, see above, chapter VII, at nn. 57–60. Wodeham denies the distinction between the soul and its faculties again in his Oxford lectures, where he notes that although Fitz-Ralph had earlier agreed, the *opus correctum* reflects a shift from their common stance; see above, chapter VIII, n. 101.

²⁴ *Lect. sec. prol.*, q.4 (Gonville & Caius, fol. 117vb): "Eadem difficultas est contra fere omnes. Nam contra Chatton est, manifestum est, quia ipse concedit <conclusionem> quam ego <teneo>. Contra Scotum et Ockham et Petrum Aureoli est, quia illi ponunt intuitivam intellectivam concomitari sensitivam, et de illa intuitiva intellectiva restat eadem difficultas illi tria, quod—secundum Chatton—omnes ille visiones essent simul."

an abstractive cognition together with the memory of a prior vision of that object suffices.²⁵

If Ockham claims too little for sensitive intuition by requiring in addition that there be intellectual intuitions, he claims too much, Wodeham thinks, by expanding the scope of intuitions generally. Because the external senses are inherently (*natum*) causative of the judgment that a sensible object exists when it exists, Wodeham disputes Ockham's assertion that intuitive cognition can also provide existential knowledge that an object does not exist when it does not.²⁶ Offering what may be the most sympathetic appreciation of the motivation for this expansion of scope to include negative existential awareness, Wodeham suggests that perhaps Ockham was originally led to this claim by considering instances that seem at first plausible:

For example, through the vision by which Socrates' cadaver is seen, I know that Socrates does not exist (*non existit*), and through the vision by which I see that Socrates is already black who earlier was white, I know that the whiteness seen in Socrates earlier does not [now] exist, and so forth in similar [cases].²⁷

Nevertheless, Wodeham argues, such cases are not similar to the one

²⁵ *Lect. sec. prol.*, q.2 (Gonville & Caius, fol. 109ra): "Secundo pono conclusionem incidentalem, quod scilicet respectu eiusdem singularis non est ponenda tertia notitia incomplexa propria, que vocatur ab aliquibus 'intuitiva imperfecta,' quam ponit Ockham in *Reportatione* secundi <libri>, virtute scilicet cuius possit evidenter cognosci Sortem fuisse, nam ut dicunt, virtute abstractive simpliciter non contingit evidenter cognosci quod sit nec quod fuerat nec quod erit. Igitur, secundum eum habemus tres actus proprios vel possumus habere. Hoc <<im>> probo primo, quia plura superfluent ubi pauciora sufficiunt; sed ad illud iudicium habendum propter quod ponatur tres actus proprios, duo actus proprii sufficiunt, scilicet abstractiva notitia cum memoria actus videndi pre-habiti."

²⁶ *Ibid.* concl. 4 (Gonville & Caius, fol. 109rb): "Omnis actus qui est sensatio exterior, vel se habens ad suum obiectum quoad iudicium natum causare virtute eius et quoad dependentiam ab illo, sicut se habet sensatio exterior ad suum <obiectum> congrue vocatur 'notitia intuitiva,' nam sensatio exterior est intuitio obiecti sui. Sed talis est notitia incomplexa virtute cuius iudico rem existere que tamen potest non existere ... et ideo de hoc pono quartam conclusionem, que est quod notitia intuitiva que, re existente est virtute cuius potest sciri res existere, non est virtute cuius possit sciri non existere, ipsa non existente."

²⁷ *Ibid.* (Gonville & Caius, fol. 109rb–va): "Primo exponam istam <conclusionem>, quia licet una notitia intuitiva possit esse virtute cuius sciatur res non esse existente<m>, puta per visionem qua videtur cadaver Sortis, scio quod Sortes non existit, et per visionem qua video Sortem iam nigrum qui prius erat albus, scio quod albedo prius visa in Sorte non existit, et sic de similibus. Et forte ex hoc primo ortum habuit illud dictum, quod intuitiva est virtute cuius scitur res existere quando existit et non existere quando non existit—non prout ista est de copulato predicato, sed ut est copulativa, quia tunc non

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Ockham had in fact provided in support of his position, namely God's conservation of an intuition when he has destroyed an object. Even if such a cognition were conserved, Wodeham responds, it would be "in no way intuitive,"²⁸ for it would not suffice to produce an evident judgment. Ockham's understanding is even less acceptable as a description of naturally caused intuitions, for if we consider "some simple [thing] that is intuitively cognizable," it is obvious, Wodeham asserts, that there cannot be any cognition "by virtue of which [that simple thing] may be known not to exist universally," that is, anywhere. Moreover, this is so regardless of whether we posit that such a cognition has as its object this simple thing itself, for the judgment that it does not exist would require not only an incomplex cognition, but also deductive reasoning along such lines as: "I have my eyes open and nothing impedes [their gaze]; therefore I would see the thing if it were present." Wodeham objects that this does not follow and that, even if it did, one cannot in any case validly infer from the claim that the object "is not present such that it can be seen naturally by the unimpeded [visual] power" to the fact that the object "is a non-being."²⁹

Modern scholars, who live after microscopes and telescopes have revealed the existence of objects too small or too distant to be seen "naturally by the unimpeded visual power," should surely grant that Wodeham correctly faults Ockham on this point. Although their medieval readers did not yet have such instruments, Wodeham's supporting reasons were such as to persuade a generation who produced the major treatises of the Oxford calculatory tradition. It was common, as he noted, to recognize in "arguments made concerning ratios," that for a cause to be efficacious over any unlimited distance whatsoever would require that the cause be infinite. So he offers as an example a visible object steadily removed from

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denotatur quod eadem intuitiva sit talis et talis sicut in primo sensu, sed quod aliqua sit talis et aliqua talis."

²⁸ Ibid. (Gonville & Caius, fol. 109va): "Licet, inquam, ita sit, nullo tamen modo notitia intuitiva, que est virtute cuius scitur res esse naturaliter quando existit, esset si conservaretur virtute cuius scire non existere quando non existit."

²⁹ Ibid. (Gonville & Caius, fol. 109va–vb): "Unde si fiat sermo de aliquo simplici <obiecto> cognoscibili intuitive, non nato inherere, etc., impossibile est quamcumque cognitionem naturaliter causabilem haberi virtute cuius sciatur universaliter ipsum non esse, sive ista cognitio intuitiva habeat illud pro obiecto sive aliud. Et haec potest esse quinta conclusio. De intuitiva primi, iam patet ex quarta conclusione <supra n. 26>. De intuitiva alterius, patet etiam per hoc quod tale iudicium non haberetur sine tali vel consimili deductione: 'habeo oculos apertos et nihil impedit, igitur viderem hoc si esset presens.' Non plus sequitur [sed mihi] <<quia>> non valet 'hoc non est presens sic ut possit naturaliter videri a potentia non impedita; igitur est non-ens,' sed est fallacia consequentis. Ponamus etiam quod videres omnia, et totum mundum simul, adhuc non sequitur, quia Deus posset illud ponere extra mundum."

the presence of the viewer, such that the distance between them is continuously elongated. In this case, Wodeham points out, inasmuch as any given visible object (other than God) serves only as a finite cause of vision, there must come a point beyond which the object is not sufficiently visible for there to be a judgment that the object exists. On the contrary, the viewer would judge that it does not exist.³⁰

Wodeham's response reveals that this Franciscan, who among Ockham's audience was best prepared to understand his views, unequivocally interprets him as having claimed that by means of intuition we know immediately not merely that an object is not present, but that it does not exist when it is not before us; and thus Wodeham joins his contemporaries in rejecting Ockham's formulation.³¹ Nevertheless, in defending the view that intuitive cognition inherently requires the presence and existence of the object, Wodeham generally eschews the approach of Camp-sall, Rodington, and Holcot, who had stressed the connotation of such terms as "intuition" and "vision." The requirement cannot be demonstrated, Wodeham thinks, by appeal to the signification of the terms employed to refer to apprehension, because on this there is no common agreement. Instead, what is signified varies according to the pleasure of the user.³² Even so, Wodeham insists, his own conviction that intuitive cognition requires the presence and existence of its object, if not strictly provable, can meet the two objections that had become standard by the mid-1320s.³³

The first objection that Wodeham considers is that the soul has no simple cognition such that God could not cause or conserve it without the existence of its object. If so, then because by means of such cognition one has certain judgment concerning the existence of its object, one would have

³⁰ Ibid. (Gonville & Caius, fol. 109va): "Secundo arguo sic, probando quod ipsa sine obiecto non sufficeret, si conservaretur, ad causandum evidentem assensum quod obiectum suum non existeret, cum aliis causis naturalibus, quia tunc posset naturaliter—si conservaretur—esse causa qua iudicatur res non esse, ipsa tamen existente. Probo consequentiam, quia obiectum illud posset per causas naturales tantum elongari ab isto passivo quod nullum effectum, absolutum maxime, posset in eo causare. Nullum enim activum creatum potest agere ultra omnem distantiam finitam—et hoc est sibi <i.e. Ockham> principium sicut et mihi, quia tunc oporteret quod intenderetur infinite, per argumentum commune de proportione facta. Igitur tali elongatione obiectum nullum effectum absolutum, quale est iudicium quodcumque, concausaret in illa potentia. Sola igitur visio tunc ageret; est enim causa naturalis, habens passum presens dispositum, et quando sola agit, causat iudicium quod obiectum non existit."

³¹ See above, chapter VI, nn. 30, 77; chapter VII, nn. 50, 54–55; chapter IX, nn. 9, 13.

³² See n. 17 above; Wodeham does not mention either Holcot or Rodington in these questions.

³³ The first is an argument taken from Ockham's critique of Scotus above, chapter V at nn. 23–35; the second from Aureol, below, n. 39.

the certain—but erroneous—judgment that the non-existent exists. In order to avoid this undesirable consequence, Ockham had claimed as Wodeham notes, that in the event of "such a miraculous conservation" of an intuitive cognition, the non-existent would be judged not to exist. This, however, Wodeham finds inconsistent, and he points out that the evasion relies on a claim that not only seems false, but also is known neither from experience nor reason.³⁴ Noting that Chatton, too, had arrived at the conclusion that Ockham's view entailed insupportable consequences, Wodeham nevertheless finds the former's "prolix deductions from Ockham's principles" unsatisfactory as a rebuttal, and often not particularly to the point.³⁵

³⁴ *Lect. sec. prol., q.2* (Gonville & Caius, fol. 109rb–va): "Contra primam conclusionem et tertiam, potest obici, quia nulla est notitia simplex in anima, quin illam posset Deus causare, vel prius causatam conservare, obiecto eius non existente. Si igitur virtute talis notitie posset haberi iudicium certum de existentia talis rei, tunc re non existente posset homo habere certum iudicium quod existeret; quod includit repugnantiam ... (*marg. Responso Ockham*) Ad istud, assumptum concederetur, sed diceretur quod quando res existit, tunc est virtute cuius potest naturaliter causari tale iudicium, scilicet quod existit; et si conservetur re non existente, dummodo sit notitia non imperfecta, virtute illius evidenter sciretur rem non existere ... Sed re non existente, ipsa notitia intuitiva sola, si sit perfecta et *conservetur miraculose* a Deo, sufficit cum potentia et generali Dei influenza ad causandum notitiam evidentem quod res non existit. Nec hoc est inconveniens, quod causa aliqua cum alia concausa possit in effectum contrarium illi in quem sola possit. Sed illud non videtur mihi <i.e. Wodeham> verum, et ideo de hoc pono quartam conclusionem ... Primo, propter argumentum iam factum, cuius responsio <facta per Ockham> non est nisi evasio, quia nec per experientiam nec per rationem scitur. Immo dices: ratio est ad hoc, quia Deus eadem notitia novit intuitive rem existentem et non-existentem, et virtute istius scit eam existere quando existit, et non existere quando non existit. Hoc non evadit ..." (The remainder of the argument is quoted above, n. 27). Wodeham may have referred to Ockham's *reportatio* of book I (no longer extant) rather than to the *Ordinatio*, since not all arguments are precisely where alleged, and Wodeham is otherwise reliably accurate.

³⁵ *Ibid.* (Gonville & Caius, fol. 109vb): "Item, pro quarta conclusione arguunt aliqui (*marg. argumenta Chatton, pro quarta conclusione*) contra responsionem Ockham: primo, quia tunc 'Deus non posset in nobis causare unum actum cognoscendi aliquam rem per quem apparet nobis presens quando est absens. Et hoc falsum, quia nihil negandum est ab eo de quo non probatur ipsum includere contradictionem...' This introduces a quotation of Chatton's entire argumentation in his *Lectura prol., q.2, a.3* (summarized above, chapter VII, nn. 50–56; see also edition in O'Callaghan, pp. 246–47). Wodeham responds (fols. 109vb–110ra) that most of Chatton's objections are not effective; cf. e.g. (fol. 110ra): "Quinto arguit quod Ockham haberet concedere quod ille actus videndi posset esse et tamen quod per istum nec appareret rem esse nec non esse. Et consequentiam probat per prolixam deductionem ex principiis Ockham. <<Respondeo>> conclusio est concedenda... si autem ly 'per' diceret circumstantiam cause formalis, sicut ille <Chatton> videtur imaginari contra Ockham, tunc concluderet contra eum manifesta impossibilia. Item sexto <arguit Chatton>: 'ille actus quo videtur intensum visibile potest naturaliter manere pro aliquo tempore post corruptionem visibilem, et tamen tunc non est virtute cuius scitur illud visibile non esse, sicut patet per experientiam. Responso: assumptum est negandum, sed de hoc in sequenti questione" (see below, nn. 54–55). Ultimately, Wodeham sides with Ockham against Chatton, declaring (fol. 110ra): "Ex

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Wodeham construes his own affirmation of the requirement of the object's existence and presence in intuitions as in accord with Scotus's consistent construction of *natural* cognition. Yet he is also persuaded that at least once Scotus had admitted that there can be intuitive cognition without an existent object by supernatural causes, and that Ockham is, on his own account, following Scotus. Wodeham stresses that the disproof of the supernatural possibility would require as its premise that intuition is a relation, such that it innately includes the existent object as one of the *relata*. From this it would follow that for there to be an intuitive cognition without an existent object would require a contradiction, and thus could not occur even by divine power.³⁶ Nevertheless, Wodeham decides, "supernaturally there could be an intuitive cognition without the existence of its object," as can be demonstrated from principles that Scotus himself would accept. He would agree, as Wodeham notes, with the claim that whatever God is able to do by means of an efficient cause, he can do immediately; and because the visible object "is not a cause of vision except efficiently," God can dispense with it and cause a vision when the object does not exist.³⁷ Wodeham elsewhere remarks that he does not share Ockham's conviction that any solitary intuition is a sufficiently infallible basis for existential judgments; we are, however, able to correct for erroneous perceptions. Thus, when he here concedes that no cognition is sufficient to certify that God is not intervening "miraculously" in any given instance, Wodeham presumably supposes that this concession is not disastrous for his view that we are by other means able to have certitude.³⁸

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predictis patet conclusio ad primum articulum, unde nobis innotescit differentia inter abstractivam et intuitivam non enim ex obiectis sicut aliqui <Chatton> videntur dicere... sed ex effectu ..."

³⁶ Ibid. (Gonville & Caius, fol. 110rb): "Ex dictis patet conclusio una correlaria, scilicet quod rationabilis est illa differentia quam ponit Scotus ubique <n. 16, supra> ... Hec differentia brevis est et bona, nec est verisimile quod aliter intellexerit illud, <licet> ex eius principiis in III libro, dist. 14, q. 1 et alibi sequatur quod supernaturaliter possit esse intuitiva sine existentia obiecti. Et hoc tenet, sicut dicit Ockham—qui eum sequitur—licet Petrus Aureoli sibi imponat quod nec de potentia Dei posset aliter fieri. Et tunc esset consequenter dicendum pro eo, si illud sensit, quod notitia intuitiva includit respectum identicum ad obiectum, et per consequens quod contradictio esset eam esse sine obiecto existente sicut et respectum sine termino."

³⁷ Ibid., concl. 7 (Gonville & Caius, fol. 110rb): "Quod autem supernaturaliter posset esse notitia intuitiva sine existentia obiecti sui—et hec sit septima conclusio—probo sic, ex hoc ex principiis Scoti, que mihi videntur vera. Quia quidquid potest Deus facere per causam efficientem mediam, potest per se immediate; igitur et visionem quam <facit> mediante obiecto. Obiectum enim non est causa visionis nisi effective; non enim finis requiritur existere, quia nulla res plus requirit existentiam finis secundi quam efficientis secundi."

³⁸ See nn. 91, 108 below. For Wodeham's concessions, see *Lect. sec.* q.2, concl. 3 (Gonville & Caius, fol. 109vb): "Ideo dico quod nulla est notitia intuitiva cuius virtute

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The second objection Wodeham recounts against his definition of intuitive cognition is that "not only miraculously, but naturally something can be seen when it is non-existent; and [in support] of this [claim] there are many experiences."³⁹ Consideration of this objection is postponed to the third and fourth questions of the prologue where it is identified as Aureol's. There Wodeham addresses the issues Aureol had introduced both by his hypothesis of an "apparent" or "intentional being," and by his concomitant defense of naturally produced intuitive cognitions of non-existent or absent objects. That Wodeham himself understood the issues to be complementary is not dependent upon conjecture, for on his own admission he initially envisioned the fourth question as a second article within the previous question.⁴⁰ Perhaps Chatton's teaching alerted him to the connection in Aureol's *Scriptum* between the prologue and the third

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evidenter iudicari possit res existere, nisi supposito quod Deus <<non>> manuteneat notitiam intuitivam sine obiecto a quo naturaliter dependet. Semper tamen virtute notitiae intuitive perfecte, ubi non est impedimentum, apparet vel natum est apparere existere obiectum illius actus, licet non semper e converso... contra... sicut Deus potest conservare visionem sine existentia obiecti... igitur per nullam notitiam in mente potest nos certificare. Concedo quod per nullam notitiam potest nos sic certificare quin possimus decipi ab eo si voluerit;" again, concl. 6 (fol. 110rb): "Conclusionem istam probo, quia illa notitia incomplexa virtute cuius naturaliter potest sciri obiectum illius notitiae existere, nisi sit aliquod impedimentum aut miraculum, requirit naturaliter obiectum suum existere, quia aliter posset falsum sciri. Sed aliqua notitia incomplexa in nobis, quam voco 'intuitivam' est huiusmodi, ex prima conclusione <patet>; quod autem requirat etiam quod <<obiectum>> sit praesens, patet ex probationibus quarte conclusionis."

Throughout this discussion, Wodeham mentions "miraculous" action and "supernatural" intervention when explicitly considering God's absolute power; hence, Wodeham's usage of the dichotomy, like that of his contemporaries, is consonant with Scotistic interpretations. Moreover, Wodeham clearly (n.34 above) interprets Ockham's claims as referring to God's capacity to *act* miraculously, not as references to "initial possibilities open to God," as Courtenay understands Ockham. On this issue, see above, chapter IX, nn. 79–80.

³⁹ Ibid. (Gonville & Caius, fol. 109rb): "Item, non tantum *miraculose*, sed *naturaliter* potest aliquid videri ipso non existente, ad quod sunt multa experimenta; sed de isto videbuntur in sequenti questione <i.e. tertia>."

⁴⁰ When, at the outset of *Lect. sec. prolog.*, q.3, Wodeham lays out the "divisio questionis," he announces two articles (Gonville & Caius, fol. 113ra): "Hic primo videbitur de quesito; secundo, an per visionem causetur 'esse aliquod apparens' vel '<esse> visum' distinctum a visione vel visibili?" Only the first article actually occurs in q.3, and the second one, introduced as "an article omitted from the previous question" forms q.4 (see above, n.13). The arguments in these questions are disordered at several points, and there are marginal indications to the scribe (or reader) rectifying such occurrences. Inasmuch as both questions were evidently from the London lectures, it may be that these problems indicate that Wodeham intended in the *Lectura secunda* to make separate questions of the two articles and to shift material from one to the other; many of the scribal confusions could easily have arisen from copying a "marked up" text of the London lectures. After my initial studies of these two questions had appeared, R. Wood, in "Wodeham on Sensory," offered another analysis of Wodeham's discussion together with an edition of the third question; in what follows, our interpretations do not always agree.

distinction, but if so, Wodeham restored Aureol's sequence, treating the question of the intuition of non-existents before refuting the "apparent being."⁴¹

Wodeham's Analysis of Aureol's Understanding of Intuitive Cognition

At the outset of the third question, Wodeham carefully distinguishes existence from presence, repeating his contention that for vision to occur naturally, both are required. Otherwise, even if the possibility of miraculous action is excluded, there could be no certitude of any contingent fact by route of the senses, as Chatton had argued.⁴² After reciting the latter's arguments, Wodeham admits that one could instead object against his own position, that presence and existence are not required, because "intuitive cognition is the cognition by means of which the thing appears to be present, whether it is present or not; and by abstractive cognition it does not [appear to be present]."⁴³ This, of course, is Aureol's view.

⁴¹ See above, chapter VII, at nn. 19–23.

⁴² *Lect. sec. prol. q.3* (Gonville & Caius, fol. 113ra): "Quoad primum teneo duas conclusiones. Prima est quod non potest visio naturaliter causari sine existentia et presentia rei visibilis. Probo, quia tunc circumscripto omni miraculo, numquam posset haberi certitudo aliqua naturaliter de existentia vel quacumque conditione contingenti rei sensibilis per viam sensus; nec, per consequens, per viam intellectus... Et si sic, igitur nulla certitudo <foret> in huiusmodi, et tunc periret omnis scientia accepta per viam experientie, quia omnis scientia est notitia certa." Cf. also *ibid.*, q.2 (in nn. 17, 39 above). For Chatton, see above, chapter VII, n. 32. R. Wood asserts, "Wodeham on Sensory," p. 213: "In fact, as Wodeham knew, Aureol held that intuitive cognition was unerring," referring to Aureol's *Scriptum proem.*, s.2 [I: p. 209, para. 120], a passage that Wodeham quotes (Gonville & Caius, fol. 113rb): "et idcirco non facit intellectum errare, quia obiecto absente statim desinit esse." Whatever Wodeham believed, however, Aureol here refers *only* to intellectual and not to sensitive intuition, and despite this passage, Aureol was nonetheless far from persuaded that intellectual intuitions were unerring; see above, chapter IV, nn.51–55.

⁴³ *Ibid.* (Gonville & Caius, fol. 113ra): "Item, 'non minus dependet visio a visibili presenti quam lumen a luminoso a quo causatur, quia quantum experimur unum,' puta lumen dependere a corpore luminoso tantum, et visionem a presentia luminis. 'Sed lumen non potest naturaliter causari sine presentia luminaris, sicut patet ad sensum, puta non <est> radius sine sole, et sic de similibus; igitur.'" For Chatton, see *Lectura prol.*, q.2 [ed. O'Callaghan: p. 242]. After an argument supporting Aureol's hypothesis incorrectly interposed here, Wodeham either paraphrases or quotes from a *reportatio* the third argument Chatton had posed against Aureol [ed. O'Callaghan: p. 242], and concludes (Gonville & Caius, fol. 113ra–rb): "Item, tunc tolleretur omnis via per quam innotesceret differentia inter notitiam intuitivam et abstractivam, quia non est ad hoc via nisi vel a causa vel ab effectu, ut patuit in precedenti questione <supra, n.35>. Et utraque tollitur hoc dato: 'vel apparet presentialiter,' ut verbis eius <Aureoli> utar. Diceretur, et hec est responsio in re Petri Aureoli, quod ideo quia intuitiva est per quam apparet (*ms.* apparens) res esse presens, 'sive sit presens sive non,' per abstractivam non, vel <non> 'apparet presentialiter,' ut verbis eius utar."

Aureol's definition puzzles Wodeham, who wonders what the French scholar wants to claim. "Either," Wodeham begins, "you [Aureol] mean that the intuition or vision itself is the form by means of which a thing appears present (as a wall is white with whiteness), or that it is the cause of the thing's apparent presence (as a wall disperses whiteness)."⁴⁴ Despite the promising recognition that Aureol's claim requires explication, Wodeham nonetheless contents himself with showing that absurd consequences attach to each interpretation, and turns to the supporting arguments from the second question of the prologue to Aureol's *Scriptum*.⁴⁵ Aureol, Wodeham paraphrases, proceeds "along two lines [of reasoning], [the] first [of them] by way of experience, from which 'all our scientific knowledge has its source.'"⁴⁶ Aureol's five experiences are reproduced almost verbatim, together with a summary of his extrapolation from the facts of sensation to intellection.⁴⁷ Slightly more abbreviated, but still

⁴⁴ Ibid. (Gonville & Caius, fol. 113rb): "Contra: aut intellegis quod ipsa intuitio vel visio sit id quo formaliter apparet res existere presens, sicut paries est albus albedine, aut id quo causaliter, sicut paries disgregat albedine."

⁴⁵ Ibid.: "Non primo modo, quia tunc omnis actus animae esset compositivus et divisivus obiective, quia ita significaret naturaliter aliquid esse tale vel non esse sicut propositio. Hoc videretur inconveniens de actibus sensitivis maxime, quia eque sensus posset discurrere et demonstrare sicut intellectus ... notitia etiam abstractiva eque esset compositiva, quia per te <Aureol>, in secunda questione prologi, non differunt intuitiva et abstractiva proprie—supple 'ex parte obiecti.'—Et tunc superflueret omnis propositio intrinseca composita, planum est; et etiam tunc tolleretur via sciendi differentiam <inter intuitivam et abstractivam>. Si secundo modo, haberetur intentum principale huius argumenti ... Item, non minus potest intuitiva intellectiva aliunde naturaliter causari quam ab eius obiecto quam sensitiva. Utram <que> ponit in via, licet—ut dicit—non experiamur intuitivam intellectivam propter coniunctionem cum sensitiva [cum] intuitione." For Aureol, see above, chapter IV, nn. 67, 70–71.

⁴⁶ Ibid.: "Contra tamen dictam conclusionem arguit Petrus Aureoli duplici via. Primo per viam experientie, a qua oritur omnis nostra scientia;" cf. chapter IV, n. 81.

⁴⁷ Ibid. (Gonville & Caius, fol. 113rb – vb): "Nisi notitia intuitiva fieri posset re absente nec actualiter existente, aliter non derelinqueretur in nobis visio causata ex forti visibili illo absente vel clauso oculo, quod est contra experientiam et contra beatum Augustinum XI *De trinitate* cap. <2>, qui vult ibi '<plerumque> cum clausurimus oculos, post-quam diu inspexerimus luminaria vel alia visibilia omnino intensa' ... Item, secunda experientia est in somno et somniis, quam ponit Commentator tractatu suo *De somno et vigilia*, fere circa medium ... Istud confirmari potest per Algazalem, libro *Physicorum* tractatu 4, cap. 8, cuius via est ista: 'de causa videri in vigil<i>o formas quae non habent esse' ... Tertia experientia est illa quam iam posui de Algazele de timentibus, quibus apparet quod audiunt et videant terribilia ... Quarta est de ludificatis in quibus constat et notum est omnibus quod videant que non sunt, <ut> castra, canes, et lepores, et similia. Ultima vero est in habentibus oculos molles, in quibus cum viderint rubeum derelinquitur visio rubei, ita quod rubeum apparet eis omne quod vident.' Sic igitur patet quod intuitiva sensitiva non requirit necessario etiam naturaliter presentiam obiecti; et si hoc, igitur nec intellectiva intuitiva, tum quia 'nomen notitiae intuitivae derivatur a sensu ad intellectum; et iterum, intellectus est abstractior et magis <in>dependens quam sensus;" for Aureol, see above, chapter IV, nn. 81, 83. Either Wodeham knew a version of Aureol's commentary other than the *Scriptum*, or Wodeham added these citations to Algazali.

faithful, is the rendering of Aureol's own defense against dismissing the adduced experiences as "false, deceptive, or erroneous visions" to be analyzed differently from visions, or their relegation to the common sense as errors of judgment. The exposition of Aureol's view concludes with the second, *a priori* argument, that by God's (absolute) power an intuitive cognition could be effected without its object.⁴⁸

The extent and accuracy of Wodeham's presentation is in itself significant. The only known treatments in England of Aureol's thesis prior to Wodeham are those of his teachers at London, and of Graystones and Rodington at Oxford. Neither Ockham nor Rodington alludes to *these* arguments from the prologue to Aureol's *Scriptum*. Chatton, who summarizes Aureol's experiences in bare detail, omits both the extrapolation from sensation to intellection and the *a priori* argument. Moreover, Chatton fails to signal Aureol's anticipation and rejection of the categorization of the experiences as judgmental errors.⁴⁹ Clearly, Wodeham has not relied on the critiques drafted by any of these predecessors, but has studied Aureol carefully afresh.

Having evaluated Aureol's theory independently, Wodeham finds neither teacher's response to be without pitfalls. His dissent from Chatton's analysis is presaged by the more precise statement of Aureol's distinction between the modes of cognition.⁵⁰ Wodeham maintains that the experiences Aureol had marshalled to demonstrate that vision occurs in the absence of any extramental object in fact argue only that something is conserved in the existent object's absence once its presence has helped to effect vision. Moreover, what is conserved is not vision, as Chatton had granted, but only the object's *species*.⁵¹ Wodeham reminds Chatton that

⁴⁸ Ibid. (Gonville & Caius, fol. 113va – vb): "Ad ista, inquit, 'diceretur dupliciter: primo, quod ille non sunt vere intuitiones, sed false et deceptorie. Secundo, quod <non sunt visiones, sed> iudicium sensus communis est per quem iudicamus nos videre, ut patet in II *De anima*. Unde tales ludificati non vident, sed videtur eis quod vident, sensu communi hoc iudicante.' Contra primum: 'nullus est actus in visiva potentia quin sit visio' ... Item, 'verum et falsum insunt eidem notitie secundum numerum, nulla mutatione facta in ipsa, sed re tantum mutata' ... Licet igitur veritas visionis exigat presentiam rei, non tamen realitas visionis ... tum 'quia sensus communis iudicat oculum videre, igitur oportet quod in oculo sit aliquid quod iudicat, puta apparitio rei; apparitio autem in visu est ipsa visio' ... secunda via <que procedit> a priori non probat dictam conclusionem <m> quod hoc posset fieri per potentiam Dei, ut supra ostensum est, et concessum;" for Aureol, see above, chapter IV, nn. 55, 63, 85.

⁴⁹ See above, chapter V, at nn. 97–99; chapter VII, nn. 32–47; chapter VIII, nn. 9–13, and at n. 66.

⁵⁰ Compare Wodeham, nn. 43, 45, 47 above, to Chatton, above, chapter VII, nn. 20–22 and Aureol (as indicated in those notes).

⁵¹ *Lect. sec. prol.*, q.3, concl. 2 (Gonville & Caius, fol. 113vb): "Primum istorum argumentorum non probat quod visio possit naturaliter causari obiecto non existente vel absente, sed quod prius causata, possit naturaliter conservari aliquamdiu. Et hoc—propter

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"both according to you and in truth, the species is able to remain at least for some time without the presence of their cause."⁵² The species are not identical to vision, for which, however, species are a partial cause; even if species were impressed in the eye, vision itself occurs at the site where the optic nerves merge as, Wodeham notes, Scotus had taught.⁵³

By admitting that species outlast the presence of the visible object, while denying their identification with vision, Wodeham proposes to avoid Chatton's concession, "that for the small time during which the vision can be preserved after the visible object has receded, one cannot be certain whether the object exists in reality, although afterwards one is able to have [such] certainty."⁵⁴ By granting this point, Wodeham responds, Chatton contradicts himself; more important, the admission is fatal, for "without doubt this way [of reasoning] removes all certainty concerning the existence of any visible object whatsoever."⁵⁵

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istud argumentum—conceditur a quodam, scilicet Chatton, propter quod pono secundam conclusionem contrariam sibi, scilicet quod visio prius causata a visibili non potest naturaliter conservari visibili destructo vel absente. Ad hoc quattuor sunt previa argumenta facta pro prima conclusione <supra, n. 43>;" *ibid.* (Gonville & Caius, fol. 114ra): "Ad illud videtur posse responderi ex positione sua quod ideo 'visio prius causata potest per aliquod tempus manere re visa recedente, eo quod species intensa per quam visio immediate causatur remanet per aliquod tempus recedente visibili.'" For Chatton, see above, chapter VII, n. 38; for Wodeham's response, see below, n. 54.

⁵² *Ibid.* (Gonville & Caius, fol. 114ra): "Contra istud ... quia species potest manere per te <Chatton> et secundum veritatem, saltem per aliquod tempus sine presentia cause."

⁵³ *Ibid.*: "Si visio immediate causatur a specie, aut igitur sic immediate quod obiectum non causet nec concauset immediate actum in suo genere et ordine, sed tantum causat speciem et conservat a qua immediate causatur visio; vel non sic, sed obiectum etiam est partialis causa visionis. Si secundum, tunc stat argumentum plane, sicut patet de se; si primum, tunc non esset verum quod dicit quod 'numquam visio aliqua nata est naturaliter causari sine presentia rei vise' ... Preterea, si species esset sic tota causa immediate visionis obiecti a quo causabitur species, igitur male respondes <Chatton> ad experientiam Petri Aureoli secundam de somniis et tertiam de timentibus, quia ibi species <<radiantae>> [*ms. rediinate*] ad sensus causarent visionem, tunc, primi obiecti et non specierum—cuius oppositum dicit;" *ibid.* (Gonville & Caius, fol. 114vb): "Dicendum quod ibi non est sensibile positum supra sensum, sed in oculo, et ibi non est sensatio, sed in quodam nervo, ubi est concursus nervorum venientem ab oculis, etc. (*mag.* Et hoc que tenet Scotus d.3);" cf. above, chapter III, n. 87, and chapter VIII, n. 94.

⁵⁴ *Ibid.* (Gonville & Caius, fol. 113vb): "Ad hoc quattuor sunt previa argumenta facta pro prima conclusione. Respondetur tamen ab eo <Chatton> primo quod non potest pro illo parvo tempore certificari pro quo visio potest <<con>> servari recedenti visibili, tamen quia illa visio non durat diu post recessum visibilis, ideo potest postea habere certitudinem utrum sit ita in re per hoc, scilicet si ista visio diu durat." See above, chapter VII, nn. 39–40.

⁵⁵ *Ibid.*: "(*Marg.* Contra) Sed absque dubio ista via tollit omnem certitudinem de existentia cuiuscumque visibilis, licet sit cauta evasio. Probo consequentem, quia pro nulla mensura est possibilis certitudo de existentia visibilis per ipsam visionem pro qua mensura staret cum ipsa visione non-existentia visibilis, nec potest de opposito constare. Sed si quis per centum annos videret solem pro quocumque instanti vel parte temporis in quo ade-

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These species are not experientially discernible in the presence of their generating objects, in conjunction with which they are seen, much as—to borrow an example from Scotus—stars are invisible by day.⁵⁶ But what are these species? They are the remnants (*reliquie*) of the "forms made in the senses," i.e. in the organ or instrument of the senses, as Wodeham glosses Augustine; they are "certain qualities . . . which are called by some 'species.'"⁵⁷ He also terms the species a "similitude of the thing seen with respect to the thing, and its distance, and all [its accidents]."⁵⁸ In describing the species as "remnants," and more especially, as "qualities," Wodeham attempts (like Holcot later) to avoid the materialist consequences which, he implies, had felled even Scotus, to judge from his *De anima* commentary. Sensation, Wodeham asserts, is only spiritual; that is, inasmuch as the soul's faculties are not distinct from the soul itself, sensation occurs immediately in the soul. What is received in the soul need not be extended (*extensa*), as bodies are. So, Wodeham argues, whereas Scotus

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quate posset elici actus iudicandi de existentia staret naturaliter cum ipsa visione quod visibile non existeret. Igitur maior patet, quia aliter posset certificari quod visibile existeret quando non existet. Minorem probo, quoniam ipsa visio causatur instantanee, licet igitur dicat—et bene—quod visio non potest naturaliter causari sine existentia et presentia obiecti. Et per consequens, saltem in primo instanti quando causatur ipsa visio, non possit stare visio ipsa cum non-existentia obiecti. Tamen quia in instanti primo non est iudicium ipsum naturaliter causabile—secundum eum et secundum veritatem, quia presupponit formationem propositionis mediante qua causetur, que formatio est cum successione in tempore—ideo, pro primo instanti non habebitur certitudo. Nec umquam post <<primo>>, quia dato quod visibile non maneret nisi pro primo instanti, staret quod visio maneret aliquamdiu post. Igitur pro illo parvo tempore non potest esse certitudo utrum sit vel non sit; nec post illud parvum tempus, quia non est via unde constet quin manserit visibile tale usque tunc . . ." In further arguments, Wodeham alludes to Scotus's views on whether creation and causation require a unified explanation, a problem to which Wodeham returns in I *Lect. sec.* d.3, q.5 (Gonville & Caius, fol. 176ra).

⁵⁶ Ibid. (Gonville & Caius, fol. 14vb): "Ad sextum, dicendum quod vel prius cernebatur, sed non discernebatur propter coniunctionem, etc. Vel aliter, quod sicut stelle non videntur de die, ita nec species, sive videtur principale visibile. Et causa est assignanda consimilis utrobique;" see above, chapter V, n. 132.

⁵⁷ Ibid. (Gonville & Caius, fol. 114rb): "Dico igitur quod beatus Augustinus non dicit, nec vult, nec experientiam etiam <docet> quod ipsummet corpus lucidum quod prius videbatur adhuc videatur absente visibili, sed quedam reliquie istius forme que facta erat in sensu, idest in organo seu instrumento sensus, quando videbatur corpus lucidum extra. Non enim ipsa visio versatur in conspectu, quia visus non est reflexivus super actum suum, sed aliquid visibile versatur in conspectu, scilicet reliquie forme prius causate in organo cum corpus—inquit Augustinus—'videbatur lucidum' . . . Ex quo patet quod secundum eum corpore absente, quod deberet videri, nullo modo potest visio remanere. Dicendum est igitur ad istud experimentum, quod in organo oculi remanent quedam qualitates causate a corpore visibili intense que videntur post amotionem visibilis, que vocantur a quibusdam 'species.'" "

⁵⁸ Ibid. (Gonville & Caius, fol. 115ra): "Ad secundam <experientiam Aureoli> per idem: vel potest aliter dici ad utrumlibet quod forte species una vel plures concurrentes sunt similitudine<s> rei extra prius vise quoad rem et distantiam et omnia, et ideo creditur res videri que tamen non videtur."

accounts for the phenomena of dreaming and imagining by a process that implies corporeal species, namely the multiplication of species from the imagination to the *organs* of the other interior senses, such events are instead to be explained as reflexive acts, or as enabled by habits and species in conjunction.⁵⁹

These species, or intentions, help to account for the mistaken judgments concerning existence that Wodeham is convinced do occur. Hence, Wodeham decides, Aureol is correct in arguing that these "experiences" cannot simply be dismissed as erroneous visions for which a theory of cognition need not account. All the same, they do lead to judgmental error:

They are truly [visions] inasmuch as what is seen in them [the species] truly exists; and the arguments adduced in opposition [to this] do not proceed against it ... I gloss the second [hypothetical] response [Aureol admits as follows]: that then they do not see what appears to be seen, but other [things]; and so the common sense judges, i.e. that instrument mediately receives that erroneous judgment ... concerning external sensations and concerning the nature of the sensibles—which are actions that the Philosopher seems to attribute to the common sense in II *De Anima*.⁶⁰

Aureol's disclaimer notwithstanding, Wodeham adds, this explanation can be reconciled with the authority of Augustine and Averroes who locat-

⁵⁹ Ibid.: "...Cuius causam assignat Scotus libro *De anima* questione 9, quia actus imaginandi multiplicat speciem suam in organum alterius sensibili<s>, etc. Sed hanc causam non possum ego assignare, quia non pono sensationes <esse> accidentia extensa sicut ipse, sed dico quod talia sunt realiter per actus reflexos, vel per hoc quod mediantibus habitibus eliciuntur ibi actus abstractivi fortes eiusdem speciei cum habitis in vigilia, et eo fortiores, quo non est impedimentum per distractionem;" *ibid.*, q.4(Gonville & Caius, fol. 117vb): "Ad tertium, quod non videtur sequi contra aliquos qui ponunt visionem fore formam extensam, certum est, quia tunc potest continue crescere et decrescere; sed ideo videtur sequi contra me, quia pono visionem esse formam spirituales non extensam, sicut nec eius subiectum primum extenditur. Ad illud potest dupliciter dici: uno modo quod forte quod infertur non deberet videri inconueniens, ex quo nulla manet. Eadem difficultas est contra fere omnes <supra, n. 24>." As Courtenay, *Wodeham*, p.44, notes, Scotus's autographs were available to Wodeham; thus his accurate reference to the *De anima* [Vivès III: p. 115] commentary attributed with some dispute to Scotus confirms that it is indeed his; cf. Steneck, "Internal Senses," p.109n for a brief discussion of the controversy on its authenticity.

⁶⁰ *Lect. sec. prol.*, q.3 (Gonville & Caius, fol. 115rb): "Prima responsio ad experientias est bona, sic intelligendo quod sunt visiones false et erronee, id est ductive in errorem; verae tamen sunt quoad hoc quod id quod eis videtur vere existit. Nec contra hoc procedunt argumenta in oppositum, sicut patet de se. Secundam responsionem glosso, quod tunc non vident ista que apparent videri, sed alia; et sensus communis sic iudicat, id est illud instrumentum mediate recipit iudicium illud erroneum, ita quod de hoc serviat illud instrumentum—scilicet quod in illo recipiantur mediate iudicia de sensationibus exterioribus et de natura sensibilibus, quas actiones videtur Philosophus tribuere sensui communi, II *De anima*. Et de alio ut, scilicet, via per quam species deriventur ad imaginationem ita quod non est frustra in homine, licet nullus sit actus sensitivus sibi correspondens respectu sensationis nec forte aliquis alius; sed de hoc non ad presens."

ed the "appearances" in the particular senses. Thus, Wodeham in effect concludes that Aureol's experiential evidence can be understood without recourse to any "apparent being," a conclusion defended in the fourth question of the prologue.⁶¹

Wodeham's Consideration of Aureol's "Apparent Being"

Wodeham may have known Rodington's rejection of Aureol's hypothesis of an "apparent being" produced in intuition, but there is no indication that this discussion affected Wodeham's consideration of Aureol. Instead, Wodeham's focus is on the ways in which his teachers have misunderstood their French confrère, and on the problems their treatments of his views expose. After stating that the "seen or apparent being" that Aureol posits is not invariably caused in intuitive cognitions, Wodeham produces the arguments against its hypothesis from Ockham's *Or-dinatio*. The initial disproofs Wodeham considers well argued,⁶² but when the Venerable Inceptor refers to "true" and "false" apparent beings, it seems to Wodeham that the misunderstanding of Aureol vitiates the argument. Rather than dual "apparent beings," Wodeham correctly observes, Aureol had held that one-and-the-same "apparent being" is intrinsically first true and then, after the removal of its object, false.⁶³

⁶¹ Ibid.: "Ad primum in contrarium, concedo quod apparitiones simplices—non illorum que credentur videri sed aliorum quorundam—sunt in sensibus particularibus, cum Commentatore et Augustino. Sed apparitio significans formaliter aliquid esse presens (vel esse album, vel moveri, et sic de aliis), illa recipitur in sensu communi, modo predicto, vel in fantasia. Ad secundum: sensationes particulares iam sunt in actibus suis, licet non respectu quorum creduntur esse."

⁶² Ibid., q.4 (Gonville & Caius, fol. 115va): "In ista questione probantur due conclusiones; et secundo <articulo> solventur experientie et rationes probantes oppositum. De primo: illa sit prima conclusio, quod in cognitione intuitiva non causetur omne tale 'esse visum' vel '<esse> apparens' medium inter visionem et visibile. Hanc probo primo sic: quero de 'esse apparenti et intentionali': aut habet esse obiectivum tantum, ita quod nulli-bi habet esse subiectivum, aut alicubi habet esse subiectivum..." The verbatim quotation of Ockham (see above, chapter V, nn. 100–10) continues to his "Quandocumque aliqua sunt idem realiter, impossibile est unum esse reliquo non existente. Sed hoc—demonstrando albedinem—potest esse hoc—demonstrando illud esse apparens—non existente ... igitur ... non sunt idem realiter." Here Wodeham interrupts: "iste enim modus arguendi est bonus, ubi subsumuntur tantum termini abstracti vel pronomina demonstrativa tantum, sicut hic." Again, after further arguments, Wodeham notes "tunc arguit et bene," and "iste rationes apparent mihi bone."

⁶³ Ibid. (Gonville & Caius, fol. 115vb): "Item arguit frater W. Ockham: 'quan-documque aliquid apprehenditur naturaliter ab aliqua potentia successive sine duobus, prius scilicet sine uno et post sine alio, potest per divinam potentiam apprehendi sine ut-roque simul. Sed per Petrum Aureoli albedo primo apprehenditur sine esse apparenti vero, et <post sine> [ms. possum] esse apparenti falso medio. Igitur, potest apprehendi sine omni esse apparenti medio, et ita frustra ponitur.' (*Marg.* Sed contra:) Sed hoc non cogit, quia idem esse apparens penitus est quod primo est verum et post falsum. Sed aliter

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Wodeham further disputes the efficacy of an argument both Ockham and Chatton raised, that the hypothesis of an "objective entity" could be obviated by invoking the notion of designation (*denominatio*). Each had stressed that the act of designating an object does not suffice to produce it, "any more than Caesar, who is designated by a picture would be produced by it." Taking the relation of an object to its vision to be analogous to that of Caesar to his depiction, Chatton and Ockham had denied that anything other than extrinsic designation of the object resulted.⁶⁴ Aureol, however, had not only considered the objection, as Wodeham noticed, but had explicitly rejected it as inadequate, not least because it failed to explain how designation, as the intellect's doing, occurs.⁶⁵ Yet if Ockham's and Chatton's dismissal inadvertently indicates the explanatory problem Aureol had attempted to remove by the hypothesis of an "apparent or objective being," his solution seems to Wodeham to involve a confusion derived from a false understanding (*falsa imaginatio*) of what is meant by stating that "an object is known."⁶⁶

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potest dici ratio sic quod ipsa visio successive potest naturaliter terminari ad ipsum esse apparens tantum et ante ad ipsum verum esse albedinis tantum, quia aliter eodem actu naturaliter apprehenderentur duo, quorum utrolibet non existente vel saltem altero ni-hilominus naturaliter staret actus."

⁶⁴ Ibid.: "Preterea, illud quod non capit ab aliquo nisi solum denominari, non producit ab isto; alioquin Caesar, qui denotatur a pictura, produceretur ab ea. Sed res non [incidit] capit a visione, nisi solam denominationem, quia quod aliquid dicitur esse visum non apparet nisi denominatio extrinseca, qua obiectum <sive> sit sive non sit, denominatur visum ab ipsa visione." For Chatton, see chapter VII above, at nn. 29–31; for Ockham, see I *Ord.* d.27, q.3 [OTh IV: pp. 252–53].

⁶⁵ Ibid.: "(Marg. Responsio Petri Aureoli, distinctione 27 primi <libri>, questione prima:) Ad istud respondet Petrus Aureoli quod minor falsa est. Non enim pariet per picturam Caesar ipse fuit presens nec obicitur sibi sicut obiectum presens est potentie cognitive. Immo multum aliter est in anima quam Caesar in pictura, alioquin non posuisset Philosophus VI *Metaphysice* <capitulo> primo specialem modum essendi, 'esse in anima.' Preterea, omnis intelligens aut cognoscens experitur rem sibi presentem dum de ea cogitat; igitur tunc habet aliquid esse quod non habet dum non actu intelligitur. Et tamen tunc denominatur, scilicet quando non intelligitur a specie vel habitu. Igitur tale esse non est tantum denominari." For Aureol, see above, chapter IV, nn. 24, 50; Pinborg, "Brito on Universals," 135–36.

⁶⁶ Ibid. (Gonville & Caius, fol. 116ra): "In omnibus enim talibus est falsa implicatio, nisi quod cognoscitur habeat esse. Et ideo secundum veritatem nullum omnino esse habet res extra animam, sive sit sive non sit, propter hoc quod cognoscitur. Nec in anima nec extra animam, nec simpliciter nec secundum quid, sicut nec Caesar quodcumque esse habet propter hoc quod depingitur, quia cognosci non est quodcumque esse habere illud quod cognoscitur, licet sit cognitionem habere esse. Sed utrobique, et Caesar a pictura et cognitum a cognitione, extrinsece denominantur cum dicitur Caesar esse depictus vel obiectum esse cognitum. Nec tamen 'Caesarem dipingi' est Caesarem extrinsece nec intrinsece denominari, sed est picturam esse que ideo fiebat ut Caesaris memoriam faceret. Et similiter, rem cognosci vel esse cognitam non <est> rem denominari, sed est cognitionem esse a qua res vere denominatur cognosci. Et ideo argumentum processit ex falsa imaginatio."

Recognizing virtually all of Aureol's synonyms for the "apparent being,"⁶⁷ Wodeham's elucidation of the latter's thesis against his teachers' misreading is extended to their view of the apparent being as a *mediating* cause of vision. To Chatton's arguments that as a mental creation (*fictum*), such an entity can be proven redundant because vision can be caused without it, and because its existence would block the fruition of God in the Beatific Vision, Wodeham responds by introducing a passage from Aureol's commentary evidently unknown to Chatton and Ockham alike.⁶⁸ In distinction twenty-seven, Wodeham urges, Aureol delineates the consistent intent of his entire opus, when he responds that "whether the object is present or absent, the [sense of] sight is immediately united to the reality of its object which it places in a formed being."⁶⁹ Beyond discerning the centrality of this notion to Aureol's work, Wodeham seems to be the first English reader of the *Scriptum* to realize that its author conceived of this entity "formed" by the soul not as a prior cause, but as a *product* of vision, and he quotes Aureol's own insistence that this objectively existing entity is no "cloak" or "medium" intervening between object and knower.⁷⁰

⁶⁷ For example, Wodeham mentions (fol. 115rb) "esse aliquod apparens," "esse vi-sum;" (fol. 115va) "esse intentionale," "esse obiectivum;" (fol. 115vb) "intentio;" (fol. 116ra) "ens diminutum;" (fol. 116rb) "ens fictum," "esse formato," "esse iudicatum," "apparitio obiectiva;" (fol. 116va) "esse fictivum."

⁶⁸ *Lect. sec. prol.*, q.4 (Gonville & Caius, fol. 116ra–rb): "Item arguo: posita albedine presente et substantia actus <videndi> in <potentia> [*ms.* posita], omni alio ente diminuto circumscripto, adhuc ipsa albedo esset visa. Igitur superfluit ponere ibi huiusmodi ens diminutum. Sed hic forte diceretur quod antecedens non est verum. Contra: non minus immediate unitur visio ocularis suo obiecto quam visio intellectualis suo; sed ista, re existente presente, immediate terminatur ad rem. Igitur maior patet, quia non plus experimur inter visionem et rem visam exterius aliquid emanare tamquam medium quam in quacumque visione intellectuali. Minorem probo, quia aliter Deus in patria non immediate intelligeretur absque hoc quod aliquid per modum medii emanaret et produceretur ibi. Et tunc visio beatifica non immediate terminaretur ad Deum, sed ad aliquid quod, Deo non existente, nihilominus existeret modo sibi competenti, si visio posset aliunde conservari. Et propter eandem rationem, videretur alicui quod ens fictum seu diminutum concomitaretur volitionem, et per consequens nec in via nec in patria, aliquis immediate frueretur Deo, sed tali ficto, quod videtur absurdum." Cf. Chatton, chapter VII above, nn. 26, 83.

⁶⁹ *Ibid.* (Gonville & Caius, fol. 116rb): "(*Marg.* Responsio Petri Aureoli) Hiis respondet distinctione 27, primi libri, quaestione prima, in qua responsione stat intentio totius operis sue disperse per totum opus suum, quod sive res sit presens sive absens, visus immediate unitur realitati sui obiecti quam ponit in esse formato, ubi nota esse considerandum quod res in esse formato posita non claudit in se aliquid absolutum, nisi ipsam realitatem;" for Aureol, see above, chapter IV, n. 50.

⁷⁰ *Ibid.*: "Et idcirco res que videtur est hoc quod realiter existit. Habet etiam esse iudicatum et visum, quod quidem non ponit varietatem aliquam aut distinctionem vel numerum cum realitate ista quantum ad aliquid absolutum, sed addit respectum istum intrinsecum et <in> distinguibilem, que dicitur 'apparitio obiectiva.' Non igitur terminatur visus ad rem obiectam mediante aliquo absoluto quasi sit aliquod pallium <vel

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Nevertheless, in Wodeham's opinion, the "objective or apparent being" is superfluously posited. More serious to him than its redundancy is the difficulty of justifying the denial that such an entity would, in fact, be an *intramental* "cloak" or mediator blocking direct cognition of extramental reality. After all, by Aureol's own account, an apparent being is indistinguishable from its extramental object.⁷¹ Problematic and unnecessary in intuitive cognition, the apparent being is equally unwarranted in abstractive cognition.⁷² After briefly countering Aureol on this point, Wodeham turns to the experiential evidence adduced in the third distinction of the *Scriptum* to support the necessary formation of the intentional object. Given Wodeham's appraisal of Aureol's arguments as consistent in purpose, it would be surprising indeed if the analysis of these "experiences" diverged from the explanation Wodeham had already offered for those of the prologue. If anything, he here displays more explicitly his commitment to the multiplication of species for any alternative account of the phenomena at issue. Thus, for example, in discussing Aureol's example of a stick that appears bent when partially submerged in water, Wodeham responds that:

It belongs solely to the perspectivist to explain the cause why this appears to be, although not as it is. But the cause in the proposed [case] is the variation of the medium through which the species of the stick in the water multiplies

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medium> inter parietem qui videtur et visionem; et idem <dicendum> est de intellectu vidente Deum in patria." For Aureol, whom Wodeham quotes correctly, see chapter IV above, n. 50.

⁷¹ Ibid. (Gonville & Caius, fol. 116rb–va): "Sed contra istam responsionem est primum argumentum pro conclusione prima, et etiam secundum et quintum <supra n. 63>. Preterea, de illo respectu intrinseco et indistinguibili a realitate cognita, que dicitur 'apparitio obiectiva,' quero: in quo fundatur? Aut immediate in ipsa realitate vera, et tunc non posset manere realitate illa adnihilata per potentiam Dei ... cuius oppositum tu dicis, ponens apparitionem obiectivam etiam naturaliter ubi res visa nihil est ... Dices forte quod <non> super eandem realitatem fundatur, sed super eam habentem aliud modum essendi. Contra: ille modus essendi de quo est sermo non est nisi apparere obiective. Igitur respectus ille qui est apparitio obiecti esset respectus fundandi seipsam, etc.; et ita erit ibi quasi pallium et medium, quod negares. Preterea, si in actu sensus vel intellectus emanat aliqua realitas que non est extra in rerum natura in qua fundetur ipsa apparitio obiectiva tamquam respectus indistinguibilis ab ea ad quam realitatem terminetur intuitus, sequeretur quod res extra non intelligeretur. Et tunc peribit omnis notitia et scientia etiam de rebus, sicut arguit Aristoteles contra ideas Platonis." Ibid. (fol. 117ra): "Concedo igitur quod non est ponendum aliquod tale diminutum esse rei vise per hoc quod videtur. Nullo tamen modo videtur vel videri potest absque apparitione; sed ista apparitio est ipsamet visio qua posita ... repugnantia est quin obiectum videatur."

⁷² Ibid., concl. 2 (Gonville & Caius, fol. 117ra): "Iuxta dicta, pono aliam conclusionem de cognitione abstractiva que habet precise pro obiecto illud quod habuit intuitiva propria alicuius singularis, nam de abstractiva universalis differo usque ad materiam de universalis. Est igitur secunda conclusio quod per notitiam abstractivam propriam immediate sequentem notitiam intuitivam, obiectum talis actus non causat aliquod esse diminutum vel apparens quod mediat inter cognitionem et cognitum."

to the eye. Indeed, if there were a hundred media through which it could go different ways, the line on which the species multiplies would be refracted that many times ...⁷³

Wodeham's acceptance of the perspectivist theory of the multiplication of species as an explanatory mechanism, suggested at many turns during the consideration of Aureol's experiential evidence, is completely unambiguous only when Wodeham discusses this third experience.⁷⁴ It is likely, however, that perspectivist theory is among the sources informing his response to the first experience, of someone on a passing boat to whom the trees along the shore appear to move. The analysis of this experience is most overtly indebted to Chatton and Ockham, with each of whom Wodeham concurs at some points; yet the significance of his own understanding, in which he departs from both teachers, stems from his recognition of the implications of their arguments.

Ockham's purpose had been to remove the event Aureol described from the realm of sensation by relocating it within the purview of intellectual operations. Insofar as Ockham concerned himself with causes, he attributed the resultant intellectual error to "equivalent apprehensions" in the senses. These apprehensions, arising "on account of the motion of the [viewer] existing on the ship, who does not move except by the ship's motion," whereby the trees are seen at different distances and vantages, can produce the proposition "the trees move" in the intellect. Hence, there is no need to suppose any motion in the eye itself, whether really (*subiective*) or, as Aureol maintained, objectively existing.⁷⁵ Chatton, too, had refused to concede Aureol's assertion that the experience testified to the facts of vision, rather than to those of judgment. The multiplication of species from the trees to the observer, Chatton determined, causes continuously successive visions. From these the judgmental faculty judges that the trees move, because "it will not realize how else these visions

⁷³ *Lect. sec.*, prol. q.4, a.2 (Gonville & Caius, fol. 118va): "Tertia experientia de apparentiis fracture baculi, cuius pars est in aqua ... Reddere autem causam quare ita apparet esse licet non ut sit, pertinet tantum ad perspectivum. Et causa autem est in proposito variatio medi per quod multiplicetur species baculi in aqua usque ad oculum. Si enim essent centum media per que diversaretur, totiens frangeretur linea per quam species multiplicaretur ita quod prior linea non indirecte protenderetur, idest statim incipiet fieri diversatio per lineam in alio situ exteriori vel interiori quam in medio priori. Aliud autem medium est aqua, aliud aer; igitur <etc.>" (Immediately before the last sentence the text contains an interpolation from the preceding *experientia*.)

⁷⁴ It is also suggested elsewhere, as in the discussion of the fourth experience (Gonville & Caius, fol. 118vb), where Wodeham mentions "stat in hoc quia per aliquem motum impeditur concursus aspectuum ubi concurrere deberent inter oculos et rem visam, ideo apparet homini illud quod unum est, esse duo."

⁷⁵ See above, chapter V, at nn. 124–34.

might be caused than they would be, if the trees actually moved."⁷⁶

Wodeham agrees with both Ockham and Chatton that the particular external sense is not the locus of error, although its perceptions (or apprehensions) are the source of the error. Thus, at the outset of his analysis Wodeham states that, contrary to Aureol's claim, the trees are not seen to move; and even if they did move, they would not be seen to do so. Nevertheless, if by the statement "they are seen to move," Aureol understands "they appear to move," then the assertion can be accepted; the appearance, however, is not vision, but an erroneous judgment caused "by means of vision."⁷⁷ Paraphrasing Ockham, Wodeham concludes that there is no motion in the eye, objectively or subjectively, nor in some "seen being."⁷⁸ Nor, Wodeham adds, is there motion in any "judged being," unless Aureol's terms are taken not as names for mental entities, but instead "metaphorically," i.e. as expressing the fact that the adjudicative faculty judges—albeit erroneously—that something moves. That faculty, as Wodeham has already indicated, is the common sense.⁷⁹

In attributing the perception of motion to the operation of an internal sense, rather than an external one, Wodeham presumably considers his stance harmonious with Chatton's. Still, the sources for Wodeham's view reveal that his reading is not merely derivative, for he returns to discussions unknown to Chatton, namely those from Avicenna and the perspectivists which Scotus had assimilated in his *De anima* exposition of the internal senses' capacity for judgment.⁸⁰ Perspectivists argued, and Scotus

⁷⁶ See above, chapter VII, at nn. 43–44.

⁷⁷ *Lect. sec. prol. q.4, a.2.* (Gonville & Caius, fol. 117rb): "Ad istam experientiam dico, quod arbores non videntur moveri sicut [non videntur] etsi moverentur, non viderentur moveri, ut alias tactum est; et causa tunc erat dicta. Tamen si ly 'viderentur moveri' acciperetur pro 'apparent moveri,' tunc concedo—sed illa apparitio non est visio, sed iudicium erroneum causatum mediante visione."

⁷⁸ *Ibid.*: "Dico igitur quod cum arbores videntur moveri ad motum hominis per navem, nullus motus est in oculo, nec obiective nec subjective, nec aliquis motus est in esse viso, quia nullus videtur, nec etiam aliquis motus apparet." For Ockham, cf. chapter V, at n. 116.

⁷⁹ *Ibid.* "... loquendo ad istum intellectum quo conceditur motum apparere <supra, n. 77> etsi appareret isto modo loquendo, tamen non haberet propter hoc aliquod 'esse iudicato,' nisi metaphorice loquendo, ut supra <n. 66> expositum erat. Et veritas huic metaphore correspondens est quod potentia iudicativa iudicat—licet erronee—aliquid moveri. Et hoc verum est, non propter aliquod 'esse intentionale' motus, sed propter hoc solum quocumque alio circumscripto, quia ipsum iudicium erroneum informat animam." See also above, n. 60.

⁸⁰ In qq. 9–10 of his *De anima* commentary, Scotus discusses Avicenna's views from the *Liber sextus de naturalibus* on imagination and the common sense, including material from p. I, c.6; p. III, c.8; p. IV, c.1. See above, chapter I, nn. 22, 34; chapter III, n. 12, 92; chapter IV, n. 19; and, for Wodeham's familiarity with Scotus's *De anima*, q.9, see above, n. 59. Wodeham cites Avicenna's work both tacitly and explicitly throughout this question (as, e.g., on fol. 118ra).

confirmed, that motion is not perceived by an external sense such as vision, because awareness of motion requires a process of inferential reasoning, that is, the ordering of stored species. Although this process may occur so rapidly that the passage of time is imperceptible, it nevertheless requires time for a successive "order" of species to be received from successive visions, from which the common sense judges that there is motion.⁸¹ Chatton had alluded to that process, and Wodeham implies it when he turns to Ockham's resolution and announces:

Consequently, contrary to [you, Ockham], the appearance by which it appears to a man that the trees move is an act of the senses. But according to you, no judgment by which it is assented that something actually is, or actually relates (*se habet*) is an act of the senses.⁸²

Wodeham concedes that strictly speaking, the sensation is not *formally* judgment, for it does not have the form of assent to or dissent from, or even doubt concerning, a proposition. Nevertheless, the sensation of motion is not an incomplex apprehension, as Ockham proposes. Nor does the percipient deliberately choose to assent to or dissent from a proposition such as "the trees move;" after all, complex instinctive reactions, whether of man or beast, hardly require the sort of judgment upon which Ockham insists.⁸³ Hence, Ockham's claim that "many [seeing the trees] would judge and know that the trees do not move," does not refute arguments for taking the experience as sensitive, "for at least partly through

⁸¹ It is worth noting that Chatton and Wodeham assume that all of Aureol's experiences involve the same internal faculty, called variously (and even carelessly) the common sense or the imagination.

⁸² *Lect. sec. prol.*, q.4 (Gonville & Caius, fol. 117rb): "Nihil plus illud conceditur, nec in esse reali, nec in esse intentionali formaliter, licet causaliter requiratur quod arbores ille videantur in alia et alia distantia continue, et quod continue succedant nove et nove visiones . . . Et per consequens, contra <Ockham> illa apparitio qua apparet homini quod arbores moveantur est actus sensus. Sed per te <Ockham> nullum iudicium quo assentitur aliquid esse actualis vel actualiter se habere est actus sensitivus." For Chatton, see above, chapter VII, at nn. 43–44; for Ockham's restriction of existential judgment to the intellect, see above, chapter V nn. 13, 41–45, 122.

⁸³ *Ibid.* (Gonville & Caius, fol. 117va): "Ad secundum: concedendum est quod illa apparitio non est formaliter iudicium, quod est assensus vel dissensus vel dubitatio etiam . . . sed est ista apprehensio quedam complexa . . . licet non oporteat eum assentire aut dissentire." These remarks assume the prior discussion of Ockham's evasion of the objection, that (fol. 117rb): "etiam brutis apparent arbores ille moveri in tantum quod si naves moveretur versus arbores, fugerent <ac> si essent eis terribilia quedam." Wodeham argues that animals react to new stimuli at once, based on sensitive memory and imagination; then "nec est hoc inconveniens bruto, cum etiam in nobis experiamur, cum ad solam positionem simplicium apprehensionum multa frequenter facimus . . . sine omni deliberatione vel iudicio previo." Cf. Ockham, *IV Rep.* q.14 [OTH VII: pp. 313–16], where the issue is sense memory. Although Bacon (relying on Avicenna) had considered animal adjudicative behavior (above, chapter I, n. 38), Wodeham's discussion seems to have attained some notariety, for which see below, chapter XII, at n. 36.

vision, which is an act of the senses," it will seem to them that the trees move.⁸⁴ Or, as Wodeham emphasizes, "although I do not doubt whether [the trees] move, nor do I assent that they do move but dissent with certitude; nevertheless whether I will or no, it always appears to me that they move."⁸⁵

The inevitability of this perception (presumably under the same conditions) is due to the fact that, as Wodeham points out, the causal conditions are the same as for the perception "of what really is moved," as Ockham would say, namely that "something be seen in a continuous succession of distances, and that one new vision after another succeed each other continuously." Although these conditions obtain because of motion from another source (the boat), the result for the passenger of the progressive elongation from the trees is the perception of motion.⁸⁶ Both Ockham and Chatton had in effect admitted this to be the case; the latter, at least, did so purposefully, concluding that the judgmental faculty would, therefore, judge the trees to move when unable "to imagine how else the visions might be caused."⁸⁷ Lest this be assessed as a minor difficulty, Wodeham proposes that,

This was the cause why some ancients said that the earth rotates, and thus not through the motion of the heavens, but through the revolution of the earth, different parts of the sky continuously appear to us.⁸⁸

⁸⁴ Ibid. (Gonville & Caius, fol. 117rb): "Ad primum <quod nullum iudicium ... sit actus sensitivus> assumptum est negandum. Bene tamen partialiter per visiones que sunt actus sentiendi apparet homini quod arbores moveantur."

⁸⁵ Ibid. (Gonville & Caius, fol. 117vb): "Ad secundum <supra n. 83> ... Quia licet nec dubitarem an moveantur nec assentiam quod moveantur, sed certitudinaliter dissentiam, velim tamen nolim semper apparet mihi quod moveantur." In the Oxford lectures, Wodeham draws upon another of Aureol's experiences to illustrate the inevitability of perceptions under specified conditions; see I *Oxon. prol.*, q.2, a.2 [ed. Grassi, "Conoscenza di Dio" pp. 98–99]: "Dico ergo, sicut prius, quod clara Dei visio, licet non sit evidens iudicium quod Deus est bonum infinitum, quia ipsa non est iudicium vel saltem potest non esse iudicium sed simplex intelligentia solum, tamen ipsa posita statim potest habere iudicium evidens quod illud bonum apparens sit bonum infinitum; immo ipsa, ut aestimo, tantum facit suum obiectum apparere infinitum, sicut visio baculi cuius pars in aqua et pars supra facit apparere baculum fractum, licet ipsa corporalis visio non sit iudicium de hoc, et ita de similibus."

⁸⁶ *Lect. sec. prol.*, q.4 (Gonville & Caius, fol. 117rb): "Nihil plus illud conceditur, nec in esse reali, nec in esse intentionali formaliter, licet causaliter requiratur quod arbores ille videantur in alia et alia distantia continue, et quod continue succedant nove et nove visiones, sicut alias tactum fuit, cum de causa fieret sermo quare <obiectum> 'A' realiter motum iudicatur moveri. Causa autem quare arbores continue in alia et alia distantia <videntur> est quia per motum aliunde continue plus et plus elongatur homo ab arboribus." For Ockham's view, see e.g. I *Quodl.*, q.5 [OTh IX: 29 lin. 10–19].

⁸⁷ For Chatton, see above, chapter VII, n. 44.

⁸⁸ *Lect. sec. prol.*, q.4 (Gonville & Caius, fol. 117rb): "... quia per motum aliunde continue plus et plus elongatur homo ab arboribus. Et hec fuit causa quare aliqui antiqui

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That Wodeham draws this connection is interesting in itself, but the scientific opinion of the ancients also illustrates for Wodeham the insufficiency of Ockham's theory.⁸⁹ The Venerable Inceptor had accepted sensitive apprehensions capable of eliciting "operations similar to those from one who sees a body that is truly moved," and indeed, further admitted that the apprehensions were "equivalent"—that is, capable like other apprehensions of producing propositions to which the intellect gives assent, as for example, "the trees move," or "the circle is in the air."⁹⁰ Here Wodeham finds an impasse in Ockham's theory, since Wodeham thinks that on Ockham's own grounds the assent must be construed as evident, because based on intuitions. Hence, the proposition assented to qualifies for Ockham as the immediate object of scientific knowledge. Nevertheless, Wodeham stresses, the proposition is false, for it signifies reality to be other than it is.⁹¹ Given the equivalence of propositions that in fact "signify reality as it is," and those that do not, the percipient can assent to either as evident.⁹²

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dicebant terram circumvolvi et sic non per motum celi sed per circumvolutionem terre apparet nobis continue alia et alia pars celi, sicut patet II *De celo*." At *De caelo* II.14. (Barnes ed. I: 487–88), Aristotle discusses whether the earth moves rather than the heavens, but he does not introduce this example. A more likely source for Wodeham is Witelo, IV *Perspectiva* prop. 138 (Risner: p. 180): "In motus et quietis visione error accidit virtuti distinctive ex intemperata dispositione octo circumstantiarum cuiuslibet rei vise ... Similiter etiam accidit error in quiete: aliquis enim a longe visus non veloci motus, quiescere videtur, et propter hoc planeta credimus immotos, licet velociter moveantur ... Ex intemperata etiam situs oppositionis obliquitate accidit error virtute distinctive in premissorum visione, unde aliquo velociter navigante in flumine et oblique inspiciente arbores in ripa fluminis, tunc arbores ab axe visuali multum elongatas estimabit moveri; ille vero arbores, quibus axis visualis incidet, quiescere videbuntur."

⁸⁹ See below, at nn. 114–115.

⁹⁰ Above, chapter V, at nn. 125–27, 131.

⁹¹ *Lect. sec. prol.*, q.4 (Gonville & Caius, fol. 117vb): "Sed est ista apprehensio quedam complexa, habens pro subiecto vel predicate vel utroque visionem ipsam arboris, et hoc vel eandem semper numero vel equivalentem. Et quia composita ex cognitionibus [ut] evidentibus, ideo est multum evidens apprehensio, in tantum quod ipsa posita appareat homini velit, nolit sicut ipsa esse significat, licet non oporteat eum assentire aut dissentire, licet ipsa quantum est ex parte illius natura sit causare assensum. Assensum quod sic sit [sed] <tamen> per aliud regitur, puta per experientiam aliunde vel aliunde, vel rationem quod non sit ita sicut apparet esse."

⁹² *Ibid.* (Gonville & Caius, fol. 118rb), discussing the experience of the flaming circle: "Aliter posset <dici> sicut respondet Ockham distinctione 27, quod 'nullus circulus apparet oculo,' licet 'intellectus credat istam propositionem esse veram 'circulus est in aere'—suppletis: nisi aliunde sciat quod non est ibi circulus ... Sed tenendo istam responsionem, dicerem consequenter quod quia oculus prosequitur attente extremitatem istam ignitam circulariter motam, intellectus statim ex visione eadem continuata ipsius ignis circulariter moti momentanea—vel alia et alia equivalentibus—componit propositionem ... qua propositione formata, apparet 'ignis ille esse circulus,' que propositio propter hoc quod componitur ex cognitione intuitiva, que multum est evidens cognitio, est propositio multum evidens, licet falsum in tantum, ut ipsa sit vel ex ea inferi possit discursu imperceptibili ibi existere circulum."

The Complexe Significabile as the Object of Knowledge

Thus, Wodeham is led to reject Ockham's acceptance of the mental proposition as the adequate object of the "adjudicative act" of evident assent. The major alternative facing Wodeham had been offered by Chatton, and in rejecting it, too, the most junior of the three Franciscans arrived at a notion known to modern scholars as the *complexe significabile*. Wodeham's solution to the question of the object of knowledge and belief, this notion is also his simultaneous answer to the two further problems of establishing the bearer of truth and falsity, and what a mental proposition signifies.⁹³ The shorthand term *complexe significabile* (or "complexly signifiable") comes from the last of these, for as Wodeham argues, what is referred to by such a *complexum* or mental proposition, is "only complexly signifiable."⁹⁴

To establish this result, Wodeham first distills Chatton's lengthy discussion into arguments supporting the claim that the extramental thing signified by the terms of a mental proposition is the object of scientific knowledge and of this act of "assent."⁹⁵ Wodeham took most of these reasons to play at best a supporting role for the sixth, which, in his eyes (as in those of several contemporaries), made the crucial point:

Assent to a [mental] proposition presupposes assent to the thing itself signified by the proposition, because first [one] assents that 'thus it is in reality as is denoted by the proposition' rather than that the proposition is true. Hence the assent caused by means of a proposition which signifies some

⁹³ For the connection of these three questions I am indebted to E.J. Ashworth, "Theories of the Proposition: Some Early Sixteenth Century Discussions," *FrSt* 38 (1978), p. 85. That Wodeham, rather than Gregory of Rimini, originated the notion was the discovery of Gedeon Gál, "Adam of Wodeham's Question," which contains an edition of *Lect. sec.* d.1, q.1; see also Nuchelmans, "Wodeham on Meaning."

⁹⁴ This seems to me a more idiomatic translation into English of Wodeham's "complexe significabile" than such locutions as "complexly significables" in, e.g., P. Spade, trans. *Peter of Ailly: Concepts and Insolubles*, (Dordrecht: 1980) p. 10. That this is the genesis of Wodeham's terminology is suggested by a related discussion in his *I Ord.*, d.1, q.12 (Paris, Mazarine 915, fol. 56ra): "Nam quod aliquid sit cognitio complexa alicuius, puta A, vel quod aliquid, puta A, cognoscatur complexe per illam cognitionem—que duo habeo pro eodem—potest tripliciter intellegi. <Primo> quod A sit obiectum totale illius notitie complexe, et iste sensus est negandus; vel <secundo> quia A cognoscatur de aliquo complexe; vel <tertio> quod aliquid cognoscatur complexe de A. <Secundo> modo et tertio potest concedi quod aliqua propositio sit cognitio complexa ..."

⁹⁵ Wodeham, *Lect. sec.* d.1, q.1 [ed. Gál: p. 73 para. 7–p. 76 para. 17]: "De primo posset rationabiliter videri alicui quod res extra sit obiectum actus sciendi et causet assensus causabiles immediate per propositionem significantem rem extra, sive ille assensus sit actus sciendi sive intelligendi sive opinandi sive credendi." These arguments either rearrange Chatton's considerably or, more probably, show the order of Chatton's *Reportatio* which has been replaced by the current *Lectura* prol., q.1 [ed. Reina: pp. 48–74, 290–314].

thing, does not have that proposition as an object but [instead] the thing signified by means of [the proposition].⁹⁶

Furthermore, as Wodeham notes, Chatton had confirmed this by considering scientific demonstration. The conclusion of a demonstration, Chatton had stressed, is formally related to the premises such that assent to the conclusion presupposes assent to the thing signified by the mental proposition (*complexum*).⁹⁷ This confirming argument was evidently one of several which opened for Wodeham the issue of precisely *which* mental propositions could be claimed as the object of scientific knowledge, and persuaded him that not merely those which functioned as the conclusion of a demonstration, but also the premises are parts of that total object.⁹⁸ The first claim, too, that we assent "that things are in reality as they are denoted to be by the proposition" before we assent to the truth of the proposition itself, was for Wodeham a trenchant criticism of Ockham's view, that the object of assent was the mental proposition itself. It is one of three arguments that Wodeham advances against the Venerable Inceptor for, as Wodeham says,

Experience teaches that assent frequently falls upon it being thus on the part of the thing; for example, I assent that you are sitting there, and the assent almost is not carried to the proposition, but [is carried] most strongly and directly to 'thus it is in reality.'⁹⁹

⁹⁶ Ibid. [ed. Gál: p. 75 para. 14]: "Sexto sic: assensus propositioni praesupponit assensum ipsi rei significatae per propositionem, quia prius assentitur sic esse in re sicut denotatur per propositionem quam quod propositio sit vera. Igitur assensus causatus per propositionem quae significat rem aliquam, non habet propositionem illam pro obiecto sed rem significatam per eam." See above, chapter VII, at n. 86.

⁹⁷ Ibid. [ed. Gál: p. 75]: "Confirmatur, quia scientia de actibus animae, ut logica, praesupponit ordine naturae scientiam de rebus significatis, quia non acquiritur scientia de natura demonstrationis sine experientia demonstrationis. Sed experiendo demonstrationem et formando eam causatur assensus et actus sciendi natus causari per eam. Et per consequens scientia et assensus respectu complexi in mente praesupponit assensum rei significatae per complexum illud. Item, non apparet qualiter praemissae demonstrationis causarent actum assentiendi conclusioni, quia non plus significant vel repraesentant quam e converso. Sed non causant cognitionem nisi respectu istius quod repraesentatur per eas vel respectu ipsarum. Igitur actus sciendi quem causant est respectu rei significatae et non respectu conclusionis;" cf. also *ibid.*, p. 74, para. 8–9.

⁹⁸ Below, at nn. 111–112.

⁹⁹ Wodeham [ed. Gál: p. 78 para. 26–28]: "Ad istum articulum: primo, non videtur mihi quod complexum sit obiectum totale actus sciendi ... Item, experientia <<docet>> quod frequenter assensus cadit supra *sic esse a parte rei*, puta assentio quod vos sedetis ibi, et quasi non fertur super complexum sed potissime <et> directe ad *sic esse in re*. Item, nec assensus est solum ipsa propositio, sicut probatum erat questione precedenti—etsi esset, habetur propositum, quia propositio non est distincta apprehensio sui ipsius ... Igitur est apprehensio vel istorum quae apprehenduntur apprehensionibus praevis, ut ibi tenui, vel istorum et simul complexi. Et ita non est praecise respectu complexi." It is significant that Wodeham does not note that Ockham has conceded this point in his IV *Quodl.*, q.16

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Why, therefore, did Wodeham not accept Chatton's view, that the object of assent and scientific knowledge was the thing itself? Chatton had suggested that just as the species (or mental intention) is an entity by means of which the object from which it is generated is known, so the mental complex created by joining together those intentions was a means by which the same thing is known, such that the complex "man is white" signifies the man referred to by the subject term.¹⁰⁰ Now this term, "man," according to Chatton, Wodeham, and Ockham, is a first intention, and when Wodeham treats Lombard's twenty-third distinction, he notes that Chatton holds that "a first intention is that which signifies a thing to be such as it is in being."¹⁰¹ To this Wodeham responds that:

Although this approaches the truth, it is false, because nouns do not signify a thing to be such as it is nor such as it is not ... for so to signify is [proper] only to a proposition, and not to any simple noun.¹⁰²

The reason for this is that the term "to be," which is an awareness (*nota*) of composition, signifies something, inasmuch as a proposition consists not only of subject and predicate terms.¹⁰³ Thus, Wodeham insists,

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[OTh IX: pp. 376–77], where he distinguishes between two kinds of assent; see also above, chapter V, n. 13.

¹⁰⁰ See above, chapter VII, at n. 88.

¹⁰¹ Wodeham, *Lect. sec.* d.23 [ed. Tachau, "Wodeham on Intentions:" p. 40 para. 14]: "*Contra Chatton.* Iuxta istam viam est una alia cuiusdam moderni fere eadem isti," i.e. Ockham, "sed in illo modico quo discordat evidenter falsa: 'difficile,' secundum eum, 'est assignare bonam differentiam. Dico tamen,' inquit, 'quod intentio prima est illa, que significat rem esse talem, qualis est in essendo; secunda que significat rem esse signum alterius rei,' vel unius vel plurium."

¹⁰² Ibid. [ed. Tachau, "Wodeham on Intentions:" p. 41 para. 15]: "Istud dictum, licet appropinquat veritati, falsum est, tum quia nomina non significant rem esse talem qualis est nec qualis non est, nec esse signum nec non esse signum; sic enim significare est solius propositionis et non nominis alicuius simplicis ..."

¹⁰³ Ibid. [ed. Tachau, "Wodeham on Intentions:" p. 41 para. 16]: "Unde, secundum Philosophum, I *Perihermenias*, capitulo de oratione, 'aliquid,' inquit, 'partium orationis significativum est separatum, ut dictio [tamen] non ut affirmatio; dico autem ut 'homo' significat [aliquid] sed non quoniam est vel non est; sed erit affirmatio vel negatio, si aliquid addatur.' Hec ille." What is added is the "nota compositionis" as, e.g., *Lect. sec.* d.1, q.1 [ed. Gál: p. 90, para. 63]; this is explained most fully in the preceding question, *Lect. sec.* prol., q.6 (Gonville & Caius, fol. 123vb): "Aliter posset responderi iuxta doctrinam quam scribit Hokham ... pro quo sciendum quod quando intellectus format propositionem, componit aliquid cum aliquo—non aliquid unum per se constituendo, quia unum sibiipsi vel alteri mediante nota compositionis importata per hoc verbum 'est,' quod verbum mentalis est quidam conceptus comparativus eiusdem ad seipsum vel ad alterum comparando, et hoc vel affirmative ... vel negative apposito conceptu negationis ... Sed hoc potest quadrupliciter intellegi. Uno modo intellectus componat rem ipsam quam per subiectum formaliter intellegit sibiipsi vel alteri quam per predicatum formaliter intellegit seu apprehendit. Componat, inquam, primo modo predicto per *notam copule* que comparet ..." See also I *Ord.* d.1, q. 12 (Mazarine, fol. 56va R): "(*Marg:* Quod nulla cognitio intuitiva nec abstractiva significat formaliter sic esse vel sic non esse, nisi sit pro-

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Whether [the copula] signifies inherence or composition on the part of the thing [i. e. in reality], or unity and identity between the extremes—or what is signified by the extremes—of a proposition, always the result is that a proposition signifies something or somethings that is not signified by the subject or by the predicate.¹⁰⁴

Because of the inherently different significates of the terms of a proposition and of the proposition itself, then, Chatton's answer cannot be sufficient. Faced with Ockham's alternative, can Chatton's critique be defeated? One might argue on Ockham's behalf that in the case of evident propositions, that "thus it is in reality" (*sic esse in re*), is entailed by their construction from terms known intuitively. In other words, because the sufficient mediate or immediate cause of these evident propositions is the intuitive cognition of the things signified by their terms; and because intuitive cognition is "that cognition by means of which is known that a thing exists when it exists, and does not exist when it does not;" and because the awareness of existence *can* be taken as the import of the copula, which Wodeham thinks makes a proposition signify other than as the terms signify; it might seem that Ockham's evident proposition would suffice as the object of assent, dissent, or scientific knowledge.¹⁰⁵ If so, Wodeham's notion of "what is complexly signifiable" would be either redundant or reducible to Ockham's solution.

Wodeham's analysis of Ockham's response to Aureol allows us to understand why this is not the case, for Wodeham is worried by Ockham's insistence that the experiences adduced by Aureol result in apprehensions equivalent in the effects they produce to those that would be obtained if reality actually were as perceived to be. Wodeham recognizes that without any introspective means of distinguishing erroneous and veridical apprehensions, such sensory illusions would ineluctably result in intellectual errors. Ockham's decision that such errors as these experiences produce are indeed intellectual merely confirm the worry.¹⁰⁶ Categorizing these errors instead as residing in the interior senses, and not yet at the level of

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positio, licet bene virtualiter.) Nam secundum Philosophum in *Perihermenias*, 'esse' significat quamdam compositionem; et alibi etiam hoc probavi diffuse." This may be a reference back to the questions of the *Lectura secunda* under discussion here.

¹⁰⁴ *I Lect. sec. d.1, q.1* [ed. Gál: p. 77 para. 23]: "Item, aut ly 'esse,' quod est nota compositionis, aliquid significat aut nihil. Si nihil significat nec consignificat, frustra ponitur in oratione. Si aliquid, et non magis unum quam aliud, quia indifferenter repraesentat quidlibet entium, et quodlibet potest copulari cum quolibet. Et sive significat inhaerentiam sive compositionem a parte rei, sive unitatem et identitatem inter extrema vel significata per extrema propositionis, semper habebitur quod propositio significat aliquid vel aliqua quod non significatur per subiectum vel praedicatum."

¹⁰⁵ See above, chapter V, at nn. 63–70.

¹⁰⁶ Above, at n. 75.

intellectual errors, Wodeham suggests that in order to assent to a proposition, one is ruled by other experiences or arguments that reality is or is not as it appears to be.¹⁰⁷

Wodeham's response tacitly assumes that, while sense experience is—as earlier maintained—the basis for evident assent, no single simple apprehension suffices for such assent. What he implies in discussing Ockham's critique of Aureol, Wodeham argues for explicitly in his examination of the *complexe significabile* and, in a set of arguments that Rimini would later adopt verbatim, Wodeham uses again the example of the stick partially submerged in water which appears bent. This shows, Wodeham concludes, that contrary to Ockham, "intuitive cognition of a thing does *not* cause assent to a contingent proposition immediately."¹⁰⁸ That is, we must go through a discursive process of collating the experiences of our several external and internal senses first.

Part, then, of what makes the object of scientific knowledge, or assent, what is expressible (*enuntiabile*)¹⁰⁹ but only complexly signifiable is that, contrary to Chatton, the signification of a mental proposition is not identical to the signification of its subject term. And, against Ockham, the object of assent is not the proposition itself; instead, as Wodeham says:

The immediate object of the act of assent is the total object of the complex necessitating assent (speaking of simply evident assent). Or, generally speaking, its object is the total object or significate immediately conforming to the total proposition, concausing the proposition and necessarily presupposed by the proposition ... [Further] the significate of the proposition is that it is or is not as the proposition denotes.¹¹⁰

¹⁰⁷ Above, n. 91.

¹⁰⁸ Ibid., prol., q.6 (Gonville & Caius, fol. 128ra): "Sed istud non apparet mihi evidens, quia non minus unsum iudicium esset talis propositio quam aliud, sed aliquod iudicium non est talis propositio sicut patet de iudicio quo iudicatur baculus esse fractus cuius pars est in aqua; aliter aliquis—ut alias probavi—simul assentiret et dissentiret sic esse. Probatio consequentie, quia eadem propositio numero vel eiusdem rationis potest manere in assentiente sic esse prius, post experientiam quam certificatus est per demonstrationem vel <experientia> aliunde quod non sic sit, et non sicut ut prius ita nec modo potest sibi non videri ita esse, licet certus sit quod non ita sit <sicut> prius assumpsit et modo non ..." The point for which this argument is adduced is stated on f. 123va: (*Marg.* Secundus articulus: contra Ockham per idem Chatton questione 1 prologi) ... sciendum quod illa opinio <Ockham> multipliciter impugnatur. Primo enim probatur contra eum dupliciter quod notitia intuitiva de re non causat assensum complexo contingententi immediate sicut ille <Ockham> videtur sentire. Quid autem ego circa hoc sentiam patebit proxima questione sequenti." For Rimini's quotation of Wodeham, see below, chapter XII, at nn. 38–42.

¹⁰⁹ Wodeham, III *Ord.* q.2 (Mazarine, fol. 176ra): "... nullum verum enuntiabile, i.e. complexe significabile—cuius sunt scibilia—est verum veritate intrinseca, sed veritate aliena extrinseca a qua vera sunt et vera dici possunt pro eo quod significantur in eo quod talia signo vero creato vel increato vel utroque."

¹¹⁰ *Lect. sec.* d.1, q.1 [ed. Gál: p. 86 para. 49]: "Sexta conclusio est quod immediatum

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Thus, a proposition signifies a state of affairs; and because this significate of a proposition "concauses" the proposition, and is necessarily presupposed by the proposition, when that proposition functions as a premise, its significate becomes part of the total significate of the demonstration, but is not absorbed into the total significate of the conclusion.¹¹¹ This is because, just as the significate of a proposition is not identical to the significate of its terms, so the significate of a demonstration is not identical to the significate of its premises.

Thus, the "expressible" construct that is only complexly signifiable is for Wodeham not merely an Abelardian *dictum* of a proposition; at the least it is the *dictum* of both premises and conclusion.¹¹² Moreover, both the considerations that motivate the hypothesis of the *complexe significabile*, and the extent to which, without adopting Chatton's views, Wodeham accepts the point of his critique of the Venerable Inceptor, preclude our understanding Wodeham's innovation as reducible to Ockham's position, especially where the bearer of truth and falsity is concerned. The doctrine should be seen, rather, as the *via media* between Chatton and Ockham that it appears *prima facie* to be, one perhaps slightly on Chatton's side of the path.¹¹³

Wodeham's treatment of Aureol's "experiences" is intrinsically interesting on at least two counts. On the one hand, it is the root of Wode-

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obiectum actus assentiendi est obiectum totale complexi necessitantis ad assensum, loquendo de assensu simpliciter evidenti. Vel generaliter loquendo, eius obiectum immediatum totale est obiectum totale seu significatum totale propositionis immediate sibi conformis, concausantis illum et necessario sibi praesuppositae, vel obiecta totalia multarum propositionum talium;" p. 87: "Ad primum istorum <dubiorum> dicendum quod obiectum totale propositionis est eius significatum; eius autem significatum est sic esse vel sic non esse sicut per propositionem denotatur."

¹¹¹ Ibid. [ed. Gál: pp. 93-94, para. 80-83; pp. 99-100, para. 104-08]. Wodeham begins the next question (d.1, q.2) thus (Gonville & Caius, fol. 132rb): "Habitio ex precedenti questione quod scientia realis causata per apprehensiones tantum rectas habet pro obiecto 'sic esse a parte rei' et non complexum, nec tantum 'sic esse sicut significatur per conclusionem,' sed etiam 'sicut significatur per premissas,' dummodo sit scientia evidens evidenti intrinseca, iam restat descendere in speciali ad notitiam theologicam" Wodeham's acceptance of a state of affairs as the significate and partial cause of a true proposition probably owes something to Aureol's insistence on a *compositio in re* as the significate of a true proposition (chapter IV, n. 58).

¹¹² Although it thus seems to me that Nuchelmans' inclusion of the *complexe significabile* within the heritage of Abelard requires qualification, I have been alerted to the significance of references to *enuntiabilia* by Nuchelmans, "Wodeham on Meaning," and idem, "The Semantics of Propositions," in CHLMP, pp. 201-04.

¹¹³ As Gál first suggested in the introductory remarks (pp. 67-68) to his edition of *Lect. sec. d.1, q.1*. Wodeham's debt to Chatton's position is evident again when, in the subsequent question (d.1, q.2), Wodeham reiterates that, "omnis scientia proprie dicta realis est de rebus vel quod sic sit a parte rei vel non sit, et non de complexis, ex precedenti questione."

ham's formulation of the epistemological notion of the *complexe significabile*. And, on the other, it yields the recognition, upon which Copernicus would eventually build, that the relativity of motion affects the determination of whether the motion of the earth accounts for the facts of astronomy. Modern historians have generally credited the mid-fourteenth century Parisian scholars Buridan and Oresme with having developed this analogy, and have speculated concerning the implicit epistemological attitudes behind their discussions. Hence, it is significant that Wodeham's correlation of the experience of a passenger in a boat to man's perception of the heavens from the earth occurs in the context of inquiring into the foundations and object of natural scientific knowledge.¹¹⁴ Moreover, it is worth noting that Wodeham's *Lectura secunda* was available to Parisian theologians in time for Oresme, if not also Buridan, to have known it.¹¹⁵

Perhaps Parisian scholars were only encouraged by a reading of Wodeham to attach renewed significance to an insight already available to them in perspectivist treatises; even so, this was merely one of many issues on which he had become an authority comparable to his sources in the eyes of fourteenth-century readers. To be sure, they recognized his debt to such predecessors as Scotus, Aureol, and Chatton—a list to which we should add Campsall and Ockham. Still, they also saw that while he treated his sources' opinions as *cynosures* from which to chart his own way, he followed none of their accounts completely.¹¹⁶ His consideration

¹¹⁴ See, for example, Edward Grant, "Late Medieval Thought, Copernicus, and the Scientific Revolution," *Journal of the History of Ideas* 23 (1962), pp. 197–220, esp. pp. 209–12; more recently, idem, "The Condemnation of 1277, God's Absolute Power, and Physical Thought in the Late Middle Ages," *Viator* 10 (1979), pp. 211–44. It is worth noting that Wodeham is not even remotely interested in God's absolute power here, so he thus provides a bona fide example of (as he believes) false scientific belief.

¹¹⁵ For the availability of Wodeham's discussion to Parisian scholars in the 1340s, when Oresme began to study theology, see below, chapter XII, particularly at n. 63.

Oresme's discussion of the possible rotation of the earth, in his *II Livre du ciel et du monde*, c. 25 (ed. Albert D. Menut and Alexander J. Denomy [Madison, Wisconsin: 1968], p. 522), combines both the point made by Wodeham (above n. 88) with the citation to Witelo: "Item, je suppose que mouvement locale ne> peut estre sensiblement appareu fors en tant comme l'en apparcoit un corps soy avoir autrement ou resgart d'autre corps ... Et il appert ou quart livre de *La Perspective* de Witelo que l'en ne apparcoit mouvement fors telement comme l'en apparcoit .i. corps soy avoir autrement ou resgart d'un autre ... Et nous sambleroit continuelment que la partie <<du monde>> ou nous sommes reposat et que l'autre fust toujours meue, aussi comme il semble a un homme qui est en une naif meue que les arbres dehors son meuz (Italics mine)."

Oresme's words here constitute an addition to the arguments he takes over directly from Buridan, who does not refer here either to Witelo or to the example of one who aboard ship observes the shore. For Buridan, see his commentary on *II De celo et mundo*, q.22, trans. by Marshall Clagett in E. Grant, ed. *A Source Book in Medieval Science* (Cambridge, Mass.: 1974), pp. 500–01 (the passage quoted from Oresme is on pp. 504–05).

¹¹⁶ This is especially evident from Rimini's and Ceffons' use of Wodeham's arguments, for which see below, chapter XII.

of their motivations and commitments inclined him to accept from thinkers he valued what he found insightful, without any compulsion to defend positions he thought ill-considered. In particular, his discussion of cognition in no wise marks him a "slavish" Ockhamist in the manner modern readers have sometimes assumed of him as Ockham's own student and confrère.¹¹⁷ On the contrary, as Wodeham's medieval readers recognized, he accepted little from Ockham in the realm of epistemology and psychology.

Oxford after Wodeham

With Wodeham's, Holcot's, and Crathorn's reading of the *Sentences* at the outset of the 1330s, the major elements of Oxford's late medieval epistemological theory had been articulated, primarily by those who did not accept Ockham's account of knowledge. A study of the commentaries produced by the theologians who taught at Oxford in the interval between Wodeham and Wyclif would doubtless allow us to see with greater clarity whether the Venerable Inceptor gained adherents to his views on cognition in that time.¹¹⁸ It is unlikely that he gained many. At least as late as the mid-1340s, Oxford scholars inherited a range of alternative theories. Hence, even if they did not deflect their attention to other issues as completely as might appear from the often incomplete commentaries many left behind, there is no reason to suppose that Ockham's views gained greater conviction for later readers. In fact, there are indications that his positions did not.

Thus, in the mid-1330s, Ockham's confrère Robert of Halifax returned more nearly to Scotus's views on cognition than had any Oxford scholar of the 1320s whose work survives. Where the details of his account of light and vision were concerned, Halifax drew not only on the perspectivist tradition proper but on such sources for it as Grosseteste.¹¹⁹ If Halifax's

¹¹⁷ This has been the general assessment of such scholars as Ehrle, Michalski, and Gilson, whose views underlie more recent treatments, such as those of Vasoli and Leff; for a lucid historiographic summary, see Grassi, "Conoscenza di Dio," pp. 43–52.

¹¹⁸ In the decades since Robson's *Wyclif and the Oxford Schools* (Cambridge: 1961), relatively few studies have been dedicated to Oxford scholars whose œuvre can be dated to the 1340s–1350s. Among recent studies, we may include Leonard Kennedy, "Philosophical Scepticism in England in the Mid-Fourteenth Century," *Vivarium* 21 (1983), 35–57; and the valuable article by Heather Phillips, "John Wyclif and the Optics of the Eucharist," in *From Ockham to Wyclif*, pp. 245–58, who substantiates the continuity of Oxford scholars' reliance on perspectivist optics.

¹¹⁹ Halifax's lectures on the *Sentences* should evidently be dated to the second half of the 1330s, according to W.J. Courtenay, "Some Notes on Robert of Halifax, O.F.M.," *FrSt* 33 (1973), 135–42. For Halifax's account of knowledge, see Tachau, "The Problem of the *Species in medio* in the Generation After Ockham," *MedSt* 44 (1982), 432–36. Halifax's

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contemporary and fellow Franciscan, Roger Rosetus, ever considered cognition and scientific knowledge as directly as had most scholars until the early 1330s, that discussion does not survive. What does remain of his lectures on the *Sentences* reveals that he, too, accepted the perspectivist account of vision at least in part.¹²⁰ Such influential secular scholars as Richard Kilvington, Thomas Bradwardine, and John Dumbleton all relied on the multiplication of species explicitly enough to allow us to classify them, along with such obscure theologians as the Benedictines Walter of Odington and John of Stukle, among those whom Ockham's attack on species failed to persuade.¹²¹ In the 1340s, they were joined by the Carmelites John Titlesdale and Osbert Pickenham and by the secular Nicholas Aston, all of whom relied on species to explain cognitive phenomena.¹²² While scholars may have continued to differ on the nature of species—that is, on whether they had intentional or more fully corporeal existence—we have no grounds for supposing that those who referred to such entities had abandoned the physical and metaphysical

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citations of Grosseteste include reference (in Paris B.N. lat. 15880, f. 76vb) to his *De lineis, angulis, et figuris*, a work crucial to the development of Roger Bacon's understanding of the multiplication of species; cf. above, chapter I, n. 13.

¹²⁰ Rosetus' *Sentences* commentary was composed before 1337, when a copy of it was made in Norwich; see Courtenay, "Nicholas of Assisi and Vatican Ms. Chigi B V 66," *Scriptorium* 36 (1982), 260–63. For Rosetus' views, see Tachau, "The Problem," pp. 436–39.

¹²¹ For Richard Kilvington, whose *Sentences* commentary was composed within a year or two of Wodeham's, cf. I *Sent.* q.3 (Vatican Vat. lat. 4353, p.36) where he refers to "multiplicatio speciei sensus ad memoriam, sicut in visu ad (!) obiectum." Bradwardine accepts species throughout his discussion of cognition in the *De causa Dei*, as in his *Propositiones de perspectiva* (preserved in Vatican Vat. lat. 3102, fols. 110v–111v). Walter of Odington's *Tractatus de multiplicatione specierum in visu* (Cambridge, Univ. library li.1.13, fols. 44[35]v–51[42]r) was composed ca. 1330. John of Stukle opines that "nullus intellectus creatus potest aliquid intelligere sine actu distincto a specie in memoria, vel [a] supplente speciem," in I *Sent.* q.1, a.2 (Troyes, Bibl. mun. 505, f. 103ra). On Stukle, see Courtenay, "The 'Sentences'-Commentary of Stukle: A New Source for Oxford Theology in the Fourteenth Century," *Traditio* 34 (1978), 435–38. John Dumbleton relies on perspectivist theory in his *Summa logicae et philosophiae*, part V, which he introduces as follows (Oxford, Merton College 306, fol. 58ra): "completa declaratione de actione reali inter formas et qualitates sensibiles, consequenter de actione spirituali inquiramus . . . Primo de forma lucis per quam nobis maxime apparet actio spiritualis determinemus." This evokes a similar justification for the study of light by Roger Bacon, for which see Lindberg, *John Peckham*, p. 19.

¹²² As is clear from the texts quoted in Kennedy, "Philosophical Scepticism in England." In addition, Osbertus Pickingham inquired, I *Sent.*, q.2, a.1 (Erfurt, Wiss. Bibl. C.A. 2.132, fol. 12vb–13ra): "utrum ad omnem actum intelligendi viatoris requiritur aliqua species." Pickingham's commentary must have been completed before 1348, when Tomaso Neri, prior of the Florentine Carmelites, died, for he left his copy to that convent, according to K.W. Humphreys, *The Library of the Carmelites of Florence at the End of the Fourteenth Century* (Amsterdam, 1964), p. 27.

explanations of which species were a part from at least the time of Roger Bacon.¹²³

At present, the commentaries produced in the decades that separated Holcot, Crathorn, and Wodeham from Wyclif remain too little studied to warrant much more than hypotheses concerning the degree to which the debates of the 1320s had established any common understanding of intuitive and abstractive cognition. If they did so, it was not Ockham's; more probably, consensus was slow in coming. At any rate, issues debated early in the century, which had not reached completely satisfactory resolution by the time of Wodeham, clearly persisted for several decades. Thus, for example, Oxford scholars remained divided as to whether, for existential certitude, not only a sensitive but also an intellectual intuition was required, or whether representative images could be sufficiently distinguished from the objects they represented to avoid existential error.¹²⁴ As historians begin to investigate more thoroughly the epistemological views of scholars who taught in Oxford's theological faculty during the twenty-five years before Wyclif became a student there, it will be worth observing whether Wodeham loomed as large in their eyes as he assuredly did at Paris in the same period. That Wodeham became a major source for Parisian discussions of cognition is not a matter of mere conjecture, but to appreciate how this came to be, it is necessary to understand the evolution of epistemological theory at Paris in the years after Peter Aureol lectured at the Franciscan convent there. This is the story to which it is now time to return.

¹²³ Discussions of light produced by contributors to the "Calculatory tradition," once associated primarily with Merton College, have been made accessible to scholars particularly through the articles of Edith Sylla, beginning with "Medieval Quantifications of Qualities: The 'Merton School'" *Archive for History of the Exact Sciences* 8 (1971), pp. 9–39. There she indicated (p. 13) that "notions of action and alteration ... were highly influenced by the results that had been provided by the relatively independent science of optics. This does not mean that the so-called 'light-metaphysics' was necessarily widely believed by medieval theorists. Instead, the situation seems to have been simply that when considering the relatively unknown process of alteration in general theorists adopted as models the better known descriptions of geometrical optics." When Sylla wrote, the standard historical account focused on the successful removal of neoplatonic light metaphysics from epistemology after Scotus and Ockham; on the evidence of the present study, however, for the Calculators to have retained such a metaphysical foundation would have been neither incompatible with their physics nor unusual.

¹²⁴ That scholars raised these issues is not, of course, sufficient to demonstrate that they were skeptics; it indicates rather that the solutions advanced earlier in the century were still not without their difficulties. As is evident from what I have written, I disagree with Leonard Kennedy's interpretation in "Philosophical Skepticism in England," which requires that one not distinguish correctly between arguments raised and their resolution. The reader who approaches these texts with caution will nevertheless benefit from the texts he quotes as I have.

**PART FOUR—
THE INTRODUCTION OF ENGLISH THEORIES OF KNOWLEDGE TO PARIS**

**Chapter Eleven—
Paris 1318–1345:
The Interpreters of Scotus and Aureol**

A modern student of late medieval thought might readily infer from the general scholarly disinterest in the few Parisian *Sentences* commentaries intermittently extant from the decades of the 1320s–1330s, that theological inquiry at Paris slipped after Peter Aureol's lectures into a valley from which it emerged only in the 1340s.¹ Overshadowed by the intense revolution in theology, logic, and natural philosophy at Oxford during the same academic generations, Parisian scholars were enabled to reestablish their claim to intellectual hegemony only by the assimilation of that innovative legacy. So, at least, the most recent research into fourteenth-century thought allows us to assume.² Regardless of whether such a picture of Paris in the second quarter of the century is accurate in outline, one result is to deny Aureol the focal position that he ought to occupy. In particular, his influence upon epistemological discussions at Paris in the twenty-five years that separate his lectures on the *Sentences* commentary from those of Mirecourt has remained *terra incognita*. We have had, to be sure, little reason to suspect that Aureol's views played any crucial role in the accounts of knowledge of this (or any other) period, if only because scholars who have turned to his commentaries have usually read them through the lens of Ockham's and Chatton's misleading critiques.³

¹ In addition to studies of individual theologians listed in the notes below, important recent discussions include: Simo Knuuttila and Anja I. Lehtinen, "Change and Contradiction: a Fourteenth Century Controversy," *Synthese* 40 (1979), 189–207; P. Spade, "Quasi-Aristotelianism," in *Infinity and Continuity*, pp. 297–307; Cova, "Meyronnes e Catton;" and, most recently, Stephen D. Dumont, "Being and Difference: Footnotes to Plato in the Fourteenth Century," paper presented to the Medieval Academy of America meeting (April, 1987). In addition, several studies of John Murdoch touch on the views of Gerard Odonis, O.F.M. and Nicolas Bonetus, as, e.g. his "Superposition, Congruence and Continuity in the Middle Ages," in *Mélanges Alexandre Koyré* I (Paris: 1964), pp. 416–41; idem, "Mathesis in philosophiam scholasticam introducta: the Rise and Development of the Application of Mathematics in Fourteenth-Century Philosophy and Theology," in *Arts libéraux et philosophie au moyen âge* (Montreal-Paris: 1969), pp. 215–54.

² See, e.g., W.J. Courtenay, "The Role of English Thought in the Transformation of University Education in the Late Middle Ages," in J.M. Kittelson and P.J. Transue, eds., *Rebirth, Reform and Resilience, Universities in Transition 1300–1700* (Columbus, Ohio: 1984), pp. 103–62, esp. pp. 115–21.

³ See the otherwise illuminating examinations in Adams, "Unreal Entities;" Cova, "Meyronnes e Catton;" Kelley, "Walter Chatton vs. Aureoli;" and Wood, "Wodeham on Sensory." The possibility of Aureol's influence was first suggested to me by parallels

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The tendency to appreciate Aureol's account of knowledge as at most a stepping-stone between Scotus and Ockham has also rested upon the (often unstated) assumption that each of these three scholars acquired audiences on both sides of the English Channel as soon as their lectures on the *Sentences* were presented to students and colleagues at their own *studia*. On such a basis, it has seemed obvious that, by 1324 at the latest, Ockham's account of knowledge had begun to dominate Parisian discussions as it did in the English lecture halls.⁴ Available evidence, however, does not support this belief. On the continent, although Aureol had already begun to develop his views at Toulouse and Bologna during the years 1312–16, his theory of knowledge only began to be familiar to his Parisian audience in the same years that Ockham, in England, was delivering the lectures preserved as his *Reportatio*. Scholars at Oxford and London evidently became acquainted in their turn with Aureol's views only after his *Scriptum* was written and published, and then only gradually. As a result Ockham's own positive views on cognition were established before he encountered his French confrère's thought; thus, their discussions of intuitive and abstractive cognition were independent and roughly simultaneous in origin.⁵ When Ockham's explanation of cognition became available to scholars in France has not hitherto been subject to investigation.⁶

The reception of Aureol's thought at Oxford was, as we have seen, affected by the more important echoes of perspectivist treatises resonant in his understanding of intuition, of "appearances" and his discussion of errant perception: all aspects of Alhazen's perspectivist theory with which Aureol's Oxford readers, at least, were evidently unfamiliar, to judge

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in the thought of John de Ripa (teaching at Paris in the 1350s) as revealed in Paul Vignaux, "La connaissance comme *apparentia* dans les *prologi quaestiones* de Jean de Ripa," *Studi internazionali di filosofia* 7 (1976), 39–56.

⁴ This is a particularly persistent notion in much of the literature on Buridan (the chronology of whose works is, however, not yet secure) despite the challenges to the assumption that Ockham's theory of knowledge was known to Buridan, raised by T.K. Scott, "Nicholas of Autrecourt, Buridan, and Ockhamism," *J. Hist. Phil.* 9(1971), p. 35 and Jan Pinborg, "The *Summulae*, Tractatus I De Introductionibus," in idem, ed. *The Logic of John Buridan. Acts of the Third European Symposium on Medieval Logic and Semantics* (Copenhagen: 1976), pp. 75–81.

⁵ See above, chapter IV, n. 11; chapter V, nn. 3–5; chapter VI, n. 58; chapter VIII, nn. 9–16.

⁶ The following survey of scholars who wrote in the interval between Aureol and Bernard of Arezzo is intended to sketch developments rather than to be completely exhaustive; moreover, I have not always been able to follow the practice employed for earlier chapters, of relying on manuscripts which I could establish conveyed the text accurately. Instead, the choice of manuscripts below often has been determined merely by having had the opportunity to consult them, and readings are therefore more provisional than they would otherwise be.

from their misconstruction of Aureol's views. Perspectivist theory had, after all, deeper roots in the Parisian academic community than in Oxford, and from the late thirteenth century onwards the commentaries of Parisian-trained scholars (including Aureol) evinced greater interest in perspectivist theory than did those of Oxford theologians.⁷ This divergence in training helps to explain the differences between Parisian and Oxford appreciation of Aureol's account of cognition.

If Parisian scholars ultimately came to understand Aureol's account more nearly than did their colleagues across the Channel, they did not do so immediately. As in England, his notion of intuition was initially unclear to audiences on the continent who took Scotus's discussion of intuition as their starting point. Two aspects that defined their response were: first, Aureol's understanding of intuition not as a mode of cognition providing existential certitude, but instead merely as visual or "optical" perception (to distinguish it from apperceptual acts); second, his focus on accounting for the creation of intramental objects of thought that represent extramental objects by virtue of *appearing* like those objects.

For commentators on the *Sentences* who knew Aureol's lectures, these two views, along with his experiential evidence, constituted from the outset the hallmark of his account, which they increasingly treated under the rubric "whether intuitive cognitions can occur naturally without an [extramental] object." Two of the earliest discussions were those of his fellow Franciscans, Landulphus Caracciolo and Francis Meyronnes, whose commentaries were delivered in Paris, probably before 1322.⁸ Within a year or two of Meyronnes, a third Franciscan, Aufredo Gonteri Brito, lectured on the *Sentences* at Barcelona as preparation for the lectures he even-

⁷ See above, chapters I–II, and chapter IV, nn. 8–10. Among the indices of the difference in Parisian and Oxford interest (aside from the greater number and variety of references in the works of scholars trained in the former milieu) we may include the evident unfamiliarity in Oxford discussions with Alhazen's three inferential processes (above, chapter I, n. 38). Lindberg, *Vision*, p. 121 notes that the first record in any university library of Pecham's *Perspectiva communis* "indicates that it (along with Alhazen's *De aspectibus*, Bacon's *Perspectiva*, and several other optical works) was in the library of the Sorbonne before 1338."

⁸ For the dating of Landulphus' and Francis Meyronnes' commentaries to the academic year 1320–21 on the basis of the latter's disputations with Pierre Roger (later Clement VI), see Jeanne Barbet, *François de Meyronnes-Pierre Roger Disputatio (1320–1321)* (Paris: 1961).

For Landulphus, I have had access to Cambridge, Gonville and Caius College Ms. 526/326 containing his *II Sent.*; and, thanks to Stephen Dumont, to a photocopy of Vienna, Österr. Nationalbibl. 1496, fol. 1ra–2vb. I have supplemented this by later medieval authors' quotations of his views. For Meyronnes, I have relied upon *In libros Sententiarum*, Ms. Vatican, Vat. lat. 894; ed. Venice: 1504–07; and ed. Venice: 1520 (repr. Frankfurt-am-Main: 1966).

tually gave at the Franciscan *studium* in Paris in 1325.⁹ That same year the bachelor of the *Sentences* in the Augustinian hermits' *studium* was evidently Michael of Massa, whose commentary also survives.¹⁰ To these commentaries from the 1320s may be added two by anonymous authors. One of these, by a Franciscan who wrote before Meyronnes had been promoted to the magisterium, is preserved at Kraków;¹¹ the other, extant in a Vienna manuscript, was the work of an Augustinian hermit.¹² The author of what is possibly the latest commentary extant from that decade was a Dominican, Bernard the Lombard, whose term as bachelor of the *Sentences* spanned the academic year 1327–28.¹³

⁹ This biographical information can be gleaned from the Explicits in Wrocław, Bibl. Uniw. A 211 (formerly I.F.184): fol. 686va, "Explicit compilacio et ordinacio super 2um librum Sentenciarum edita per fratrem Amfredi Gonteri Britonem de ordine fratrum minorum et de provincia Turonie tunc lectorem in provincia Arragonie in conventum Barchimone in studio generali anno ab incarnatione domini mcccxxii;" fol. 306ra: "Explicit compilacio lecture primi Sentenciarum ordinata per fratrem Aufredum Gonteri Britonem, de ordine fratrum minorum, sacre theologie Baccalaureum Parisius a.d.mcccxxv." For Gonteri's discussion, see below, nn. 23–32, 34–37. On Gonteri, see León Amorós, "Anfredo Gontero, O.F.M. discípulo de Escoto y lector en el estudio general de Barcelona," *Revista Española de Teología* 1 (1940–41), 345–72.

¹⁰ See Damasus Trapp, "Notes on some Manuscripts of the Augustinian Michael de Massa (+ 1337)," *Augustinianum* 5 (1965), 58–133, e.g. pp. 70, 85–86. Trapp's attribution of Vatican, Vat. lat. 1087 to Michael of Massa does not seem to me entirely secure; hence, I have relied primarily on the fourteenth-century *Abbreuiatio* of his commentary in Oxford, Bodl. canon misc. 276; and upon an unfocused microfilm of Bologna, Università 2214. On Massa, see also Ludwig Hödl, "Studien zum nominalistischen Schöpfungsbegriff in der spätscholastischen Theologie des Michael de Massa O.E.S.A. (+ 1337)," *Cassiciacum* 30 (1975), 234–56.

¹¹ This is the commentary on book I in Kraków, Bibl. Jag. 1584, fol. 39ra–106va, which the explicit terms a "reportatio;" my grounds for attributing the commentary to a Franciscan include his references to Duns Scotus as "doctor noster Scotus" as, e.g., at fol. 42va. Probably the commentary predates Thomas' canonization in 1323, as he is referred to simply as Thomas. In q. 5, the author discusses Aureol, first paraphrasing his arguments (Kraków, fol. 42vb–43ra): "Contra duas primas condiciones notitie intuitive <scil. existentia et presentia obiecti> arguit Magister Petrus Aureoli, sic: si notitia intuitiva esset de re presente, solum sequeretur quod quando videmus baculum in aqua qui apparet fractus, non esset intuitiva, sed tamen certum est quod videmus ibi aliquid quod ibi apparet et tamen nihil existit ibi, tamen intuitive videmus. Secundo, si notitia intuitiva solum esset de re presente, sequeretur quod illusiones demonum que nobis apparent aliquando non essent intuitive, sicut aliquando videmus quod vulpes vel lepores currunt in domo, vel quod Gallina trahens trabem magnam, et tamen nihil est et tamen videmus intuitive. Tertio, si notitia intuitiva requireret existentiam rei, sequeretur quod notitia de colore in collo columbe non esset intuitiva, et tamen nullus color ibi existit, sicut apparet quando vertit collum quod nihil est ibi de colore."

¹² Wien, Dom. Kloster 160/130, fols. 1ra–24vb, written in a French hand; that the author was a member of the Augustinian hermits is established by his references to Bernardus Oliverii, O.E.S.A. as "unus doctor nostris" (fol. 18va). The manuscript also contains a treatise opposing Burley by Conrad of Megenberg, who is discussed in Courtenay and Tachau, "Ockham, Ockhamists, and the English-German Nation at Paris, 1339–1341," *History of Universities* 2 (1982), pp. 71–75.

¹³ For Bernardus Lombardi, O.P., who read at Paris 1327–28, I have relied upon Erfurt Wiss. Bibl. C.A. 4.368.

For the 1330s fewer *Sentences* commentaries have been identified, but three, at least, survive from the first half of the decade. In addition to the lectures of the Franciscan Guillaume de Brienne, who read in 1330–31, and whose commentary is extant in a sole copy, we may count the more widely disseminated ones authored by the Augustinian hermit Thomas of Strasbourg and the Franciscan Petrus de Aquila. The former probably presented his lectures on Lombard in 1333–35 and thus no more than two or three years before the latter, who wrote at mid-decade.¹⁴

The Response to Aureol

The scholars whose commentaries survive, along with several whom they quote, shared a general disposition to begin from Scotus's distinction between intuition and abstraction. However diverse in fact were the interpretations of Scotus's distinction, it had become so well established by the early 1320s that the anonymous Augustinian saw no need to argue for his own understanding. After all, he remarked, to differentiate the two modes of cognition as he did, was "sufficiently common:"

The formal reason of abstractive cognition consists in this: it bears first and *per se* upon the quiddity proper to a thing, whether [that thing] in fact exists or does not, and whether it is present or not ... abstracting from being and non-being, and from presentiality and non-presentiality ... The formal reason of intuitive cognition, however, is first and *per se* that it bears clearly upon the thing according to its present existence in being, such that, in order for the thing to fall under such a cognition, that [the thing] exist and be present is necessary.¹⁵

¹⁴ So far as I know, no modern author has studied Guillaume de Brienne's commentary, preserved in Prague, Univ. knihovna Ms. VIII.F.14, where we read on fol. 1r: "Iste reportationes sunt a fratre legente Sententias in scola Minorum Parisius anno domini 1330." On the date of Thomas of Strasbourg's (Thomas de Argentina) baccalaureate, see D. Trapp, "Augustinian Theology of the 14th Century: Notes on Editions, Marginalia, Opinions, and Book Lore," *Augustiniana* 6 (1956), 146–274. For his commentary, I have relied upon the edition of Venice, 1564. For Petrus de Aquila, who probably read the *Sentences* in 1333–35, I rely upon the incunable edition of 1480 (Speyer); and Munich, Staats-bibl. C.L.M. 8879. A cursory reading revealed no discussion of Aureol on intuition, but Petrus did know Aureol's commentary on II *Sent.*; cf. II *Sent.*, d.2 (Speyer, fol. 59rb) and d.13. Courtenay, "The Reception of Ockham's Thought at the University of Paris," in *Logique, Ontologie*, p. 46, mentions that Petrus de Aquila cites Ockham by name, but the citation (in Speyer) is a printer's error in expanding a reference to "Guillelmus" as to Ockham rather than to Alnwick. Aquila quoted the latter, as Stephen Dumont has verified on the basis of Vatican, Vat. lat. 1077 (fol. 46vb); Alnwick's text is edited in S. Dumont's forthcoming, "The Univocity of the Concept of Being in the Fourteenth Century: John Duns Scotus and William of Alnwick," *MedSt* 49 (1987). I am grateful to Dumont for his evidence, as for his solution to the longstanding problem of Aquila's purported familiarity with Ockham.

¹⁵ Anon. O.E.S.A. (Wien, fol. 18rb): "Pono unam suppositionem, quod videlicet in-

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If Scotus's distinction remained the point of departure for discussions of cognition, Aureol's contemporaries recognized his teaching as the most significant alternative account facing them. Of the scholars active during the 1320s–1330s, only Thomas of Strasbourg betrayed no familiarity with Aureol's epistemology.¹⁶ Each of the others was familiar with some version of Aureol's *Sentences* commentary, and all were aware of his arguments for the mind's formation of an "apparent, objective being" as the mental object of cognition, even when they did not connect them to his explication of intuition. Of course, for at least a few years, theologians at Paris still knew the context within which he had elaborated those views; thus, for example, the fact that his insistence on distinguishing intentional entities, as mental creations, from the cognitive acts creating them constituted a debate with Radulphus Brito and Hervaeus Natalis must have been obvious to such contemporaries as were in a position to hear all three scholars at first hand.¹⁷

One such scholar was Landulphus Caracciolo, whose objections to Aureol on this issue stemmed from the latter's distinction between con-

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tellectus <intelligit> per cognitionem intuitivam et per cognitionem abstractivam. Et dico quod ratio formalis cognitionis abstractivae consistit in hoc: primo et per se nunc videlicet feratur supra propriam quidditatem rei sive res existat in effectu sive non, sive etiam sit presens sive non... abstrahendo ab esse et non esse et a presentialitate et non presentialitate. Ratio vero formalis cognitionis intuitive primo et per se est quod feratur clare supra rem secundum esse presentialis existentie, ita quod necessarium est ut res presentialiter existat, ut cadit sub tali cognitione. Hanc suppositionem non probo, quia communis est satis, et hec etiam sonant nomina... Intelligendum tamen quod ista intellectio de notitia abstractiva et intuitiva secundum cursum communem et naturalem, quia nolo restringere potentiam Dei in aliquo quod ego possui; unde sicut cito patebit Deus potest omnem cognitionem—et abstractivam et intuitivam—ab objecto absolvere." For parallels in Scotus, see chapter III, above, n. 62.

The author turns at once to Aureol's understanding of cognition (Wien, fol. 18rb–va): "Sed contra hanc suppositionem quantum ad ambo membra arguitur ab aliquibus (*marginis*: Aureolus). Dicit enim quod primum membrum est falsum quod dicitur notitiam abstractivam precise respicere quidditatem rei... <contra secundum> probat iste doctor quod cognitio intuitiva potest esse sine existentia. Hoc probatur primo per experientias et deinde per rationes. Prima experientia... cum diu solem attendimus, etc. Secunda experientia... in sompno videt homo et sentit quod per quinque sensus, etc. Tertia experientia est de timentibus qui audiunt sonos qui tamen non sunt in rerum natura. Quarta experientia est de ludificatis qui vident castra et lepores, etc... Quinta experientia de collo columbe... Sexta experientia de habentibus oculos molles... Si igitur sensus potest habere cognitionem intuitivam absque rei existentia et presentialitate, multo magis hoc [hoc] potest intellectus." This list corresponds to that in Aureol's *Scriptum*; see above, chapter IV, n. 81.

¹⁶ In Thomas of Strasbourg's commentary, the omission of Aureol's views is particularly striking in I *Sent.*, prol. q. 3, on evident cognition and certain scientific knowledge. On fol. 10ra, the sixteenth-century editor identifies an opinion as Aureol's, that God could cause an intuition of a non-existent; it is not clear as stated that this is in fact a position unique to Aureol, and Thomas' source more nearly approaches Aufredus' views.

¹⁷ See above, chapter IV, n.24; and Pinborg, "Zum Begriff."

cepts and intellectual acts. In rejecting any such distinction, Landulphus concurred with Radulphus Brito, as Michael of Massa later recognized.¹⁸ When faced with Aureol's experiential evidence in support of the creation of "apparent" entities not only in intellection, but in the course of sensation as well, Landulphus understood him to be positing such mental creations in lieu of species multiplied from objects. Convinced that perspectivist theory could account for such experiences, Landulphus offered a detailed and influential refutation of Aureol's explanation of them. Twenty-five years later, Pierre Ceffons took Landulphus' arguments as epitomizing the response that could be offered Aureol from the standpoint of one who accepted the existence of species.¹⁹ Perhaps,

¹⁸ Landulphus discusses Aureol's notion of the *esse apparens* at several junctures. See e.g. II *Sent.* d. 11, q.2, a.2 (Gonville & Caius, fol. 118v–119r): "Ad secundam questionem pono 3 conclusiones. Prima recitat opinionem dicentem quid sit ipsa intellectio, ad cuius evidentiam declarat 3 propositiones. Prima propositio: quod actus intelligendi et species sunt idem aliquomodo. Est enim in nostro intellectu actus quedam qua obiectum ponatur in quodam esse intentionali, et istud est obiectum intellectio; fundatur necessario in duobus, videlicet in actu qui est intellectio a quo producitur in tali esse intentionali et in actu fantasie ... tertia propositio: opinio quod intelligere importat aliquid in recto, aliquid in obliquo per modum connotati, quod patet quia intelligere est illud quo res ponitur in esse apparenti obiectivi. Hic ponitur aliquid in recto ..."

Michael of Massa, in I *Sent.*, d. 23, q.1 (quoted in Trapp, "Some Manuscripts," p. 86) "utrum prima intentio ut distinguitur a secunda sit obiectum cognitum ut est cognitum, vel sit ipsemet actus intelligendi" alleges on fol. 197rb that, against Aureol, "est alia opinio satis communis quam sequitur Radulphus Brito" while the marginal note states "Radulphus Britonis et hanc sequitur Gerardus <de Senis>." Here the *Abbreviatio* is more specific (Canon, misc., fol. 100ra–rb): "Hec opinio <Aureolis> deficit in multis. In primis, quando dicit per actum intelligendi obiectum capere quoddam esse intentionale distinctum ab esse rei in seipsa, quod quidem frequenter reprobatur est, maxime in prologo ... Alia est opinio quam sequitur Landulphus et Gerardus. Dicunt quod generaliter loquendo intentio non est aliud quam actus intelligendi ..."

¹⁹ Landulphus, I *Sent.* prol., q.1 (Wien, fol. 1rb–va): "Quantum ad primum articulum est una *opinio subtilis* (*marg.* Petri Aureoli) que dicit quattuor. Primo, quod abstractiva et intuitiva non differunt penes obiecta ... tertio dicit quod non differunt ex eo quod intuitiva requirat existentiam et presentiam obiecti; abstractiva non. Probatio per quattuor vel quinque experientias. Prima experientia, nam secundum Commentatorem *De somno et vigilia* in ludificatibus, dormientibus, et egris, moventur species ab interiori ad exterius donec veniant ad sensus; et tunc sunt sensus in actibus suis propter quod timentes audiunt sonos et vident apparitiones. Certum est quod ista est visio intuitiva, et tamen sine obiecto realiter presente. Secunda experientia est <Alhazen> [*ms. habet Algazelis*] primo *Perspective* c.1, si quis sit in camera obscura et aspexerit celum per aliquod foramen diu, si reflexerit oculum ad obscurum, apparebit sibi forma lucis et foraminis ... tertia experientia est Augustini XI *De Trinitate* c.2, quod si solem ac luminaria vidimus, si claudamus oculos ab eis, versantur ante oculos nostros colores lucidi ... quarta experientia est quia si hec non esset, contradictoria esset vera de eodem; patet de Scriptura, que apparet de longe prominens, de prope plana; et collum columbe apparet uni rubeum, alteri viride; quinta experientia est Philosophi III *Meteororum* de quodam habente debiles oculos qui semper <videbat> [*ms. habebat*] ydolum ex opposito, quia aer propinquus erat sibi pro speculo. Si interrogentur isti quomodo actus notitie intuitive possunt fieri sine obiecto, dicunt quod tam sensus quam intellectus per suum actum ponit obiectum in esse intentionali ..."

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therefore, we should credit Landulphus's interpretation with having obscured for future readers Aureol's own acceptance of species in the medium.²⁰

Like Landulphus, Aureol's earliest Parisian audience seems for the most part to have accepted the existence of species (despite an ongoing debate) and therefore to have opposed the positing of an "apparent being" as superfluous.²¹ This reading of Aureol as having proposed the "apparent being" as an alternative to species was early conveyed to other Franciscan convents on the continent. Aufredus Gonteri's *Sentences* commentary was among the earliest vehicles for conveying Aureol's epistemological theory to his audiences outside Paris. Although Gonteri revised his commentary there, Aureol's views were already known to him when he taught at the Franciscan *studium generale* in Barcelona. Evidently, however, he was unfamiliar with the *Scriptum* prepared during Aureol's baccalaureate at Paris; instead, Gonteri was conversant with an earlier set of lectures—perhaps those Aureol had delivered at the nearby *studium* of Toulouse before proceeding to Paris.²² Gonteri himself had been at Paris earlier in the century, and having "long heard the Subtle Doctor" lecture there, became his avowed follower.²³ As such, Gonteri steadily defended

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Contra istam opinionem dico 3 conclusiones. Prima conclusio est quod intellectus non producit obiectum in esse intentionali, et probo: potentia non producit obiectum in aliquo esse reale, sed illud 'esse intentionale' quod tu ponis est esse reale ..." Landulphus' source is not the *Scriptum* but an earlier version; compare his quotation of Aureol to the version edited in Boehner, "Notitia Intuitiva," pp. 412–414. Landulphus' response to the experientiae continuae (Wien, fols. 1vb–2r): "Ad primam experientiam dico quod Commentator non intellegit quod a sensibus interioribus administratur species sensibus particularibus ... et quod intellegat per 'intentiones' species, patet, quia subdit 'sive intentiones veniant ab intrinseco seu ab extrinseco' quasi dicat 'sive species sint in sensibus derelictae a sensibus sive a sensu communi impressae,' idem est. Hoc idem dicit Philosophus ..." Writing at Paris in 1347, Pierre Ceffons shows no direct reading of Aureol, relying instead on these discussions from Landulphus (see below, chapter XII, at n. 64).

²⁰ See above, chapter IV, at nn. 42–45.

²¹ Of those commentaries I have studied, only that in Vatican, Vat. lat. 1087 (attributed to Michael of Massa) contains a rejection of species, in a lengthy discussion occupying several questions; see (Vatican, fol. 206va): "Sequitur secunda conclusio principalis pro prima parte, videlicet quod ab obiecto visibili non causatur in medio aliquid alterius rationis in esse nature ab ipso. Et per istam conclusionem volo habere quod obiecto visibile nihil causatur in medio, sed immediatus effectus eius sit ipsa visio causata in potentia visiva ... Pono ergo primam particulam negativam istius secunde conclusionis sic: nulla apparet necessitas ponendi speciem representativam obiecti causatam ab ipso obiecto in medio."

²² Thus, it seems to me that Gonteri's discussion in n. 36 below derives from a text close to Aureol's *II Rep.* d. 13 q.un. (above, chapter IV, n. 34); similarly, the experientiae in n. 31 do not follow the same order as those in the *Scriptum* (above, chapter IV, nn. 19–23) but are closer to the text in *I Rep.* d.3 (Borghese 123).

²³ Gonteri Brito, *I Sent.* prol. q.7 (Wroclaw, fol. 12va): "Secundo adduco contra hanc

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his teacher's views on the acquisition of natural knowledge (including the arguments for intelligible species) against whatever contemporary proponents of Henry of Ghent's views there may have been.²⁴

As the Breton scholar understands Scotus's delineation of the abstractive and intuitive modes of cognition, the two are really distinct and do not naturally occur simultaneously with respect to the same object.²⁵ Interpreting Scotus as having denied that we have *intellectual* intuitions in this life, Gonteri holds that the intellect's abstractive cognitions presuppose sensitive intuitions. So too do the acts of such sensitive faculties capable of abstraction as are the imagination and phantasy, because in this life their operations depend upon prior contact with what exists.²⁶ Thus while abstraction, which can regard non-existent objects, is indifferent to existence, intuition requires the presence and existence of its object of which it yields certain, infallible existential knowledge.²⁷ Not

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argumenta cuiusdam doctoris qui ubicumque nititur reprobare venerabilem doctorem et fratrem Iohannem Scotum, quem pro posse . . . ubique sequor, quia ipsum diu audivi, et dicta eius catholica et rationabilia et numquam calumpnia rectis intelligentibus invenior." Such professions that he follows Scotus are frequent; cf. also q.11 (Wroclaw, fol. 21rb) "ut dicit Doctor Subtilis quem sequor."

²⁴ As is suggested by the very title of Gonteri's first question of the prologue, "utrum virtute luminis naturalis intellectus homo viator in hac vita possit acquirere certa et infallibilem notitiam de aliquo ente cognoscibile, sine illustratione luminis supernaturali," which alludes to Scotus's *I Ord.*, d.3, p. 1, q.4. Gonteri defends sensible and intelligible species in this question and, *passim*, throughout the commentary; in addition to n. 29 below, see, e.g. (Wroclaw, fol. 4ra): "Dico quod res sensibilis—non ratione mutabilitatis sed ratione sue quidditatis—simul cum lumine intellectus agentis causat illam speciem que sicut naturalis similitudo representat naturaliter et immutabiliter quidditatem sive existat sive non."

²⁵ See nn. 26, 27, 35 below.

²⁶ Gonteri, *I Sent.* prol. q.11 (Wroclaw, fol. 21rb–vb): "Preterea, omnis cognitio abstractiva presupponit cognitionem intuitivam priorem ea; sed cognitio intuitiva de Deo repugnat viatori manenti viatori; ergo et abstractiva. Hoc patet ex dictis in secunda conclusione, probatio minoris inductive, quia in brutis cognitio abstractiva ymag<nat>ive presupponit cognitionem intuitivam corporalem potentie visive. Et cognitio abstractiva quidditatis in homine presupponit intuitivam sensitivam, quia deficiente sensu, necesse est scientiam desinere secundum illum sensum, ut dictum <est> prima <questione> . . . (fol. 22va) Ad quartam, conceditur in omni cognitioni abstractiva presupponit intuitivam. Dico quod falsum est hic, quia in hac vita cognoscimus essentias rerum abstractive et nullam habemus intuitivam intellectivam naturaliter, ut alias probavi . . . Si ergo maior sit vera, habet veritatem de intuitiva et abstractiva in diversis potentiis, quia abstractiva imaginationis et fantasie et abstractiva intellectiva nostra naturaliter presupponit intuitivam. Sed hoc est propter modum intelligendi naturalem, qui presupponit cognitionem sensitivam in hac vita . . . Deus autem de potentia absoluta potest causare abstractivam sine intuitiva." See also n. 28 below.

²⁷ In addition to n. 28 below, cf. also *I Sent.* prol. q.11 (Wroclaw, fol. 21rb–21va): "Et hoc probatur per rationem, quia abstractiva est non existentis; intuitiva est actualiter existentis. Sed cognitio non entis presupponit cognitionem entis, et cognitio entis in potentia presupponit cognitionem entis in actu, ut patet V *Metaphysice*; et cognitio negationis presupponit cognitionem affirmationis, ut patet III *De anima* et II *Perihermanias* et

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only does Gonteri believe that we have such certitude regarding sensibles in this life, but he evidently also believes that Scotus's arguments—from which he hardly departs—are sufficient to defeat Henry of Ghent's contrary view.²⁸

Inasmuch as Gonteri treated the debate with Henry of Ghent as the starting point of his own reformulation of Scotus, and read Aureol's hypothesis of an "apparent being" as an alternative to sensible and intelligible species, it is therefore far from surprising that Gonteri was unprepared to appreciate Aureol's departures from Scotus's explanations of knowledge.²⁹ How unusual Aureol's notion of the "apparent being" seemed, is indicated by Gonteri's introduction of it as "one doctor's opinion, in disagreement with all [others]."³⁰ After accurately summarizing Aureol's

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IV Metaphysice ... Conceditur quod Deus habet cognitionem intuitivam de rebus non existentibus, etc. ... Non sic est de intuitiva cognitione creata, <que est> nata causari a re secundum suam existentiam vel a divina voluntate vicem obiecti supplente, et nata etiam ad eam secundum rationem existentie ... potest dici intuitiva ut est respectu essentie sue et realiter existentium, et abstractivum ut est respectu rerum aliarum a se non existentium, sicut dictum <est> speculativa respectu quorundam obiectorum et practica respectu aliorum. Nullum ex hoc sequitur inconueniens in nobis, cum realiter et specificice distinguuntur."

²⁸ Ibid. prol. q.1 (Wroclaw, fol. 2vb): "Nunc secundo arguo contra hanc opinionem <Gandavensis>, quod omnis intellectus potens acquirere notitiam veram de re absque omni dubitatione et deceptione naturaliter potest habere de illa re naturaliter certam et infallibilem veritatis cognitionem; sed intellectus humanus in hac vita est huiusmodi; ergo etc. Maior patet ... minor probatur, quia intellectus humanus bene dispositus et supposita bona et naturali dispositione potentiarum sensitivarum ex quibus dependet intellectus in intelligendo in hac vita ... (fol. 3ra) Nunc tertio respondeo ad questionem aliter secundum opinionem communem philosophorum et sanctorum, et pono quatuor conclusiones probandas per ordinem. Prima est ista: quod homo in hac vita potest naturaliter acquirere certam et infallibilem notitiam sensitivam de rebus sensibilibus. Secunda est quod potest acquirere certam notitiam terminorum simplicium quantum ad actum primum intellectus qui est simplicium intelligentia. Tertia est ista: quod potest acquirere certam notitiam primorum principiorum ... quarta est quod potest acquirere certam notitiam scientificam conclusionum per demonstrationis concursum ex principiis ..." These four conclusions, like his response to the worry that sense experience can be non-veridical (Wroclaw, fols. 3vb–4va) are nearly verbatim from Scotus; cf. chapter III, nn. 81–91.

²⁹ Gonteri, I *Sent.* d.3, q.14 (Wroclaw, fol. 126ra–rb): "Preterea, ratio principalis huius doctoris movens ipsum ad ponendum quod obiectum emanat et constituitur in esse quodam apparenti per actum intellectus, est quia quilibet experitur quod intelligens rosam et quocumque aliud, apparet ei rosa et apparentia actualis ... et ita est in sensu. Tunc arguo: illud apparet intellectui apparentia actuali ... sed intellectus per speciem rose intelligens ... ergo frustra ponitur talis emanatio rose in esse apparenti per actum intelligendi. Preterea, sicut res obiective est actu apparens et cognita intellectui vel sensui per actum intelligendi et sentiendi, ita est apparibilis vel cognoscibilis mediante specie actu primo; sed species in sensu vel intellectu representat rem actu primo sine emanatione vel constitutione media; ymmo seipsa et intellectus agens et fantasma causans effective speciem in intellectu concomitanter et consecutive causant speciem representativam rei ..."

³⁰ Ibid. (Wroclaw, fol. 125va; *Marg.* "Articulus primus: opinio Petri Aureoli"):

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arguments and experiential evidence for the emanation and production in the intellect of an intentional object distinct from species, phantasms, intellectual acts, and platonic Ideas, Gonteri rejects the apparent being on the grounds that, instead of intellectual acts requiring objects, the latter would depend upon and refer to the former.³¹ In other words, to suppose that the intellect constitutes such an object is to get the causal process of knowledge backwards. As a result, the real relation of intellectual acts to the extramental world would be severed, such that there would be no scientific knowledge of reality. So understood, Aufredus worries, Aureol's hypothesis that the intellect constitutes this intentional entity would render Avicenna's distinction between first and second intentions pointless; that is, we could not explicate the ultimate foundation of logical relations among concepts upon their derivation from extramental reality.³²

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"Circa primum sciendum quod est una opinio unius doctoris discordans ab omnibus, ponens tres propositiones. Prima est quod obiectum intellectus et cuiuslibet potentie cognitive visui actus emanat et procedit in quodam esse intentionali et presentiali ultra actum illum."

³¹ Ibid. (Wroclaw, fol. 125va–vb): "Et illud esse, licet non sit reale, non est nihil, sed est esse sui generis. Et hec propositio probatur ab eo per quatuor experientias. Prima est in intellectu, quia intelligens rosam experitur quod apparet ei rosa. Ista rosa intellecta et apparens aut est actus intelligendi aut species rose aut phantasma aut rosa abstracta ut posuit Plato ydeas. Non potest dici quod sit actus ... nec potest dici quod rosa sic apparens est species ... Secunda experientia patet in potentia sensitiva visiva, quia existens in navi et videns arbores iuxta ripam videtur ei arbores moveri; ille motus non est in arbores nec in ipso vidente, quia licet existens in navi moveatur motu navis, tamen motus in navi non terminat eius visionem qua videt arbores in ripa, nec est dare ubi sit alibi. Relinquitur ergo motus sic apparens habet esse intentionale causatum per actum visus; sed intellectus non est minus formativus suorum obiectorum quam sensus; ergo etc. Tertia experientia adducitur ... in sensu visus vidente baculum in aqua per radium rectum et fractum qui apparet esse fractus ... quarta experientia est quam ponit Alacem secundo Perspective de imaginis (*ms*: imaginacioni) que videtur esse in speculo et non est secundum eum; et hoc probat et ultimo concedit quod non est nisi res posita in esse iudicato per actum visus. Et idem patet de iride, de coloribus apparentibus in collo columbe; et qui negat hoc negat ens rationis, quia ens rationis est illud quod tantum habet esse obiectivum positum per actum rationis." Against this position Gonteri continues (Wroclaw, fol. 125vb–126ra): "Sed quia istam opinionem non capio, ideo contra eam arguo. Et primo contra primam propositionem ... Sed intellectus in suo actu primo obiectum presupponit; ergo etc. Maior est evidens, quia aliter aliquid esset prius et non prius ... probatur etiam per rationem, quia potentia intellectiva maxime in primo actu suo activa est, non factiva, ut patet IX *Metaphysice* ... Ex hoc dupliciter arguitur contra opinionem istam. Primo, quia si obiectum constitueretur ab intellectu, magis dependeret ab actu intellectus et ad ipsum referetur et mensuraretur quam e converso."

³² Ibid. (Wroclaw, fol. 126ra): "Item secundo, quia cum obiectum sic constitutum <in esse apparenti> non habeat nisi esse secundum quid et esse rationis, actus et habitus intellectus ad ipsum non refereretur reali relatione, cum non habeat terminum realem; quod est contra Philosophum. Sequeretur etiam unum aliud, quod nulla esset scientia realis, quia non haberet obiectum reale cognoscibile secundum rationem et intentionem primam et conceptum primum absque operationem intellectus, quia scientia et actus intellectus non dicuntur 'realis' ex realitate solum intellectus intelligentis—aliter loica esset

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Thus recognizing that Aureol's is an account of the origin of first and, thereby, second intentions, Aufredus rejects it along lines parallel to those of Landulphus earlier and Michael of Massa later.³³

Moreover, like most medieval opponents of Aureol's "apparent being," Aufredus finds its hypothesis redundant where sensation is concerned. Construing the arguments for its production as tantamount to claiming that vision is an extramissive process, he insists that visual perception occurs instead through intromission.³⁴ Hence, he thinks that species multiplied from objects suffice to explain the experiential evidence Aureol offers of the divergence of reality from what merely appears to be.³⁵ Although at this juncture Gonteri refers his reader back to his own earlier discussion of whether such "experiences" are examples of intuitive cognitions of non-existents, he does not indicate explicitly whether he recognizes the connection between the two issues in Aureol's own thought.³⁶ That Gonteri does, however, is suggested by his further re-

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scientia realis—sed tamen hoc ex realitate obiecti intelligibilis. Per hoc periret ens reale intelligibile secundum intentionem primam ab ente rationis constituto actu collativo intellectus secundum intentionem secundam, secundum Avicennam, quia ens reale intelligibile secundum intentionem primam est actu primo intellectum non constitutum. Ens autem rationis constitutum et actu secundo intellectum patet de intentione generis et speciei et aliis de quibus est loica, secundum Avicennam."

³³ Cf. Massa, *Abbrev.* d.23, q.1 (Canon, misc., fol. 100ra–rb): "Secundo <contra Aureolum> metaphysica et alii scientie reales sunt de primis intentionibus tamquam de obiectis formalibus, ut illimet dicunt et Avicenna II *Metaphysice*; sed dicte scientie non sunt de ente obiectivo includente essentialiter conceptionem passivam et rem que concipitur ... Alia est opinio quam sequitur Landulphus et Gerardus" (quoted above, n.18).

³⁴ Gonteri I *Sent.* d.3, q.14 (Wroclaw, fol. 127ra): "Sed non est ibi aliquod esse causatum per actum visus, ut ille fingit, quia visus non videt extramittendo sed intrarecipiendo."

³⁵ *Ibid.* (Wroclaw, fol. 126rb–127ra): "Ita dico quod species et actus intellectus est similitudo obiecti, et nullum aliud esse aliud ab actu habet obiectum in actu formaliter causatum per actum, sicut imaginatur ista opinio ... Ad rationes istius doctoris: ex dictis patet ad primam experientiam de rosa intellecta, quia preter speciem et actum non habet in intellectu aliquid esse aliud ab actu formaliter ... Ad secundam experientiam de visu, cui apparet motus arboris, etc., dico quod quia potentia visiva est corporalis, ideo propter variam successionem specierum in potentia organica secundum varios aspectus directos secundum lineam visivalem ad rem visam, licet non motam localiter moto, in organo percipit motum, licet decipiatur in cognoscendo ubi sit—quia sensus decipitur circa quantitatem et situm sui proprii sensibilis ... Et hoc patet, quia homini moto in navi videnti montem et arborem, videtur quod arbor citius movetur quam mons, quia citius et sepius imprimuntur species arboris ... Ad tertiam experientiam ... hoc facit species baculi causata mediante radio recto et perpendiculari medio rariori, scilicet in aere, et reflexe vel fracto in medio densiori, scilicet in aqua ..."

³⁶ *Ibid.* (Wroclaw, fol. 127ra): "De coloribus yridis et collo columbe *dixi alias*, et dico quod non sunt colores sed est apparitio varia lineis et radiorum refractorum a talibus corporibus secundum diversam dispositionem eorum." This is evidently a cross-reference to I *Sent.* prol. q.11 (Wroclaw, fols. 21ra–22ra): "<Dubium primum> Et probo contra dicta in primo articulo de cognitione intuitiva et abstractiva. Et probo quod cognitio intuitiva potest esse de re non existente quia certum est quod Deus cognoscendo suam essentiam

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mark that Aureol errs in supposing that intellection and sensation are similar, a supposition against which Gonteri had argued at greater length when treating intuitive cognition.³⁷

Be that as it may, the connection between Aureol's notion of the "apparent being" and his insistence that intuition can occur when the object is absent or non-existent had already been drawn by the Provençal scholar, Francis Meyronnes. Like Aureol himself, Meyronnes was among the scholars so well esteemed by his fifteenth-century confrères as to be included among the choirhall portraits at Assisi, and he may have been the first Franciscan theologian to discuss Aureol's account of knowledge.³⁸

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cognoscit ... <Dubium secundum> Preterea astrologus existens in camera sciens determinatam horam eclipsis et determinatam eius moram ... Ergo non distinguit intuitiva ab abstractiva per rationem existente cognite. <Dubium tertium> Preterea sicut est in cognitione intuitiva corporali, ita simili modo debet intellegi in cognitione intuitiva intellectuali. Sed cognitio intuitiva corporali visus potest esse de re visa sine existentia reali; ergo etc. Hoc declaratur per exempla et experimenta. Primo quia visus qui vidit excellens visibile ... Hoc patet de dormientibus et amentibus et melancolicis et vehementer timentibus ... Hoc idem patet in prestigiis et illusionibus magorum ... Preterea, si cognitio intuitiva corporalis visiva non posset esse sine presentia rei vise, tunc omne visum esset realiter existens in re; et tunc contradictoria essent simul vera, ut deducit Philosophus IV *Metaphysice* <cc. 5–7> contra dicentes omnia que apparent esse vera <sunt>, quia telatura corporis colorata apparet alicui prominens aspicienti eam in uno <situ> et eadem <telatura apparet> non prominens in alio situ. Similiter de coloribus yridis; et in collo columbe; et in quibusdam pannis sericis coloratis." Gonteri responds (Wroclaw, fol. 22ra–rb): "Ad secundum astrologus existente in camera qui cognoscit existentiam eclipsis abstractive, dico quod *certitudinaliter* cognoscendo causam eclipsis cognoscit eclipsis—secundum eis—existentiam cognitione abstractiva per rationem essencie. Per hoc tamen numquam scit eclipsim certitudinaliter existere, sed natam existere, quia eclipsim existere est contingens, quia nulla causa effectiva causat nisi causante causa prima, qua contingenter causat. Sed eclipsim nata esse seit ipse certitudinaliter per causam ... Ad tertium autem quod fundatur in experimentis et exemplis de cognitione intuitiva corporali visiva que potest esse respectu non existentis. Conceditur primo de illo qui vidit excellens lucidum ubi non est, dico quod non est simile de intuitiva corporali visiva et de intuitiva intellectuali ... Aspiciente lucidi fortiter impressa in potentia visiva reflectendo se supra se imperfecte vidit visionem et speciem impressam, quia non statim desinit esse, quia species et visio quodammodo colorata est, ut II *De anima*, ubi dicit quod visus quodammodo percipit se videre, licet imperfecte. Sed sensus communis magis perfecte, intellectus perfectissime ... Ad aliud experimentum de dormientibus et amentibus et timentibus, solucio: quia hec provenit ex forti imaginatione, non ex cognitione intuitiva visiva exteriori vel auditiva. Ad aliud experimentum de telatura corporis colorati que videtur esse eminens in uno situ, etc., dico quod visus non iudicat eminens et depressum nisi per accidens, quia sunt accidentia magnitudinis, que <est> sensibile commune. Ideo circa ea potest visus decipi. Patet de solis magnitudine ..."

³⁷ I *Sent.* prol. q.11 (Wroclaw, fol. 22ra): "dico quod non est simile de intuitiva corporali visiva et de intuitiva intellectuali, quia cognitio intuitiva intellectus separati, cum sit virtus immaterialis respectu obiecti proportionali ut per se ut per accidens decipi potest sensitiva potest per accidens et maxime circa sensibilia contraria et certa sensibilia per accidens, ut quid sit illud quod videtur, et quantum et quale, secundum Commentatorem II *De anima* commento 63. Non sic intellectus qui cognoscit rei intuitive existentiam et sui non existentiam per accidens."

³⁸ See above, chapter IV, n. 1. Meyronnes' understanding of intuitive and abstractive

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Moreover, he was in Paris early enough to have appreciated the ways in which Aureol's views constituted a response to the generation that separated him from Scotus, and much of Meyronnes' objection to aspects of Aureol's theory derived from a more Scotist stance than the latter had adopted. Thus, Meyronnes' own distinction between abstraction and intuition approximated the understanding labelled "common" by his anonymous Augustinian contemporary, and from that standpoint Meyronnes objected to any account of intuition limiting the absolute requirement of a present, existent object. Because intuitive cognition on his view constituted a real relation to its object, not even by divine power could intuition of a non-existent occur.³⁹

Meyronnes is thus entirely consistent when, in considering whether any sensitive or intellectual faculty can have a cognition of a non-existent object naturally, he insists that the intellectual faculty cannot naturally intuit what does not exist. Inasmuch as intuitive cognitions are prior to other cognitions, Meyronnes stresses, "that awareness (*notitia*) cannot be false, upon which the certitude of all our awareness depends."⁴⁰ Nor can

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cognition has not been the subject of much study, but see especially Cova, "Meyronnes e Catton." See also the judgment of Bérubé, "Première Ecole Scotiste," p. 14.

³⁹ Meyronnes, I *Sent.* prol. q.15 (Vat. lat. 894, fol. 9ra; Venice 1504, fol. 8rb): "Dico igitur quod illa notitia <scil. abstractiva> est de re per aliquod representativum, sed terminatur ad quidditatem obiecti in se et ad illa que insunt obiecti per se;" prol. q.17 (Venice 1504, fol. 9rb–va; Venice 1520 fol. 10rb–va): "Ad secundum, dico quod intuitiva est illa que causatur a re per seipsam—vel est talis qualem causaret ipsa res, si haberet vim causativam et posset eam causare ... Intelligendum tamen quod notitia intuitiva concernit quatuor extrema contradictionis a quibus abstrahit notitia abstractiva. Primum est actualis existentia, quia si cognoscatur non ut actualiter existens, sed tantum quidditas, tunc cognoscitur abstractiva tantum et non intuitive, nam abstractiva concernit tantum quidditatem. Secundum est quod intuitiva concernit presentiam de communi lege, licet enim forte Deus posset facere obiectum non presens, tamen de communi lege ita est. Tertium est causatio, quia de communi lege causatur a re ad quam terminatur. [Ad] Quartum est motio, quia de lege communi oportet quod obiectum moveat;" prol., q.18 (Venice 1504, fol. 10ra; Venice 1520, fol. 11ra): "Eliciuntur ergo ex dictis quatuor conclusiones. Prima, quod cognitio intuitiva causatur ab obiecto; secunda quod terminatur ad ipsum; tertia quod Deus potest supplere vicem obiecti in ratione moventis; quarta, quod non in ratione terminantis. Iste conclusiones patent ex predictis. Sed hic sunt due difficultates. Prima est quod quando sunt aliqua essentialiter ordinata et realiter distincta, Deus potest facere unum sine alio; sed relatio notitie differt realiter ab <obiecto> et est posterior essentialiter; ergo etc. ... Ad primam, quando sunt aliqua duo que separari non possunt, ista sunt idem realiter. Et tunc dico quod notitia et sui relatio ad obiectum sunt idem realiter, licet aliquo modo distinguantur."

Meyronnes' sixteenth-century Irish editor, Mauritius de Portu, O.F.M., who mentions in his foreword (fol. 1r) that he has had to supply marginal notes, attributed the arguments for intuitive cognitions of non-existents by divine power to "Ockham, Thomas, and others" (Venice 1504, fol. 9vb). For Mauritius' own works, see C. Lohr, *Medieval Latin Aristotle Commentaries, Traditio* 27 (1971), p. 344.

⁴⁰ Ibid. q.19 (Vat. lat. 894, fol. 11rb; Venice 1504, fol. 10rb; Venice 1520, fol. 11ra): "Utrum potentia, sive sensitiva sive intellectiva, possit cognoscere naturaliter non exis-

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sensitive intuitions be false, he continues, for through them we acquire the terms of propositions known *per se*. Hence, if sensitive intuitions were false, so too would be such propositions; and since upon these demonstrative arguments in turn depend, the result would be that all knowledge grounded ultimately in sensation would be uncertain.⁴¹ "What is certain," Meyronnes concludes, "does not presuppose what is uncertain."⁴² Introducing Aureol's experiential examples as counter evidence, and adding several additional ones to the list, Meyronnes notes that, by comparison to the other external senses, those derived from visual experience "are more difficult."⁴³ Still, by recourse to species, and by relegating several experiences to the common sense or imagination, as judgmental errors, he believes he can explain each of the adduced instances without admitting that intuitive cognitions of objects either not

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tens ... Circa istam questionem pono duas conclusiones. Una, quod potentia intellectiva non potest intuitive cognoscere non existens. Hoc probo dupliciter. Primo sic: illa notitia non potest esse falsa a qua dependet certitudo omnis notitiae nostrae. Hoc probatur, quia in essentialiter ordinatis, ablatio primo aufertur posterius; si ergo falsa est illa notitia a qua dependet omnis nostra certitudo, aufertur omnis alia veritas. Sed a notitia intuitiva dependet omnis certitudo nostrae cognitionis; ergo etc."

⁴¹ Ibid. (Venice 1520, fol. 11ra–rb): "Secunda conclusio est quantum ad sensitivam, et dico quod sensitiva non potest esse falsa. Et probo primo sic: nulla propositio in qua est veritas per se nota potest esse falsa, cum ex per se notis deducatur conclusio demonstrativa; sed talis est per se nota, scilicet notitia intuitiva sensitiva. Hoc probo sic, scilicet quod veritas sensitiva apprehensa per sensum intuitive cognoscentes est per se nota. Arguo sic: sicut se habent principia ad conclusiones, ita termini ad principia; sed oportet principia esse notiora conclusionibus; ergo oportet quod termini sint notiores principiis; sed terminos cognoscimus per sensum; ergo, etc."

⁴² Ibid.: "Tertio <arguo> sic: scientia certissima non presupponit aliquid incertum vel dubium ... Omnes istae rationes habent istam vim: certum non presupponit incertum; sed omnis certa cognitio scientis presupponit notitiam sensitivam."

⁴³ Ibid. (Vat. lat. 894, fol. 11rb–va; Venice 1504, fol. 10rb–va; Venice 1520, fol. 11rb–va): "Sed contra predicta sunt multa experimenta. Primo de auditu, nam sonus videtur audiri ubi incipit multiplicari; multiplicatur autem successive et per motum ... Secunda de odoratu; aliqui enim delectantur in uno obiecto, aliqui tristantur in eodem ... similiter de gustu, omnino idem est uni amarum, alteri dulce. Similiter de tactu respectu calidi. Similiter de motu corporis inter duos digitos ... Sed nunc concurrunt aliqua experimenta de visu que videntur difficiliora [*ms.* difficiliora; *ed.* difficilia]. Primum est Augustini XI *De trinitate* cum video corpus luminosum, multum apparent postea colores lucidi ... Secundum experimentum est de coloribus diversis apparentibus in collo columbe ... Et similiter de quibusdam vestimentis que nunc videntur unius coloris, nunc autem alterius ... Tertium est de istis picturis prominentibus ... Quartum est de his que in somniis videntur ... de illusionibus ... Quintum est de <imagine in> speculo ... de iride quod est sextum ... septimum de motu scintille que propter motum videtur habere formam circuli ... octavum quod est de motu arborum et ripe iudicato per existentem in navi ... nonum de privatione ... decimum de fractione baculi in aqua ... <undecimum est> illud de speculo fracto et oculo compresso ... ultimum de actu videndi motum ... Nunc videndum esset de modo ponendi istorum quibus iste instantie concludunt. Dicunt enim quod obiectum in esse apparenti producitur et in esse viso et in esse cognito—quere Petri Aureoli."

present or non-existent can occur.⁴⁴

Meyronnes was nevertheless far from hostile to all aspects of Aureol's account of knowledge. They agreed, for example, in denying that abstractive cognitions could occur in the exterior senses, and Meyronnes treated as obvious that corporeal vision is properly intuition. They agreed, further, that the directness of intuition was not impeded by species.⁴⁵ Most important, Meyronnes granted the creation of an "apparent being" during the course of apprehension:

For they say that the object is produced in an 'apparent being,' and in a 'seen being,' and in a 'cognized being'—look in Peter Aureol[']s works]. But although I concede that the object in any apprehensive act is produced in some [such] being, nevertheless the production of that being ... by the act of vision [results in a] produced being which necessarily presupposes that there be another [being] as an object ... [because] for any instant in which there is an act of vision, it has a terminus ... but this [cannot be] what is produced in 'seen being,' because the latter does not precede its [being] produced ...⁴⁶

⁴⁴ See, e.g., *ibid.*: "Ad illud <sumptum ex Augustino>, dico quod obiectum aliquid immutat realiter, aliquid intentionaliter. Intentionaliter quidem ad actum videndi, et huius immutatio est instantanea et transit; realiter autem immutat spiritus, per quos fit delatio specierum de loco ad locum, et sic illi spiritus accipiunt veros colores et isti sunt qui postea abeunte primo obiecto videntur ... Ad hoc <tertium> dico quod sensus communis iudicat ... Quartum est de his que in somniis videntur, ad quod dico quod opus imaginationis est, ideo non est difficile, quia imaginatio bene habet cognitionem abstractivam ... Ad quod <quintum> dico quod sensus particularis videt seipsum et non imaginem in speculo, et sic non decipitur sensus particularis. Sed quomodo false iudicat? Dico quod iudicium non est sensus particularis nec deceptio, sed communis qui fallitur ... dico quod sensus particularis non iudicat nisi de colore; sensus autem communis iudicat de situ ubi et de distantia ... Ad illud de iride ... dico quod in iride sunt veri colores ... Ad octavum quod est de motu arborum et ripe ... dico quod sensus communis hoc iudicat ..."

⁴⁵ Cf. Meyronnes, I *Sent.* prol., q. 15 (Venice 1504, fol. 8rb–va): "Contra <opinionem propriam> arguitur ... Secundo sic: per illud non diffinitur proprie cognitio abstractiva quod competit intuitive; sed visio oculi que est proprie intuitiva fit per speciem; ergo ... Tertio sic: videns se in speculo aut se videt abstractive, aut intuitive. Si abstractive, ergo sensus exterior poterit cognoscere aliquid abstractive, quod falsum est; si intuitive, et videt se per speciem, etc. ... Ad secundum dico quod in visione oculi species et ipsa visio sunt duo effectus essentialiter ordinati, sicut illuminari et calefacere. Et ista sunt ab eadem causa, quia unus non causat alium. Unde tam species in oculo et visio causatur ab obiecto, et visio non causatur a specie. Ad tertium, dico quod videns se in speculo immediate intuetur seipsum per actum reflexum, licet sensus exterior iudicet esse ibi speciem, quia sensus exterior consuetus est sic videre, scilicet per lineam rectam." For Aureol, see above, chapter IV, at nn. 45, 77.

⁴⁶ *Ibid.* (Vat. lat. 894, fol. 11vb; Venice 1520, fol. 11vb): "Dicunt enim quod obiectum in esse apparenti producitur et in esse viso et in esse cognito: quere Pe<tro> Au<reoli>. Sed licet ego concedam quod obiectum in quolibet actu apprehensivo producat in aliquo esse, tamen productio illius esse in quo producitur per actum visionis, illud esse productum necessario presupponit aliud esse in obiecto. Et probo hoc multipliciter ... Tertio sic: quando enim aliquod simul natura cum aliquo, quicquid est prius uno illorum

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Meyronnes clarifies his concession that such a "seen" or "cognized" being is produced by vision when he considers first and second intentions. Insisting that they are identical neither to intellectual acts nor to intelligible species, he claims that first intentions are instead "quiddities in quidditative being." This is not to deny the creation of first intentions after the acts of knowing intellectually, but only to rule out their arbitrary construction by the mind. Rather, Meyronnes suggests, such intentions are derived from the quiddities for which they serve as mental termini.⁴⁷ In other words, he does not object to Aureol's view that in the course of perception the mind acquires concepts that have intentional or apparent being; but evidently Meyronnes has construed Aureol as positing the creation of this mental entity prior to the action itself. For Meyronnes this is to get the effect before the cause.

Meyronnes' characterization of intentions using a neologism—a "quiddity in quidditative being"—is one of many indications of his deliberate effort not merely to transmit Scotist views, but to recast them anew. This effort is nowhere more obvious than in his decision that the distinction between intuition and abstraction does not exhaust the modes of cognition. He enumerates two in addition: inferential awareness (*illativa notitia*), which "concerns the relations which it infers from the cognition of their terms;" and discursive cognition (*cognitio discursiva vel*

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et altero; sed producere in esse cognito est simul natura cum produci. Actus autem videndi est prius natura ipso producere; ergo et ipso produci; sed pro quocumque instanti actus videndi est pro illo habet terminum; ergo in illo signo quo actus videndi precedit produci habet terminum. Sed non productum in esse viso, quia illud non precedit produci; ergo necessario obiectum habet aliud esse prius illo. Quarto sic: omne esse secundum quod fundatur in esse simpliciter; sed illud esse, scilicet 'esse visum,' est esse secundum quid, et fundatur in obiecto ..."

⁴⁷ Ibid., d.23, q.1 (Venice 1504, fol. 82ra–rb): "Prima <conclusio> est quod prima intentio non est actus intelligendi. Hanc probo dupliciter. Primo sic: omnis actus intelligendi vere et realiter est in genere qualitatis; prima intentio non est semper in genere qualitatis; ergo etc. Maior est communiter concessa; ... secundo <arguitur> sic: unus actus intelligendi non predicatur de alio ... actus enim quo intelligo animal non predicatur de quo intelligo hominem, sed prima intentio predicatur de prima intentione, sicut hic: 'homo est animal.' Secunda conclusio est quod prima intentio non est species intelligibilis ... Tertia conclusio est quod prima intentio non est quidditas obiecti in esse cognito ... Quarta conclusio est quod prima intentio non est quidditas in esse intelligibili ... Dico quod nolo negare quin homo postquam vere intellectus est, fit vere prima intentio; sed volo dicere quod esse intellectum non sibi dat hoc. Exemplum: homo albus est animal, et tamen albedo non dat sibi esse animal ... pono conclusionem affirmativam, scilicet quod prima intentio est quidditas in esse quidditativo ... Hanc conclusionem declaro ... primo per viam abstractionis, nam abstractiones quibus abstrahuntur universalialia a singularibus fiunt per primas intentiones ... sed tales abstractiones non fiunt nisi per quidditates in esse obiectivo. Ergo prime intentiones sic accipiuntur ..." Again, d.23, q.2 (fol. 82vb): "Ideo dico quod secunde intentiones sunt aptitudines que conveniunt ipsis quidditatibus vel primis intentionibus in esse quidditativo ..."

arguitiva). The latter Meyronnes further distinguishes on the basis of whether it begins from intuitive or abstractive cognitions.⁴⁸ Thus, Meyronnes dismisses the debate (stemming from Scotus) as to whether the soul knows itself intuitively or abstractively, by announcing instead that it knows itself discursively; that is, the soul deduces its own existence starting from objects intuitively known, namely intellectual acts.⁴⁹ Among the further uses to which Meyronnes puts this distinction is the explanation of how we know that species are required for intuition, if we are not intuitively aware of them. "Properly speaking," he claims, "species are not cognized except discursively ... for beginning from intuitive cognition, I experience that I know intellectually." Because this awareness requires the presence of an intramental terminus, Meyronnes concludes that "therefore I know in this way that the species is within me."⁵⁰

Meyronnes' contemporaries do not seem to have found such a defense of species persuasive, nor anything to recommend their interest in his adumbration of cognitive acts beyond the two modes Scotus had specified.⁵¹ Yet Meyronnes' quadripartite division of cognition is nonetheless of historical significance as an indication that, at Paris as at Oxford, no single account of the modes of cognition had yet become entirely standard. Moreover, Meyronnes was not alone in adding to the more usual dichotomy: Michael of Massa proposed a "deductive" cognition in addition to intuition and abstraction.⁵² But if Massa was innovative

⁴⁸ Ibid., prol. q.20 (Venice 1520, fol. 11vb): "Circa istam questionem primo ponam unam distinctionem de notitia ... est sciendum quod quadruplex est notitia. Prima est intuitiva, que scilicet est de re per seipsam. Secunda est abstractiva, que est per aliquod representativum. Tertia est illativa notitia, que est de relationibus que infertur ex cognitione terminorum. Quarta est discursiva vel arguitiva, et hec est duplex: una que incipit ab intuitiva et terminatur ad aliquid quod non videtur intuitive ... alia est notitia discursiva abstractiva, que incipit ab abstractiva et terminatur ad aliquid quod non cognoscitur abstractive, sicut patet de cognitione substantie et accidentis."

⁴⁹ Ibid., prol. q.17 (Venice 1520, fol. 10ra): "Ad primum <dico> quod anima non cognoscit seipsam nec intuitive nec abstractive, sed arguitive ex obiecto intuitive cognito, scilicet actu intelligendi;" prol. q.20 (fol. 12ra): "in anima nihil cognoscitur intuitive nisi actus ..."

⁵⁰ Ibid., prol. q.15 (Vat. lat. 894, fol. 9ra; Venice 1504, fol. 8rb): "Dico quod species proprie loquendo non cognoscitur nisi arguitive, et isto modo precise et non per representativum. Incipiendo enim a cognitione intuitiva, experior me intelligere; constat autem quod non nisi per aliquod presens in anima. Non est autem illud idem res, quia res non est in anima; igitur species rei. Cognosco igitur isto modo speciem mihi inesse."

⁵¹ At least, I have not yet found an explicit mention of his view; nevertheless, given Meyronnes' greater reputation in the fifteenth and sixteenth centuries, it seems to me probable that further study will reveal that he eventually attracted adherents to his distinction.

⁵² Michael of Massa, *Abbrev. in I Sent.*, prol. q.1 (canon. misc., fol. 3ra): "Secundus

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where his own positive account of cognition was concerned, he was otherwise typical of his fellow Parisians in his attitude towards Aureol's epistemology. This, in question after question, Massa strove to defeat.⁵³

Thus, to judge from those commentaries that survive, most theologians at Paris devoted extensive attention to refuting Aureol's hypothesis of the "apparent being" and to finding other ways to account for the experiences he had adduced. Their principal aim became to avoid positing intuitive cognition without a present object. None of these authors seems to have understood that, by defining intuition as visual perception rather than as a means of acquiring certitude, Aureol had departed completely from Scotus's view of intuition. Thus, reading Aureol from a more Scotist standpoint, several of these critics recognized, along with Guillaume de Brienne, that—as *they* understood intuition—Aureol's experiences, if not otherwise explicable, would be grounds for denying certitude in naturally acquired human knowledge.⁵⁴ Therefore, as long as Aureol's readers

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articulus est utrum sit dare tertium genus notitiae distinctum ab intuitiva et abstractiva, ad quem dico quod sic, et haec tertia notitia vocatur 'deductiva.'" See also below, n. 116.

⁵³ See the list of citations in Trapp, "Notes on Some Manuscripts." Among Michael's lengthiest discussions is that of prol., q.1, a.4 (*Abbrev. canon. misc.* 276, fol. 3va): "In quo articulo tractabuntur due difficultates. Prima: utrum intuitiva visio sensitiva possit esse absque obiecto actu presente—circa quam aliqui varia dicunt. Primo, quod notitia intuitiva et abstractiva non distinguuntur penes obiecta formalia. Secundo, quod distinguuntur penes modos, quia intuitiva facit cognoscere rem presentem vel saltem ac si esset presens, sed abstractiva non. Tertio, quod intuitiva est actualis sui obiecti in esse apparenti vero si notitia intuitiva sit vera, vel falso si notitia sit falsa. Quarto, quod notitia intuitiva non necessario requirit presentiam obiecti in rerum natura ad quam terminatur. Hoc quartum probatur multipliciter, primo experientis." This is followed immediately by the five experientiae of Aureol's proemium to the *Scriptum* (above, chapter IV, n. 81). To these, without a break, Michael attaches some of those from Aureol's d.3, s. 14: "Sexta est de illo qui portatur in navi qui iudicat montem et arbores moveri. Talis enim motus terminans actum iudicandi in esse apparenti non est subiective in monte ut patet, nec in ipso oculo, quia non videt se, nec aliquid in se cum non sit potentia reflexiva, nec in aere contiguo, quia motus non attribuitur aeri. Igitur illud esse apparens ad quod visio terminatur producitur a potentia visiva. Simile argumentum potest fieri de fractura apparente in baculo integro existente in aqua. Alia experientia est de ymaginibus que videntur in speculis ..." These are followed, in turn, by examples most near those of Aureol's Parisian *Reportatio* [q.2, ed. Boehner, p. 413]: "Preterea, eadem speculatura quod de longe videtur homine supereminens, alteri apparet plana; et idem collum columbe uni videtur album, alteri rubeum. Igitur unus horum habet visionem non terminatam ad obiectum in esse reali." It is not clear whether Michael combined several discussions—he did read Aureol closely enough to note the connections among the latter's various treatments of this issue—or whether he read a version of Aureol's commentary other than the two examined above, chapter IV (one possibility is Landulphus; cf. above, n. 19).

Among Massa's many objections to Aureol's view, is that it will not fit with perspectivist theory; cf. e.g. *ibid.* (fol. 4rb): "Hec opinio est contra Perspectivos <qui> dicunt quod conus visionis est in oculo et basis est in re visa."

⁵⁴ So Guillaume concludes, in his q.5, "utrum scientia intuitiva sit sine obiecto

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persisted in assuming that he shared Scotus's view of intuition as the guarantor of certitude, they rejected his account of cognition and the concomitant hypothesis of the "apparent being."

Nevertheless, at least one Parisian bachelor in the early 1340s defended Aureol's view, on the witness of Alfonso Vargas de Toledo, who read in 1344–45.⁵⁵ Vargas indicates that his colleague, Alfonso de Portugal, had subscribed to both components of Aureol's view. Alfonso de Portugal held that "in the act of seeing, the thing seen is placed in some perspicuous and apparent intentional being;" second, he held together with "the doctor whom he follows"—that is, Aureol—that there are in fact natural instances of intuitive visions without a present, existent object.⁵⁶

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presente" (Prague, fol. 8v): "Sed est hic alia opinio dicens primo quod propter nullam experientiam cognoscitur ponere notitiam intuitivam sine obiecto presente. [Ideo etc.] Ratio: per nullam experientiam cognoscitur tunc per quam possumus esse certi utrum sit vel non ..."

Guillaume of Brienne's discussion does not appear to derive from the *Scriptum* version of Aureol's commentary, but the rough nature of this reportatio makes it difficult to gauge the extent to which Guillaume paraphrased some other version(s) directly. Aureol's views are the central focus of the question: "Circa istam questionem sic proceditur. Primo recitabitur una opinio que dicit quod sic <potest esse sine obiecto presente>, et probat primo quod notitia intuitiva sensitiva, de qua—cum melius videtur—scilicet per experientias primo. Prima <experientia> est Commentatoris de sompno et vigilia, ubi dicit quod sensus quinque immutantur ab interiori motu opposito ei qui sit ab exteriori ... Secunda experientia est ubi dicitur quod si perspexerimus celum per foramen <idest in camera obscura> apparet nobis <forma> foraminis et lucis ... Tertia: <secundum> Augustinum ... si diu aspexerimus solem et post claudantur oculos ... Quinta est de baculo apparente fracto in aqua at tamen non est. Sexta est de existente in nave cui videntur arbores movere. Et de coloribus remanentibus in parietibus. Et de collo columbe. Et multe alie ad hanc intentionem ... Et sunt due rationes ad hanc. Prima, quia si negatur, tunc omne que apparent erunt sicut apparet. Et patet consequentia, quia ad oppositum: tunc quidquid apparebit sic existit ..."

⁵⁵ For Alfonso Vargas' *Sentences* commentary, I rely upon the Venice ed. of 1490 (repr. New York: 1952); for information concerning Alfonso's fellow bachelors on the *Sentences* at Paris in 1344–45, see Courtenay, *Adam Wodeham* (Leiden: 1978), pp. 130–33. On col. 247, Vargas mentions Alphonsus de Portugal, "qui mecum concurrebat in Lectura," from which we know that the latter also taught the *Sentences* in 1344–45.

⁵⁶ Alphonsus Vargas, *I Sent.* d.4, a.1–2 (Venice: col. 177–178), discussing the opinion of Alphonsus de Portugal: "dicebat quod creatura rationalis de potentia Dei absoluta potest habere actum visionis sive visionem que nunc videtur actualiter formaliter in visu, et non videre. Et ad probationem dicebat quod si ly 'precise' excludat omne esse obiectivum perspicuum sive apparens, casus est impossibilis ... (lin. 56ff, Contra Magistrum Alphonsum) Sed licet iste solutiones sint satis subtiles et pulcre, non satis faciunt tamen rationi. Non quidem prima pro cuius impugnatione pono 4 propositiones. Prima est quod res visa non ponitur per actum videndi in aliquo esse intentionali perspicuo et apparenti prout imaginatur ista solutio ... (col. 178, lin. 24ff.) Loquitur <de visione quando nihil videtur> de facto et de potentia naturali, sicut et iste socius et doctorem quem sequitur in hac materia, contra quem in primo articulo prime questionis huius prologi adduxi auctoritates istas et quasdam alias." This is a reference back to col. 6: "Aureolus in prologo primi questione secunda articulo tertio, contra definitionem tamen istam instatur sic: notitia intuitiva potest haberi sine actuali presentia obiecti ... antecedens probatur multiplici experientia ..." This is the Alphonsus Dionysius de Ulixbona (Lisboa) promoted

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On this evidence, we know that as late as 1344, Parisian theologians focused considerable attention on Aureol's understanding of intuitive cognition. By contrast, of the scholars already mentioned who lectured on Lombard's *Sentences* at Paris up through the academic year 1335–36, *none* shows any indication of familiarity with Ockham's definition of intuitive and abstractive cognition.⁵⁷

The Dispute between Bernard of Arezzo and Nicholas of Autrecourt

The most famous discussion of cognition at Paris in the 1330s was the debate between the Franciscan theologian, Bernard of Arezzo, and his secular colleague, Nicholas of Autrecourt. Their dispute must have occurred when both were bachelors of the *Sentences* inasmuch as the issues were, as Autrecourt mentions, initially broached in Bernard's lectures and were pursued in the public disputations which were the usual arena of bachelors of Theology.⁵⁸ Thus, the debate between Bernard and Autrecourt may have begun by mid-decade, and was probably over before the latter reached the licentiate in 1339.⁵⁹ More notorious events in that year have obscured the fact that at that time their discussion had already occurred, and it has instead become part of one of the most difficult textual problems facing historians of late medieval philosophy: to unravel the apparently complicated connections among the views of Buridan, Autrecourt, and Ockham.⁶⁰ Nevertheless, much of the problem's com-

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at the request of Pope Clement VI; see *CUP* II no. 1098.

⁵⁷ This claim includes Bernardus Lombardus (above, n.13), Thomas of Strasbourg (above, n.16) and Petrus de Aquila (above, n.14) even though their discussions have not been detailed above.

⁵⁸ Autrecourt, "First Letter to Bernard," edited in J. Lappé *Nicholaus von Autrecourt, sein Leben, seine Philosophie, seine Schriften*, BGPTM 6 (1908), p. 6*: "Et ideo ad evitandum tales absurditates sustinui in aula Sorbone in disputationibus..." Had Autrecourt been at the level of licentiate, he probably would have had the role of determining in the disputation, rather than merely that of sustaining a position.

⁵⁹ See Autrecourt's remark, in his revocation, "prima cedula" [ed. Lappé: p. 31*, lin. 11–15]: "Item, dixi, pro dolor, in primo principio quando legi Sententias et in epistola secunda et sexta quas scripsi contra Bernardum quod ex eo quod una res est, non potest evidenter evidentia deducta ex primo principio inferi quod alia res sit." For Autrecourt's *curriculum vitae*, see Roland Hissette, "Note sur Nicolas d'Autrecourt," *Bulletin de philosophie médiévale* 23 (1981), 94–96.

⁶⁰ The solutions to this problem which have provided the various historical frameworks used by most recent scholars concerned with late medieval thought are: K. Michalski, "Les Courants philosophiques à Oxford et à Paris pendant le XIVe siècle" (1921) in idem, *La Philosophie au XIVe siècle*; idem, "Sources du criticisme et du scepticisme" *ibid.*; J. R. Weinberg, *Nicholaus of Autrecourt: A Study in 14th Century Thought* (Princeton: 1948); E. A. Moody, "Ockham, Buridan, and Nicholas of Autrecourt: The Parisian Statutes of 1339 and 1340" (1947) repr. in idem, *Studies*, pp. 127–160; Mario Dal Pra, "La fondazione dell'empirismo e le sue aporie nel pensiero di Nicola di Autrecourt," *RCSF*

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plexity dissolves if, before considering the dispute between Bernard and Nicholas, we first examine the historiographic tradition which has woven together their views with those of Buridan and Ockham.

Paris 1339–1340: Autrecourt and the Documents

The initial basis for connecting Autrecourt's views and troubles to the influence of Ockham's thought was the evidence, at first sight incontrovertible, contained in the University of Paris's fourteenth-century records. Edited by Heinrich Denifle at the end of the nineteenth century, several documents seemed to record a crisis evidently precipitated by the introduction of Ockhamist thought. Beginning in the Arts Faculty, the crisis was marked first by the exclusion in 1339 of Ockham's oeuvre from texts to be lectured upon or studied. In 1340, the Faculty reinforced this move by drawing up a list of theses—presumably from Ockham's work—which they prohibited scholars from espousing.⁶¹ This did not, however, halt the crisis, which spread into the whole University, not only leading to the eventual condemnations of Nicholas of Autrecourt and John of Mirecourt, but also resulting *inter alia* in the burning of Autrecourt's books. This record thus seemed to place Autrecourt at the center of the debate as a supposed leader of the Ockhamist party at Paris.⁶²

Forty years ago, E. A. Moody recognized that, despite Denifle's editorial indications, the documents of 1339 and 1340 were unrelated. While the former restricted the adoption of Ockham's oeuvre as a text to

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7 (1952), 389–402; Ruprecht Paqué, *Das Pariser Nominalistenstatut. Zur Entstehung des Realitätsbegriffs der neuzeitlichen Naturwissenschaft* (Berlin: 1970); T.K. Scott, Jr., "Autrecourt, Buridan." For recent dependence upon their views see: John Boler, "Intuitive and Abstractive Cognition," in CHLMP, pp. 460–478; Francesco Bottin, *La Scienza degli Occamisti* (Rimini: 1982), 19–66, 111–136.

⁶¹ In what follows concerning the controversy at Paris in the years 1339–41, I recapitulate (and where pertinent, correct) Courtenay and Tachau, "Ockham, Ockhamists." The documents to which I here refer were edited by H. Denifle and E. Chatelain, CUP [vol. II (Paris: 1891), n.1023, pp. 485–486; n.1041, p.505; n.1042, pp.505–507; n.1124, pp.576–587; n.1125, pp.587–590]. The apparent connection among these documents is reinforced by Denifle's footnotes; cf. doc. 1023, note 2 [CUP II: p.486] where, on the authority of Prantl, Denifle connects the statute prohibiting use of Ockham's works to Buridan; again, doc. 1124 [CUP II: p.587n], Denifle states that Nicholas' errors "partim ex erroribus Guillelmi Ockam provenerant." Hence, while Denifle's apparatus is often helpful, it should not be accepted in all particulars uncritically.

⁶² Cf. K. Michalski, "Courants philosophiques," pp. 20–25, in which he begins his discussion by reference to examining the documents of Paris, but is influenced as well by Duhem and other histories of medieval philosophy, as is clear from his remark, p. 24, "L'examen des thèses de Jean de Mirecourt condamnées à Paris a conduit les historiens de la philosophie à conclure qu'elles avaient leur origine en partie dans la doctrine d'Ockham, en partie dans les idées de Bradwardine..." Michalski appears also to have been guided by Denifle's apparatus to the documents relating to Autrecourt's condemnation in CUP II, nn. 1124–1125, pp. 587, 590.

be expounded in lectures or cited in disputations, the latter, in Moody's estimation, concerned the teaching of Autrecourt, whom he dissociated from Ockham. To do so, Moody relied on internal criteria—that is, on their explicit views. He also examined the stance of Buridan whom he believed had played an instrumental role, as rector of the University, in the promulgation of the 1340 statute. This belief both tied Buridan to the initial moves against Autrecourt and raised new questions concerning Buridan's attitude toward Ockham. Not all scholars found Moody's arguments entirely persuasive, however, and both T. K. Scott and Ruprecht Paqué subsequently insisted that the statute of 1340 was aimed not at Autrecourt but at Ockham, and returned to Denifle's position that aspects of Autrecourt's condemned teaching derived from Ockham.⁶³

Nevertheless, the documents of 1339–40 reveal several facts until recently overlooked, not the least important of which is that Buridan was indisputably *not* rector at any of the times when these documents were promulgated.⁶⁴ Thus, there are no documentary grounds for assuming that he had any role in these proceedings (we do not even know whether he was present), so until his works have been sufficiently edited or studied to permit us to discover his views on cognition, we should set aside the question of Buridan's relation to the disputes over Ockham's and Autrecourt's views on these issues.⁶⁵

Second, the statutes of 1339–1340 were parts of a long series of statutes stretching from 1337–1347, which were largely unrelated to Ockham or Ockhamism, but mostly concerned the reassertion of magisterial authori-

⁶³ Moody, "Ockham, Buridan," Paqué, *Das Pariser Nominalistenstatut*; Scott, "Autrecourt, Buridan." See also L.D. Davis, "The Intuitive Knowledge of Non-Existents and the Problem of Late Medieval Scepticism," *New Scholasticism* 49 (1975), 410–430. On the doctrinal issues at stake in the 1340 statute, see below, chapter XII, nn. 2–13.

⁶⁴ Michalski seems to have been the first to assume, erroneously, that Buridan was rector at the time of the statute of December, 1340 which Michalski also took to be aimed at Ockham's thought; on that basis, Moody, "Ockham, Buridan," p. 129, was led to question Ockham's influence upon Buridan. The rector, who was chosen once every three months, at regular meetings for that purpose noted in the university calendar, was Alain de Villa Colis when this statute was enacted. For our evidence, see Courtenay and Tachau, "Ockham, Ockhamists," p. 86 n.29. Paqué, too, recognized that Buridan was not rector; see his *Nominalistenstatut*, pp. 70–71.

⁶⁵ Few scholars have endeavored to derive Buridan's thought principally from Parisian sources, but among important recent studies which do so, see: M. E. Reina, *Note sulla psicologia di Buridano* (Milan: 1959), esp. pp. 16–33; Peter Marshall, "Parisian Psychology in the Mid-Fourteenth Century," *AHDLMA* 50 (1983), 101–93; and J. M. Thijssen, "Buridan on Mathematics," *Vivarium* 23 (1985), 55–78; Bottin, *Scienza degli Occamisti*, pp. 123–37. Of late, scholarly attention has focused especially on his logical oeuvre; for a guide to recent work, see A. de Libera, "Bulletin d'histoire de la logique médiévale," *Revue des sciences philosophiques et théologiques* 69 (1985), 273–309, esp. pp. 307–09.

ty in the functioning of the University.⁶⁶ The prohibition of September 1339 conforms to this generalization. Actually containing two separate statutes recorded together, only the first referring to Ockham's work, the legislation of September 1339 merely insists upon the right of the Arts *masters* to establish which texts are suitable for study before they are introduced into their curriculum.⁶⁷ As the text makes clear, this magisterial prerogative has been abrogated by *bachelors* and other scholars in Arts.⁶⁸ This statute cannot, therefore, have had Autrecourt among its targets, for in September 1339 he had already attained not only the rank of master of Arts, but baccalaureates in Law and Theology as well. In other words, we should presume that he no longer taught Arts courses, because he was at the stage of career when a scholar's efforts were devoted to teaching theology. But even if by some extraordinary fervor Autrecourt not only managed to compose a *Sentences* commentary and Biblical lectures, and to meet his statutory obligation to participate regularly in theological disputations, but also taught Arts students, he nevertheless could only have done so as a *master*. In that case, he was not subject to the penalties

⁶⁶ Courtenay and Tachau, "Ockham, Ockhamists," pp. 56–57.

⁶⁷ *Ibid.*, pp. 54–56. The text of the first of these two statutes contained in the document Denifle treated as one, reads as follows [CUP II: pp. 485–86, n.1023]: "Universis presentes litteras inspecturis omnes et singuli magistri quatuor nationum, videlicet Gallicorum, Picardorum, Normanorum et Anglicorum, salutem in Domino sempiternam. A tramite rationis deviare videtur nec Deum habere pre oculis qui, que ab antiquis sunt statuta super re licita necnon rationi consona, transgredi non veretur, maxime cum ad hec juramenti vinculo fuerit obligatus. Cum igitur a predecessoribus nostris non irrationabiliter motis circa libros apud nos legendos publice vel occulte certa precesserit ordinatio per nos jurata observari, et quod aliquos libros per ipsos non admissos vel alias consuetos legere non debemus, et istis temporibus nonnulli doctrinam Guillelmi dicti Ockham (quamvis per ipsos ordinantes admissa non fuerit vel alias consueta, neque per nos seu alios ad quos pertineat examinata, propter quod non videtur suspicione carere), dogmatizare presumpserint publice et occulte super hoc in locis privatis conventicula faciendo: hinc est quod nos nostre salutis memores, considerantes juramentum quod fecimus de dicta ordinatione observanda, statuimus quod nullus decetero predictam doctrinam dogmatizare presumat audiendo vel legendo publice vel occulte, necnon conventicula super dicta doctrina disputanda faciendo vel ipsum in lectura vel disputationibus allegando. Si quis tamen contra premissa vel aliquod premissorum attemptare presumpserit, *ipsum per annum privamus, et quod per dictum annum obtinere honorem seu gradum inter nos non valeat nec obtenti actus aliquo modo exercere*. Si qui autem contra predicta inventi pertinaces fuerint, in predictis penis volumus perpetue subjacere." That there are two statutes recorded together is confirmed by a copy in Kraków, Bibl. Jag. 1391, which contains (fol. 49va) an abbreviated version of this statute and omits the second altogether. I thank J. Korolec for calling this manuscript to my attention.

⁶⁸ Courtenay and Tachau, "Ockham, Ockhamists," pp. 55–56; cf. penalties in the second statute additional to those underlined above: "... Si quis autem bachelarius aut scolaris contra premissa aliquid attemptaverit, penis in precedenti statuto positus modo et forma quibus supra omnino volumus subjacere. Si quis autem magister in disputationibus arguere presumat ... ipsum privatione trium lectionum decrevimus puniendum."

specified in the September 1339 statute.⁶⁹

Third, if Autrecourt can be removed from the potential targets of the 1339 statute, both he and Ockham can be dissociated from the December 1340 list of prohibited propositions which the Arts Faculty ordered be binding on their scholars and masters. While Ockham never held any of the prohibited positions, Autrecourt may have defended one of them earlier in his career.⁷⁰ By the date of promulgation, however, Autrecourt had obtained the licentiate and thus was scheduled soon to be promoted to the magisterium in the Theological Faculty where this list had, of course, no statutory authority whatsoever.⁷¹

Fourth, there is available further evidence that, by the late 1330s, controversy was building around central features of Ockham's logical and physical views, namely his reinterpretation of Aristotle's categories as granting ontological status only to substances and qualities, and his concomitant denial of extramental existence to motion and time distinct from permanent entities (*res permanentes*). Ockham was not the first, either at Paris or at Oxford, to head in this interpretive direction;⁷² nevertheless, this aspect of Ockham's thought probably was what the masters of Arts wanted to examine before ruling on the admissibility of his works as texts. Indeed, some members of the English-German nation (of which Autrecourt, as a scholar from the diocese of Verdun, was never a member) were

⁶⁹ As we noted, Courtenay and Tachau, "Ockham, Ockhamists," p. 58; p. 83 nn. 15–16. Virtually no attention in the modern discussion of Autrecourt has been paid to the fact that he acquired a law degree, for which see [CUP II: p. 505, n.1041n]: "providetur ei <Nicolao> magistro in artibus, baccalario in theologia, et in legibus." I infer that his baccalaureate in law preceded that in theology because he was already prior of the Sorbonne in 1333; this position required that he be a *socius* and hence a theologian. Cf. Hissette, "Note," p.94.

⁷⁰ For detailed argumentation on this point, see below chapter XII, at nn. 2–10; in addition, cf. Moody, "Ockham, Buridan;" the literature cited in Courtenay and Tachau, "Ockham, Ockhamists," n.20; and Courtenay, "Force of Words and Figures of Speech: The Crisis over *Virtus sermonis* in the Fourteenth Century," forthcoming.

⁷¹ Courtenay and Tachau, "Ockham, Ockhamists," p.58; the text of the statute of December 1340 is in CUP II, pp. 505–07, n.1042.

⁷² Courtenay and Tachau, "Ockham, Ockhamists," 61–64, 71–75. These positions are delineated in Ockham's logical and physical treatises as well as in his theological œuvre and in the extract from his physics commentary, the *De successivis*. And, it should be noted, as Weinberg, *Autrecourt*, showed, much of Autrecourt's *Exigit ordo* does manifest intellectual affinity to the recorded "Ockhamist" views on the Aristotelian categories, if not to Ockham's own, more careful, positions. These similarities could, however, be explained as well by reference to a Parisian tradition extending back to Olivi; on the latter tradition, cf. Courtenay, "Role of English Thought," p.115 at nn. 39–41, discussing A. Maier. If the commentary in Vatican, Vat. lat. 1087 attributed to Michael of Massa (and quoted above) proves not to be his, then (given its allusions to "English" methods more readily found in authors of the 1330s than 1320s) we may have here a theological witness more nearly contemporary with the actions of the Arts Faculty than hitherto assumed.

sufficiently opposed to such a reading of Aristotle as to establish an oath requiring that members of the Arts Faculty defend the views of Aristotle, Averroes, and "the other commentators," against those of the "Ockhamists."⁷³

In sum, then, renewed attention to the University's chartularies reveals that none of the documents of the Arts Faculty could have been binding *de jure* on Autrecourt; and if any concerned Ockham's positions, the statutory purview of the Arts Faculty encompassed only those works which were not theological. In other words, the Arts Faculty would never have been permitted by the Theological Faculty (and presumably never would have attempted) to rule on the admissibility of Ockham's *Sentences* commentary or *Quodlibeta* nor on opinions elaborated principally therein. Only in these works, however, did Ockham develop and explicate his views on intuitive and abstractive cognition.⁷⁴ What this requires us to recognize is that there is no basis, in the *documents* of 1339–1340, for assuming that Ockham's epistemological and noetic positions were anywhere at issue at Paris.

Autrecourt and Bernard on Intuitive Cognition

In the absence of such external evidence, the internal evidence linking the correspondence between Bernard of Arezzo and Nicholas of Autrecourt, on the one hand, to Ockham on the other, merits reconsideration. The major common ground upon which historians have located these three scholars has been the distinction between intuitive and abstractive cognition. Because students of medieval philosophy generally associate this dichotomy primarily with the views of Ockham, they have taken its presence in Autrecourt's correspondence with Bernard as *prima facie* evidence of Ockhamist influence upon the Parisian debate.⁷⁵ This

⁷³ See Courtenay and Tachau, "Ockham, Ockhamists," pp.60–64; AUP I: pp. 52–53; CUP II: p. 680: "Item, jurabitur quod statuta facta per facultatem artium contra scientiam Okamicam observabitur, neque dictam scientiam et consimiles sustinebitur quoquomodo, sed scientiam Aristotelis et sui Commentatoris Averrois et aliorum commentatorum antiquorum et expositorum dicti Aristotelis, nisi in casibus qui sunt contra fidem."

⁷⁴ As explicated above, chapter V.

⁷⁵ The tendency to assume that the presence of the dichotomy of intuitive and abstractive cognition is a sign of Ockham's influence may reflect the wide acceptance of Sebastian Day's *Intuitive Cognition* as the starting point of modern examination of the medieval texts; see recently Boler, "Intuitive and Abstractive Cognition;" Bottin, *La Scienza degli Occamisti*, pp. 111–23. Weinberg, *Autrecourt*, was more cautious, n.80 below. A greater difficulty in understanding Autrecourt's own position is the edition of the *Exigit ordo*, which fails to provide clear indications (as, e.g. by introducing paragraphs) of the *sic et non* of argument; still, it is possible to get straight which are Autrecourt's views, and which he at-

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is, to be sure, a slim reed. As we have established, after the first decade of the fourteenth century theologians nearly invariably took this dichotomy to be the starting point of any coherent account of knowledge. Furthermore, faced with several explications of the two modes of cognition, Parisian scholars had focused on alternatives derived from Scotus and Aureol, but had reached little consensus as of the mid-1330s, when Bernard and Autrecourt first expounded their views.

For Bernard's side of the discussion we must rely upon Autrecourt, since the Franciscan friar's *Sentences* commentary, if it survives, has not yet been found. Autrecourt sketches Bernard's view with any detail only in the first of the extant letters addressed to him, and it is important to notice that in this context Autrecourt is only concerned to refute his opponent. Thus, he does not quote Bernard at enough length to permit much insight into the latter's motivation; nor does Autrecourt offer in this letter any positive views of his own on cognition, beyond remarking that we do indeed have certainty concerning the objects of the external senses as well as of our interior acts.⁷⁶ A positive account of knowledge is, however, to be found in the *Exigit ordo*, and there Nicholas again insists upon the unqualified certitude that we attain naturally concerning external sensibles and our mental acts.⁷⁷ This stance is consistent, then, with Autrecourt's explicit reason for writing the surviving letters, namely his conviction that his colleague's account entails the denial of existential certitude, whether of external or intramental objects.⁷⁸

According to Autrecourt, when lecturing on the first book of the *Sentences*, Bernard of Arezzo had proposed three objectionable propositions

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tributes to his opponents, more nearly than does L. Kennedy, "Philosophical Scepticism in England," pp.35–39.

⁷⁶ Autrecourt, "First Letter to Bernard" [ed. Lappé: p. 6*] "... cum, ut ostendi, de actu vestrorum existentia non habeatis <Bernarde> secundum dicta vestra, et ulterius nec de intellectu vestro habebitis certitudinem, et ita nescitis, an sit <<is>>. Et ut mihi apparet, absurda sequuntur ad positionem vestram que ad positionem Achademicorum. Et ideo ad evitandum tales absurditates sustinui in aula Sorbone in disputationibus, quod sum certus evidenter de obiectis quinque sensuum et de actibus meis."

⁷⁷ Autrecourt's treatise known as the *Exigit ordo* is edited in J. R. O'Donnell, "Nicholas of Autrecourt," *Mediaeval Studies* 1 (1939), 179–280. See [p. 235, lin.6–9]: "Haec vero proprie sunt evidentie: objecta sensibilia, actus quos <experimur> in nobis, et hoc quantum ad incomplexa; quantum vero ad complexa principia nota ex terminis et conclusiones dependentes ex eis." See also below, nn. 89–108.

⁷⁸ "First Letter" [ed. Lappé: p. 4*, lin.18–24]: "Sic igitur clarum est ac michi videtur, quod ad dicta vestra sequitur, quod vos <Bernarde> habetis dicere, quod vos non estis certus de existentia obiectorum quinque sensuum. Sed quod gravius sustineri posset, habetis dicere, quod vos non estis certus de actibus vestris, utpote quod videatis, quod audiatis, immo quod non estis certus quod aliquis appareat vobis vel apparuerit vobis;" *ibid.* [p. 5*, lin.21–23]: "Sic igitur, recolligendo dicta, apparet quod vos habetis dicere, quod vos non estis certus de illis, que sunt extra vos..." See also n.76 above.

in the fourth question on the third distinction. The first of these is that,

Clear intuitive cognition is that [cognition] by means of which we judge a thing to be, whether it exists or not.⁷⁹

Of Bernard's three propositions, this has given historians of medieval philosophy the most difficulty when evaluating whether Bernard is in agreement with Ockham. Although most modern scholars have not hesitated to assign this definition of intuition to Ockham, a minority have correctly noted that the similarity to Ockham's view is at best superficial.⁸⁰ The Venerable Inceptor does not, after all, believe that by means of intuition we judge that an object exists *regardless* of whether it does; on the contrary, he insists repeatedly that when the object exists, by means of intuition we will judge that it does, and when the object does not exist, we will judge that it does not exist.⁸¹

If, however, we compare Bernard's proposition not to Ockham's definition of intuition, but to Aureol's instead, we find a much closer match. Aureol frequently implies, and at least once states explicitly, that in intuitive cognitions the extramental thing appears presently and actually to exist in reality, "whether it does or not."⁸² In the years before Bernard pronounced this position at the Franciscan convent, few Parisian theologians had stated Aureol's definition so carefully in disputing it; but Michael of Massa did, so it is reasonable to suppose that some among Bernard's audience recognized Aureol as the source of this description of intuition, even if Autrecourt did not.⁸³

Aureol is again evident as the source for Bernard's third proposition, that "intuitive cognition does not require an existent [extramental] thing."⁸⁴ This position is one for which Aureol argues at length in all extant versions of his lectures; it is, after all, the basis for his critique of Scotus's definition of intuition as the mode of cognition that concerns

⁷⁹ Autrecourt, "First Letter" [ed. J. Lappé, p. 2*]: "Prima <<propositio>>, que ponitur a vobis I Sententiarum, distinctione 3, quaestione 4, est ista: Notitia intuitiva clara est, per quam iudicamus rem esse, sive sit sive non sit."

⁸⁰ In the words of Weinberg, *Autrecourt*, p. 9, Bernard of Arezzo's notion of intuition bears a "resemblance [that] is only superficial" to Ockham's views on intuition; see also Moody, "Ockham, Buridan," p. 133; T. K. Scott, "Autrecourt, Buridan," p. 15, "Neither Nicholas nor Buridan should be regarded as an Ockhamist in his theory of knowledge, if by that is meant that the final positions concerning the nature and criteria of knowledge and the processes of cognition are the same as Ockham's."

⁸¹ See above, chapter V, at nn. 48, 54–58.

⁸² See above, chapter IV, n. 84.

⁸³ See, e.g., above n. 53; cf. also the Augustinian anonymous quoted above, n. 15.

⁸⁴ Autrecourt, "First Letter" [ed. Lappé: p. 2*]: "Tertia propositio ibidem posita est ista: Notitia intuitiva non requirit rem existentem." Autrecourt interprets Bernard as referring to extramental objects, as is evident from n.78 above.

existence. Aureol does not think such an intuition in the absence of its extramental object will be veridical, but he does think such intuitions occur; and in the two decades that roughly separate his work from Bernard's, theologians at Paris and elsewhere had frequently stated Aureol's view in precisely the terms Autrecourt attributes to Bernard.⁸⁵ Moreover, Autrecourt's first objection, couched as a fourth proposition which would follow from this, namely "that every awareness which we have of the existence of objects outside our minds, can be false," echoes the criticism of such earlier opponents of Aureol's understanding of intuition as Meyronnes.⁸⁶

If we may confidently take Aureol as the source of Bernard's first and third claims, are we able to do so for the second proposition to which Autrecourt objects? As Autrecourt reports it, Bernard had stated that:

The consequence, 'an object does not exist, therefore it is not seen,' is not valid, nor is this [consequence], 'this [object] is seen, therefore it exists.' Indeed, each is false, just as are these: 'Caesar is in [an] opinion, therefore Caesar exists,' and 'Caesar does not exist, therefore he is not in [an] opinion.'⁸⁷

It is more difficult to establish that Aureol is the source for this argument, which he does not seem to have stated explicitly in this form. Bernard's reasoning is nevertheless entirely consistent with and, indeed, follows from Aureol's views, particularly given his oft reiterated warning against the error of holding that "whatever appears, exists."⁸⁸ To assert that "this [object] is seen, therefore it exists" is patently to accept the same consequence against which Aureol warns; hence Bernard's wording merely reformulates his model.

Thus, even without amplifying Bernard's alleged positions to reconstruct their derivation from Aureol's account of cognition, the latter

⁸⁵ For Aureol, see above, chapter IV, at nn. 61–86; see also above, nn. 11, 15, 19, 36, 53, 54 (although some authors speak more precisely of non-present objects).

⁸⁶ Autrecourt, "First Letter" [ed. Lappé: p. 2*]: "Ex istis infero unam propositionem quartam, quod omnis apparentia nostra quam habemus de existentia obiectorum extra, potest esse falsa, ex quo—per vos—potest esse, sive obiectum sit sive non sit; et unam aliam propositionem, que quinta est et talis est: in lumine naturali non possumus esse certi quando apparentia nostra de existentia obiectorum extra est vera vel falsa, quia uniformiter—ut dicitis <<Bernarde>>—representat rem esse, sive sit sive non sit." Cf. Meyronnes, nn.40–41 above; and the author of Vat. lat. 1087 (fol. 183vb). In England, Chatton and Wodeham had made this point; see chapter X, nn. 42–43.

⁸⁷ Autrecourt, "First Letter" [ed. Lappé: p. 2*]: "Secunda propositio vestra, que ponitur ubi supra, est talis: 'Obiectum non est, igitur non videtur,' non valet consequentia, nec ista: 'Hoc videtur, ergo hoc est.' Immo utrobique est falsa, sicut in hiis consequentiis: 'Caesar est in opinione, igitur Caesar est;' 'Caesar non est, igitur Caesar non est in opinione.'"

⁸⁸ Above, chapter IV, at nn.25–26, 65; cf. also chapter VII, nn. 29–31.

emerges as the probable source for Bernard's views. Such a finding accords with the evidence from other *Sentences* commentaries produced at continental *studia* (including Paris) during the period of Bernard's training as a theologian, but there are further signs that, in their dispute, neither Autrecourt nor Bernard was concerned with—or even knew of—Ockham's theory of cognition. One such indication lies in the *Exigit ordo* where, as already noted, Autrecourt explicates his own views on intuitive cognition. His context is an inquiry into "whether all that which *appears* exists, and all that appears to be true is true?"⁸⁹ The very question is suggested by Aureol's claim that the denial of the "apparent being" entails the error of claiming that "all which appears, exists," as Autrecourt's discussion confirms, for he addresses some of Aureol's experiential evidence for the "objective being."⁹⁰ Autrecourt answers the question affirmatively. In doing so, he allows that these experiences show that vision involves "appearances," but insists that we can nonetheless distinguish non-veridical visions from veridical ones, such that we are—as he says—certain of the objects of the senses. Such objects are evident to us when they appear before us.⁹¹

⁸⁹ Autrecourt, *Exigit ordo* [ed. O'Donnell: pp. 228–233, "An Omne Illud Quod Apparet Sit"]: "Consequenter tractandum est de hoc problemate an omne illud quod apparet sit; et omne illud quod apparet esse verum sit verum."

⁹⁰ Ibid. [ed. O'Donnell: pp. 242–244 (It should be noted that the rubric, p. 241, "De entibus imaginariis," was introduced by the editor [see p. 179] and unlike "an omne illud quod apparet sit," is not suggested by the scribal index in the manuscript.) esp. p. 242 lin. 25–36]: "Ut supradixi, quaelibet cognitio est rei existentis, sed in hoc est differentia, quia intuitiva est rei existentis sub esse claro magis, et si Deus sic clarissime omnia cognoscat ut creditur, nostra intuitiva etiam posset dici abstractiva respectu cognitionis Dei quae intuitiva simpliciter diceretur. Et si res sit finita, tunc non videtur, cum unum obiectum sit perfectius et clarius alio, licet sint ejusdem rei, quod in talibus circa eandem rem finitam sit procedere in infinitum. Quodlibet enim esse obiectivum videtur deficere a perfectione quam habet res in se secundum esse subjectivum quod habet. Tunc secundum hoc est dare aliquod esse obiectivum finitum supra quod, si procederetur clarius cognoscendo rem, res cognosceretur secundum esse subjectivum;" and *ibid.* [p. 243, lin. 10–22]: "Notandum autem circa illud quod dictum est de esse obiectivo quod per esse obiectivum intelligo illud esse obiecti quod habet quamdam copulationem et indivisionem cum actu, ita quod ubicumque ponitur actus, ponetur et illud obiectivum esse, ut cum quis [in riparia] existit in navi et videtur sibi quod ripa movetur; et quocumque poneretur talis actus videndi, veniret obiectum secundum tale esse. Item esse obiectivum multiplicatur esse subjectivo remanente uno ..." See also n. 91, below.

⁹¹ Ibid. *Exigit ordo* [ed. O'Donnell: p. 228, lin. 17–25]: "Eapropter inducam aliqua probabilia circa quaesitum. Dico igitur si aliqua certitudo nobis insit de rebus, quod probabile est quod omne illud quod apparet esse sit, et quod omne illud quod apparet esse verum sit verum ... Nunc de omni eo quod apparet proprie, qualis apparentia est solum in actu sensuum exteriorum, est huiusmodi, alias non diceretur proprie apparere. Unde de multis iudicat intellectus quod sic sunt et eis assentit;" *ibid.* [p. 231 lin. 39–47]: "Item responderetur de baculo qui appareret fractus in aqua, et dico quod apparitio est ad quamdam imaginem quae est talis dispositionis sicut apparet. Et idem dicerem de motu ripae qui apparet existenti in navi. De febricitante cui dulcia videntur amara potest dici ut supra..."

Although Aureol's notion of the "apparent being" produced in perception lies behind Autrecourt's views, it has nevertheless been transformed, for he consistently employs the term "appearance" in accordance with its legal and etymological derivation from "what comes forth" [into view], that is, what arrives within the presence of vision's gaze.⁹² In the late 1330s, Autrecourt may not have been the only scholar to decipher the notion of "appearance" in this manner, and he was in any case not the last to do so at Paris,⁹³ but the inability of most theologians to understand him may reflect the novelty of his having confronted the epistemological problem of evidence with the training of a lawyer:

Now in speculative [matters] we seek to know but that the thing comes in appearance before the soul. This is not just as [it is] in legal observances, where the deed rather than cognition is investigated ... here we seek but evidence.⁹⁴

Hence, far from finding the putative existence of "appearances" problematic for an account of how we achieve certitude by route of the senses, Autrecourt considers such "appearances," precisely as presences, to be required for the very occurrence of any perception on the part of the external senses.⁹⁵ In other words, something must appear to the sense—that is, be present to it—for it to perceive.⁹⁶ Not only are the senses' perceptions thereby evident, but such evident awareness is among the most primary grounds for intellectual certitude. Autrecourt stresses that we do

⁹² J.F. Niermeyer, *Mediae latinitatis lexicon minus*, p. 51, cites a case from 1217 in which "apparere" is already used in this manner.

⁹³ For John of Ripa, cf. the article by Vignaux cited above, n. 3.

⁹⁴ Autrecourt, *Exigit ordo* [ed. O'Donnell: p. 184 lin. 32–36]: "Nunc in speculativis non quaerimus nisi ipsum scire ut res veniat in apparentia apud animam. Non est sicut in observantiis legalibus ubi quaeritur non cognitio sed opus ... Sed hic non quaerimus nisi evidentiam ..."

⁹⁵ Ibid [ed. O'Donnell: p. 228 lin. 17–25], quoted in n. 91, above; cf. also *ibid.* [p. 231 lin. 49–p. 232 lin. 3]: "Unde istae objectiones parum movent ad contrarium, sed longe plus movet ista quia, secundum quod dictum est de lumine imaginis, sequeretur quod nullus posset dicere de existentia vera subjectiva albedinis vel alicujus rei. Non enim potest dicere nisi per suam apparentiam; nunc dicitur quod illa apparentia terminatur ad imaginem rei et non ad aliquid existens subjective in re extra." Autrecourt responds [p. 232 lin. 4–19]: "Dicendum quod immo visus videns albedinem quod *aliquid* videat certum est. Hoc dicit 'sua apparentia' et quod est extra oculum et in tali loco—et concedo quod haec omnia sunt vera. Nunc quando non mutatur visio ad quodcumque <<nec>> se divertat et quomodo existens et realiter illud sibi apparet, imponit illud nomen et dici quod ibi est 'vera albedo' habens 'esse fixum vel subjectivum;' quando non sic imponit nomen, et appellat illud 'imaginem' sicut quando homo videtur in speculo ... esto quod plenissime videret eam ... In <<sensu>> tactu vero non sic videtur esse causa dubitandi."

⁹⁶ In the same way, to "appear" before a court is to come into the presence of the court (as opposed to litigating through such mediators as written briefs or appointed advocates).

have such certitude; the intellect, he claims, "is certain of all that which is evident to it, both [what is] ultimately [i.e. derivatively] evident and [what is evident] to it" from the senses.⁹⁷ "Now, concerning all that which 'appears,' properly [speaking]," Autrecourt continues,

Only such appearances as are in the exterior senses are of this sort; other [appearances] are not *properly* said to appear. Hence, concerning many [things] the intellect judges that thus they are, and assents to what, however, are not properly and most strongly said to appear to it, because they are ultimately evident, as that Rome is a large city. But by looking it would be *evident and entirely clear* to one who is in Rome.⁹⁸

From this standpoint, Autrecourt construes the objections concerning sense deception as quibbles missing the point that "full appearances," i.e. those that "appear in their full light," are introspectively and readily discernible because of their clarity from such partial appearances as occur in dreams or during fevers.⁹⁹ On Autrecourt's account, it is not possible for what are properly labelled "appearances" in the exterior senses to be false, because every plain appearance is true. Yet Autrecourt, while holding that the exterior senses cannot perceive falsely, nevertheless ad-

⁹⁷ Autrecourt, *Exigit ordo* [ed. O'Donnell: p. 228 lin. 21–23]: "Arguo sic: de omni eo intellectus est certus quod sit sibi evidens et ultimate evidens vel ipsi secundum actum sensus." I translate *ultimate* as "derivatively," because Autrecourt expressly argues that any evidence other than direct experience must derive from such experience.

⁹⁸ Ibid. [ed. O'Donnell: p. 228 lin. 23–27]: "Nunc de omni eo quod apparet proprie, qualis apparentia est solum in actu sensuum exteriorum, est hujusmodi; alias non diceretur proprie apparere. Unde de multis judicat intellectus quod sic sunt et eis assentit, quae tamen non dicuntur proprie et potissime sibi apparere, quia non sunt ultimate evidens, ut quod Roma est magna civitas. Sed videnti qui esset in Roma esset evidens et omnino clarum."

⁹⁹ Ibid. [ed. O'Donnell: p. 229 lin. 22–48]: "Occurrit secundum dubium <<contra opinionem propriam>> quod est Achilles apud adversarios: nam in somno alicui apparet quod volat per aerem vel quod est ultra mare ubi pugnat cum Saracenis. <<Responsio>> Dicerem sic praemittendo aliquid de his quae experimur in vigilia ... Et quod in somno non sit apparentia clara apparet ... Nunc in illis apparentiis, de quibus dixi quod sicut apparet sic est, sunt apparentiae omnino clarae," also, ibid. [p. 229: lin. 3–12]: "Contra hanc conclusionem sunt dubia. Primo quidem videbitur sequi <<contra me>> quod omnia sint vera et omnia sint falsa. <<Responsio>> Dico hoc inconueniens non sequi, propter quod praemitto quod non omnis actus virtutis comprehensivae est apparentia objecti; unde ut praemissum est alibi, intellectus habet actum judicandi et assentiendi <circa ea> quae non tamen sunt apud se in apparentia, etiam loquendo de apparentia improprie dicta ut quod Roma est magna civitas ei qui judicat et assentit isti complexo et tamen non vidit Romam. Verum est ergo <<quod>> si diceremus 'omne quod judicatur verum est verum, vel cui intellectus assentit,' <<tunc>> sequeretur illud quod dicis. Sed sic non dicimus, sed solum est sermo noster de actu apparentiae." Autrecourt refers to "full" appearance when arguing again against his opponent at, e.g., ibid. [p. 231 lin. 17–19]: "igitur oportebit semper reverti ad negatum ab eo <<i.e. ab adversario>> scilicet quod apparentia plena absolute sumpta semper est vera; et actus dicendi factus secundum eam semper est verus."

mits that the intellect can *judge* falsely.¹⁰⁰ This admission he thinks poses no problems, for he believes that if the intellect should judge falsely, "the judgment could be rectified in some way by the act [of appearance]."¹⁰¹

No matter how unproblematic Autrecourt thought this concession, his fellow theologians at Paris, like those at Avignon who eventually condemned his views, undoubtedly found it difficult to reconcile with any claim that the intellect attains certitude: for them, the fallibility of intellectual judgments concerning existence was precisely what was at issue. They worried that if sense perceptions were deceptive, then unreliable existential judgments were ineluctable.¹⁰² From that viewpoint, Autrecourt's response that erroneous judgments could be corrected "somehow" must have seemed feeble, and it is hardly surprising that his opponents failed to see grounds for supposing that Autrecourt was intent upon guaranteeing the carefully restricted certitude that he repeatedly claimed for the intellect.¹⁰³

It is possible, however, that Autrecourt's nonchalance concerning mistaken judgment stems, like his notion of appearance, from legal vocabulary, and that he envisions the sorts of errors of adjudication arising from insufficient evidence that are, with more or better evidence, corrigible. If so, he does not explicitly say; but such an interpretation allows us to appreciate how his steadfast assertions of certitude concerning what appears, and his attacks on Bernard for undermining it, are consistent with Autrecourt's acceptance of the fallibility of judgment.

Now, although Aureol is, however indirectly, the wellspring for Autrecourt's discussion, nevertheless it has usually been interpreted with Ockham's epistemology in view.¹⁰⁴ Ockham, however, had used the

¹⁰⁰ Ibid. [ed. O'Donnell: p. 229 lin. 18–21]: "Et ita illud objectum circa quod est actus iudicandi est apud intellectum in ratione apparentiae, sed forsitan non totum de quo alias plenius inquiretur; et sic est falsitas in actu iudicandi, licet non sit in actu apparentiae."

¹⁰¹ Ibid. [ed. O'Donnell: p. 230 lin. 1–6]: "Ex praedictis igitur videtur probabilis conclusio proposita, ut licet actus iudicandi assentiendi stent cum falsitate, actus ultimate apparentiae non. Et quare sicut de aliis esset una persuasio <<i.e. contra opinionem propriam>> quia apparentia talis est principium fundamentale omnis veritatis scitae a nobis, et ita tolleretur certitudo si sic esset quod staret <<apparentia>> cum non esse. Sed non sic in actu iudicandi qui, etsi quando sit falsus, poterit iudicium quodammodo rectificari per istum actum;" cf. also p. 228 lin. 29–44.

¹⁰² See for example, Meyronnes, above nn. 40–42; this worry can, of course, be traced back to the discussion between Henry of Ghent and Duns Scotus, for which see above, chapter III, at nn. 79–90.

¹⁰³ Cf. the revocations in "prima cedula" [ed. Lappé: p. 31* lin. 11-p. 32* lin. 11] and "secunda cedula" [ed. Lappé: p. 37* lin. 5–9].

¹⁰⁴ See, e.g. Bottin, *Scienza degli Occamisti*, pp. 114 ff., Weinberg, *Nicholas of Autrecourt*, pp. 177–85. Neither Bernard nor Nicholas ever mentions a definition of intuitive cognition as "illa per quam scitur rem esse quando est et non esse quando non est" which would

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terms "appearances" and "appears" rarely, always when quoting (and disagreeing with) Aureol.¹⁰⁵ Moreover, the *only* textual evidence in this discussion for Autrecourt's familiarity with Ockham's definition of intuition is supplied by the modern editor of the *Exigit ordo* in a note which identifies Ockham as Autrecourt's target in the following remark:

From the foregoing it appears that the proposition is not in every case true which states that 'intuitive cognition is of the existent thing as existent, and abstractive cognition is not, but is [instead] indifferent to being and non-being.'¹⁰⁶

This final indication that Ockham's understanding of cognition was at issue when Autrecourt wrote is, despite the editorial reference to Ockham, no evidence at all for the latter's influence upon the discussion, for the definition is in fact Scotus's.¹⁰⁷ Autrecourt himself relies relatively little upon the dichotomy of intuitive and abstractive cognition, and distinguishes them principally according to the resultant clarity, much as had definitions offered earlier in the century. Thus, Autrecourt states, "each cognition is of an existent thing, but the difference lies in this, that intuitive [cognition] is more clearly of the being of an existent thing" than is abstractive cognition.¹⁰⁸

Whatever the problems inherent in Autrecourt's stance, among its consequences, of course, is that he need not produce an alternative account for Aureol's experiential evidence. Most who had done so had argued

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in fact indicate at least indirect familiarity with Ockham's formulation.

¹⁰⁵ See above, chapter V; and chapter VII, at n. 52.

¹⁰⁶ Autrecourt, *Exigit ordo* [ed. O'Donnell: p. 242 lin. 23–24]: "Ex praecedentibus apparet quod illa propositio non est omnino vera quae dicit: 'cognitio intuitiva est rei existentis ut existens et abstractiva non; unde est indifferens ad esse et non esse.'" In n. 181, O'Donnell refers the reader to the first question of Ockham's lectures on the *Sentences*.

¹⁰⁷ See above, chapter III, nn. 72, 73, 77.

¹⁰⁸ Autrecourt, *Exigit ordo* [ed. O'Donnell: p. 242 lin. 25–29]: "Ut supradixi, quae-libet cognitio est rei existentis, sed in hoc est differentia, quia intuitiva est rei existentis sub esse claro magis, et si Deus sic clarissime omnia cognoscat, ut creditur, nostra intuitiva etiam posset dici abstractiva respectu cognitionis Dei quae intuitiva simpliciter diceretur;" cf. also *ibid.* [p. 264 lin. 9–27]: "Et in experientia nostra est secundus ordo intellectuum intelligentium abstractiva; sed non videtur quod sit aliquis intellectus intelligens intuitive, nisi uno modo et <alius> alio modo, quilibet sic intelligens intuitive; nam ut dictum est, quilibet intellectus apprehendit objectum primum in se quantum apprehensibile est ... adhuc potuerunt stare illi duo ordines intellectuum imaginatum supra, licet non attendatur differentia secundum modum cognoscendi intuitivum et abstractivum. Vel forsitan diceretur quod intuitiva non distinguitur ab abstractiva in hoc quod est cognoscere objectum in se ut dictum est, sed quia una est per discursum, vel quasi, alia non ... et ideo occurrit alius modus dicendi, ut diceretur quod distinguuntur secundum quid, secundum clarum et minus clarum, quia intuitiva est magis clara quam abstractiva ... et his apparentis visis non videtur differentia nisi in nomine." Thus, Autrecourt objects to Bernard for having termed "clear" the cognition of an object whether it is or not (above, n. 79).

that an "apparent being" superfluously explained what perspectivist theory could easily cover. For Autrecourt, however, one of the advantages of the notion of the "apparent being," as transformed into an "appearance," was that it rendered redundant the hypothetical multiplication of species from object to percipient.¹⁰⁹ The positing of such species in the intervening medium had, after all, complicated any account of how the medium was continuous, and had raised the issue of the speed of the species' propagation to the percipient, as generations of scholars after Roger Bacon had recognized.¹¹⁰ Autrecourt was among the scholarly minority who decided that such difficulties were insoluble, inasmuch as they arose from manifestly unlikely claims. So, at least, he implied in outlining the commitments of the theory that vision occurs through the multiplication of species:

They say that if there should in fact be a mountain visible from twenty leagues [away], this would be because it causes some realities, which they call 'species,' and that these multiply themselves through the whole medium, such that they are infinite and infinitely [multiplied]. And thus [species] always multiply themselves, until they arrive at [the sense of] sight; and all [this] is done in an instant. In sound this [multiplication] is done successively, and nevertheless it seems as if it is done all at once. They also posit a memory which preserves the species of intentions which are not sensed, and which sometimes move [the memory to act], and sometimes [do] not; and much [else of] this sort.¹¹¹

As Autrecourt suggests here, any claims that species multiply instantly

¹⁰⁹ Indeed, Autrecourt seems to have construed the *act* of vision as "apparitio," i.e. the *actual* appearing; cf. above, n. 101, the contrast between "actus iudicandi et assentiendi" and "actus ultimate apparentiae;" again, n. 99. Possible sources for such a claim include Aureol *Scriptum*, d.3, s.14 [II: p. 713 lin. 20–25]: "visio non est nisi apparitio quedam;" Godfrey of Fontaines, VIII *Quodl.* q.2 [PhB IV: p. 30]: "affectiones in voluntate bene disponunt et determinant voluntatem ad hoc quod ab aliquibus obiectis determinatis moveatur in quantum ... fit apparentia obiecti in intellectu;" *ibid.*, q.7 [PhB IV: p. 75]: "evidens et apparens simpliciter, non evidens et non apparens simpliciter sunt contradictoria."

¹¹⁰ Autrecourt, *Exigit ordo* [ed. O'Donnell: p. 190 lin. 3–7]: "Nunc ex nostra parte non ponimus aliquas tales res <i.e. species> de novo causari ab objectis, sed solum dicimus quod objecto praesente visui, oculo aperto, etc.—accipe in hoc <conditiones> concurrentia—aliqua realitas est nunc praesens animae quae prius non erat praesens; erat tamen." See above, chapter I, at nn. 58–59, 63; also Rosetus, discussed in Tachau, "Species in medio," pp. 437–38; the author of Vat. lat. 1087, fols. 205ra–211va.

¹¹¹ Autrecourt, *Exigit ordo* [ed. O'Donnell: p. 189 lin. 44–p. 190 lin. 2]: "Dicunt siquidem si sit unus mons qui videatur a viginti leucis, hoc est quia causat quasdam realitates quas vocant species et illae multiplicant se per totum medium, ita quod sunt infinitae et infinities. Et semper sic multiplicant se, donec veniant ad visum; et totum fit in instanti. In sono fit successive et tamen quasi subito videtur fieri. Ponunt etiam memoriam, quae reservat species intentionum non sensatarum, quae aliquando movent, aliquando non; et multa talia."

must presuppose that light (*lumen*) is not propagated in the manner of sound, which "according to common teaching multiplies successively," that is to say, over time. But the assumption that light and sound are dissimilar is insufficiently grounded, as he indicates, for it rests upon our perception that no time is required for light to reach our eyes. As Autrecourt points out, we are equally unaware that sound requires time to reach our ears.¹¹² Thus, we cannot accept that either light or sound is multiplied instantaneously from object to percipient solely on the basis of our perceptual experience. Moreover, by accepting that the propagation of light and sound are similar processes, Autrecourt is able to conclude that light, not being "some things newly created by visible objects," consists rather of "some bodies"—which he elsewhere specifies are atomic—that innately follow from the motion of the sun or even of some luminous body.¹¹³ How unacceptable this attack on species remained may be gauged by the fact that this conclusion was among those that the Avignonese commission required that Autrecourt recant.¹¹⁴

While Autrecourt faced an ever growing consensus among Parisian-trained theologians on what would constitute an account of knowledge sufficient to defeat the uncertainty that they generally eschewed, he nevertheless did not face unanimity. Indeed, his was not the only unusual understanding of cognition in the transitional decade that, where the development of epistemology was concerned, the 1330s proved to be. At some point during his debates with Bernard, an otherwise unidentified

¹¹² Ibid. [ed. O'Donnell: p. 201 lin. 10–20]: "Quid autem diceretur de lumine quod est in medio? Quid est in nocte? ... Si autem dicatur hic instando quod lumen generatur in instanti, dicendum quod licet videatur generari in instanti quia quasi subito, in tempore tamen est. Unde sonus secundum doctrinam communem multiplicat se in medio successive, quia cum quodam motu locali, videtur tamen fieri quasi subito. Sic quoque non est difficile imaginari quod aliqua sint corpora subtiliora et magis penetrantia quae quasi subito videntur se diffundere per totum medium et praecipue consideratis aliquibus de motu et quiete—quae dicitur cum de ipso tractabitur."

¹¹³ Ibid.: "Posset dici quod ipsum lumen nihil aliud est quam quaedam corpora quae nata sunt assequi motum solis seu etiam alicujus alterius corporis luminosi;" for the specification of these "corpora" as atomic, cf. ibid [ed. O'Donnell: p. 209 lin. 9–11]: "In quocumque igitur sunt infinitae partes alicujus quantitatis, illud est infinitum extensive quia cum quaelibet pars sit extensio quaedam, et sunt infinitae, inintelligibile est quin sit extensio infinita; hoc autem continuum; atomus qui videtur in radio solis est hujusmodi."

¹¹⁴ "Secunda cedula" [ed. Lappé: p. 38* lin. 11–17]: "Item, quod lumen nichil aliud est, quam quedam corpora <que nata> sunt sequi motum solis, seu etiam alterius corporis luminosi, ita quod fit per motum localem talium corporum advenientium ad presentiam corporis luminosi. Et si dicatur quod non potest fieri per motum localem, quia in instanti fit, respondet, quod immo fit in tempore sicut sonus, licet non percipiamus, quia fit subito.—Erroneum;" also ibid. [lin. 1–10]: "Item, quod in rebus naturalibus non est nisi motus localis, scilicet <congregation> is et disgregationis ... corporum atomalium ..."

Aegidius intervened in a letter addressed to Autrecourt.¹¹⁵ In this contribution to the discussion Aegidius revealed himself not only to be unaware of Ockham's theory of cognition but also to be possessed of views on cognition which were markedly idiosyncratic when measured against those of his contemporaries on either side of the Channel. Thus, despite his acceptance of the traditional bifurcation of sensitive and intellectual powers, Aegidius' further distinction between "simple apprehension" and "composition and division" had long since been superseded by that between intuition and abstraction—even if, for many contemporaries, the latter terminology embraced Aegidius' division. More unusual still was his subdivision of simple apprehension into "precise" and "coceptive" cognition. If he had a source for these terms, it was not Scotus, Aureol, or Ockham.¹¹⁶

On all the available documentary and doctrinal evidence, then, we must conclude that Nicholas of Autrecourt's and Bernard of Arezzo's views on the nature of cognition, like their dispute, grew not from any acquaintance with Ockham's or Ockhamist epistemology, but rather from problems generated by Peter Aureol's theory of knowledge. In this, Nicholas and Bernard contributed to a Parisian tradition in which Scotus and Aureol were the significant catalysts, a tradition that began a decade before their debate and continued for at least another decade, as Alfonso Vargas' critique of his Portuguese colleague informs us. Far from being as obscure to fourteenth-century scholars as he has been for those of the twentieth century, Aureol probably inspired some significant "Aureolists," at least in epistemology.¹¹⁷ Seen in this context, the circumstantial historical evidence for Ockhamist epistemology as the foundation for the

¹¹⁵ "Epistoli Egidii ad Nicholaum" [ed. Lappé: pp. 14*–24*]; for guesses as to the identity of Aegidius, see Hissette, "Note," p. 95. We have no secure date for the intervention, but it must have been relatively early, inasmuch as Aegidius only knows of two letters to Bernard [p. 14* lin. 11–13].

¹¹⁶ Ibid. [ed. Lappé: p. 17* lin. 24–p. 18* lin. 12]: "Respondebo, remittendo, quod nos experimur nos habere duplicem cognitionem, scilicet sensitivam et intellectivam; et hanc duplicem: scilicet simplicem apprehensionem, et compositionem et divisionem. Sed apprehensio simplex duplex est. Quaedam est precisiva, qua scilicet una res cognoscitur cum precisione ab omni eo quod non est ipsa; alia est coceptiva, que perfecta magis est quam prima, qua scilicet aliqua res intelligitur cointellecta alia re eadem simplici apprehensione, quod contingit propter dependentiam seu attributionem aliquam unius ad alteram vel cuiuslibet ad quamlibet, verbi gratia, qui perfecte apprehendit relationem necessario cointelligit terminum; nec oportet quod sit alia intellectio relationis et alia termini ... Adhuc compositio vel divisio, que est secunda operatio intellectus, est duplex: quedam discursiva, scilicet conclusionis; alia non discursiva vel sine discursu, ut intellectio principii complexi."

¹¹⁷ Above, nn. 55, 56; in addition, perhaps Richard Barbe, on whom see Zenon Kaluza, *Thomas de Cracovie, Contribution à l'histoire du collège de la Sorbonne* (Wrocław: 1979), pp. 137–38.

logical, scientific, and theological developments of the early 1340s at Paris disappears. Rather, the ground into which the English theories of knowledge produced in the decades of the 1320s to 1330s were sown had been prepared first by Aureol, his audience, and his adherents.

Chapter Twelve— Epilogue: Adam Wodeham's First Parisian Readers

If readers of Ockham's theological works cannot be found at Paris before the early 1340s, it does not follow that the same can be said of the *Sentences* commentaries written by other scholars at English *studia* during the 1320s–1330s. On the contrary: as considerable as the evidence that Autrecourt and his generation remained unaware of Ockham's epistemology are the signs that Autrecourt had become fairly well acquainted with the views of other English theologians from the 1320s–1330s.¹ Indeed, there are indications that Autrecourt's incorporation of their methodology may have been at the heart of the controversy over his work.

As evidence that English developments lie behind Autrecourt's thought, we may count one of the articles in the Arts Faculty's statute of December 1340:

Let no one assert without distinction or explanation that 'Socrates and Plato [are nothing],' or 'God and creature are nothing,' since these words are *prima facie* ill sounding, and because such a proposition has a false sense, namely if the negation implicit in the term 'nothing' be understood as falling not only upon the being singularly [denied], but also upon [the] beings plurally.²

The statement that "God and a creature are nothing," is one that in 1346 Autrecourt conceded he had earlier made in the *rue de Fouarre*, where Arts teaching focused.³ In addition, he admitted to having said "that what is

¹ Autrecourt may also have been familiar with Parisian "Ockhamist" views on the reinterpretation of the categories which stemmed (without careful fidelity) from Ockham's *Summa logicae*, commentaries on the *Physics* or, more derivatively still, from the *De successivis*. Thus, we can compare Conrad of Megenberg's nearly coeval criticism of "Ockhamists" to the remark in Autrecourt's *Exigit ordo* [ed. O'Donnell: p. 197 lin. 14–17]: "Nam cum noviter ad intelligentiam doctorum hujus universitatis venit quod aliqui asserebant ut probabile quod substantia materialis et quantitas non distinguuntur realiter, a majoribus ipsorum audivi quod contra tales non erat dignum arguere quoniam principia negabant per se nota." For Conrad of Megenberg, cf. Courtenay and Tachau, "Ockham, Ockhamists," 72–75; Courtenay, "Reception of Ockham's Thought," 50–55.

² Here I emend the translation and punctuation offered in Courtenay and Tachau, "Ockham, Ockhamists," p. 59, for the passage from CUP II, n. 1042, pp. 505–07: "Item, quod nullus asserat absque distinctione vel expositione, quod Socrates et Plato, vel Deus et creatura nichil sunt, quoniam illa verba prima facie male sonant, et quia talis propositio sensum unum habet falsum, videlicet si negatio in hac dictione 'nichil' implicita intelligeretur cadere non solum super ens singulariter, sed et supra entia pluraliter."

³ Autrecourt, "prima cedula" [ed. Lappé: p. 34*]: "Item, dixi semel in vico Strami-

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complexly signifiable by this proposition: 'God and a creature are distinguished,' is no thing." In the eyes of the Arts Faculty as in those of the papal commission examining him, these statements did not seem theologically sound.⁴ In fact, they must have been incomprehensible to anyone unfamiliar with the London and Oxford debates over the immediate object of knowledge, which had resulted in the semantic notion of the *complexe significabile*. Since Adam Wodeham elaborated his account of knowledge only a few years before Autrecourt lectured on the *Sentences*, the latter (unlike the masters who attacked his views) was a member of the first scholarly generation who could have had Wodeham's words available to them.⁵

Thus, Autrecourt's use of the notion of "what is complexly signifiable" reveals an intellectual debt, however indirect and partial it may have been, to Wodeham—and therein lies the real significance of Autrecourt's recanted positions. These are, after all, more readily intelligible when read as an extension of Wodeham's explication of the *complexe significabile*.⁶ Among the problems that Wodeham had raised in proposing this as the adequate object of knowledge was its ontological status. His own response had been that to inquire what kind of thing "what is only complexly signifiable" is, poses an incoherent question, and Autrecourt seems to have been persuaded of the correctness of this stance. In this way, for example, Autrecourt's statement that "God and a creature are nothing" is probably to be understood as a claim denying the independent ontological status of the state of affairs signified by the compound subject "God and a creature" in such propositions as, "God and a creature are distinguished."⁷

Some of Autrecourt's fellow masters of Arts were evidently able to appreciate his point, to judge from the statute's wording of the dangers that its drafters saw in permitting such assertions as "Socrates and Plato are

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num quod non potest evidenter ostendi, quin omnia, que apparent, sint vera (31)—Falsam. Item, dixi in quadam disputatione, quod contradictoria ad invicem idem significant (33)—Falsam. Item, dixi in quadam disputatione, quod Deus et creatura <non sunt ali>quid (32)—Falsam et scandalosam prout verba sonant;" again, in the articles sent from Paris [ed. Lappé: p. 41* lin. 22–23].

⁴ Ibid. [ed. Lappé: p. 41* lin. 24–25]: "Item, quod significabile complexe per istud complexum: 'Deus et creatura distinguuntur,' nichil est (55).—Falsum et scandalosum."

⁵ See above, chapter X, at nn. 9–11, 93–113.

⁶ The article from the December 29, 1340 statute has puzzled modern scholars, but see H. Elie, *Le complexe significabile*, pp. 37–40, who first argued for the connection between the statute and the *complexe significabile*, but inferred that Autrecourt derived the doctrine from Rimini; see also F. Bottin, *Scienza degli Occamisti*, pp. 191–95 who correctly notes that this reverses the order of intellectual priority.

⁷ Thus, see Gregory of Rimini, *I Lectura prol.*, q.1 [I: p. 9 lin. 20 – p. 10 lin. 24], partly quoted in n. 38 below.

nothing" or "God and [a] creature are nothing" without further explication. After all, the masters do not reject construing the term "nothing" as attaching to the referent of the compound subject *taken as a whole*, that is, to God-and-creature. They fear, rather, that when the claim concerning the ontological status of the *dictum* of the proposition is unclearly presented, students may infer that the expression "are nothing" refers to each part of the subject separately, and thus interpret the speaker as denying that God exists, that a creature exists, that Socrates exists, and so on.⁸

In any event, Autrecourt's position is not strictly Wodeham's, but modifies it to allow signification by the constituents of propositions (in this case, their subjects, even if compound), rather than reserving it to the propositions themselves. Such an understanding of signification would have been in accord with that of Chatton, who had held that each of the terms in a proposition signifies one-and-the-same extramental object, albeit differently. On this basis, as Wodeham had argued, Chatton had committed himself to the view that contradictory propositions signify the same thing.⁹ This conclusion, too, Autrecourt acknowledges having propounded in a disputation.¹⁰

That Autrecourt's notion of the *complex significabile* conflates the views of Wodeham and Chatton on the signification of propositions is supported by the later remarks of Pierre Ceffons, who lectured on the *Sentences* at Paris a year after Autrecourt had been required to recant the sixty-five propositions drawn from his teaching and condemned at Avignon. Ceffons repeatedly mentions the risks of accepting such innovations as the *complexe significabile*, which he nevertheless hesitantly accepts. In its defense, he notes that he has found the notion in the work of Gregory of Rimini, Adam Wodeham, and he thinks, "even in Chatton."¹¹ Ceffons' allusion suggests that Parisian scholars, in trying to make sense of the embarrassment of riches facing them in the newly acquired English theologi-

⁸ This seems to be the point of the warning against a false sense in the article quoted above, n.2: "si negatio in hac dictione 'nichil' implicita intelligeretur cadere non solum super ens singulariter, sed et supra entia pluraliter." Such a reading is consonant also with the interpretation Courtenay and I have advanced elsewhere, that the promulgators of the statute were concerned about increasingly imprecise logical and rhetorical argumentation; in addition to our "Ockham, Ockhamists," cf. Courtenay's "Reception of Ockham's Thought at Paris."

⁹ I *Lect. sec.* d.1, q.1 [ed. Gál: p. 76 para. 20, 21]: "Volo igitur quod in anima istius simul sint iste due propositiones 'Deus est Deus' 'Deus non est Deus' ... contradictoria—etiam per istum <Chatton>—significant omnino idem, aliter non essent, ut dicit, contradictoria."

¹⁰ Above, n.3; cf. also "alia cedula" [ed. Lappé: p. 37*]: "Ite<m, quod propositiones>: 'Deus est,' 'Deus non est,' penitus idem significant, licet <alio modo> (3).—Falsum."

¹¹ For Pierre Ceffons' remarks, see below, n.74.

cal oeuvre, had confused the views of Wodeham and Chatton. This is not difficult to understand, for the former had, after all, accepted the force of the latter's arguments in countering Ockham's views on the object of knowledge.¹²

Thus, while the Parisian articles of December 1340 tell us nothing at all about whether Ockham's *Sentences* commentary was already known at Paris, they do confirm the new availability of the ideas of other theologians trained in English *studia*. Wodeham and Chatton were significant contributors to the "new English theology" produced from 1315 onwards by the incorporation of mathematical or analytical languages and increasing resort to propositional analysis as a methodology.¹³ English theologians thereby accomplished a shift in method analogous to that achieved in twentieth-century thought by the advent of the logical programme established by Frege, Russell, and Wittgenstein. Both shifts have been difficult for non-specialists to accept, and Autrecourt's doctrines indicate that he was among the first at Paris to comprehend the Oxford semantic theories to some degree. Moreover, because the theology that they permitted *required* a foundation in that new logic, perhaps he even encouraged making it available to the Arts students in the *rue de Fouarre*. There he may have inspired bachelors who continued to explore the new logic.¹⁴

Be that as it may, the more senior Parisian masters of Theology and many of Autrecourt's colleagues in the Arts Faculty trained in the indigenous tradition of Paris, presumably considered the new material strange, and found incomprehensible and dubious what they believed to

¹² See above, chapter X, nn. 96, 99.

¹³ I take the term "new English theology" from Courtenay; see, for example, his "Role of English Thought," pp. 111–115. Historians of late medieval thought are indebted to John Murdoch for elaborating, in a series of articles, precisely how central the development of analytical languages and propositional analysis were to the "theologia anglicana;" in addition to his "Mathesis," see especially: "The Development of a Critical Temper: New Approaches and Modes of Analysis in Fourteenth-Century Philosophy," *Medieval and Renaissance Studies* 7 (1978), 51–79; "Propositional Analysis in Fourteenth-Century Natural Philosophy," *Synthese* 40 (1979), 117–46; "*Scientia mediantibus vocibus*: Metalinguistic Analysis in Late Medieval Natural Philosophy," in *Sprache und Erkenntnis im Mittelalter*, *Miscellanea Mediaevalia* 13/1 (1981), 73–106.

¹⁴ This would explain the references in Autrecourt's revocation to statements in the *rue de Fouarre*, since (as indicated above in chapter XI, nn. 58–59, 69–71) Autrecourt's studies in the upper Faculties of Law and Theology were well advanced in the early 1330s, and condemnations delayed more than a decade are hardly likely. That bachelors were not for long deterred from studying the new treatises from England is evident from codicological evidence and from the contents of Nicholas Drukken of Denmark's *Prior Analytics* commentary, for which see: N. J. Green-Pedersen, "Nicolaus Drukken de Dacia's Commentary on the Prior Analytics—With Special Regard to the Theory of Consequences," *CIMAGL* 37 (1981) 42–69; see also Courtenay and Tachau, "Ockham, Ockhamists."

be his "innovations." Difficulties in appreciating the newly arriving methods and ideas were doubtless exacerbated for any member of the Arts Faculty who was not simultaneously studying theology, because such a scholar would have had less direct acquaintance with the English *Sentences* commentaries in which they were elaborated. Similarly, the two popes during whose reigns Autrecourt's trial progressed, had both received their theological training at Paris before the development of the English method, and we can expect that they were equally at sea when confronted with the controversy over Autrecourt's teaching. Finally, few of the resident curial theologians who could be selected to sit on examining panels had any training that equipped them to understand the "insanities of British logicians," as Petrarch, a sometime courtier at Avignon, labelled the new scholarship.¹⁵

The Bachelors of the Sentences in the Early 1340s

Yet the "new English theology" found proponents after Autrecourt among the younger theologians, beginning with Gregory of Rimini, Alfonso Vargas of Toledo, John of Mirecourt, and their colleagues. These scholars clearly appreciated the "Anglican subtlety," and their *Sentences* commentaries bear its fruit.¹⁶ This new receptivity of the younger scholars at Paris to English theology is the context within which the Parisian scholarly community finally became aware of Ockham's epistemological and noetic views. Because these became familiar to theologians at Paris alongside the critiques of Chatton, Wodeham, and other English scholars who had generally linked Ockham's account to Aureol's, we should not be surprised that this line of interpretation continued at Paris, where it

¹⁵ Thus, as quoted in Neal Gilbert, "Ockham, Wyclif, and the 'Via Moderna,'" in *Antiqui und Moderni: Traditionsbewusstsein und Fortschrittsbewusstsein in späten Mittelalter*, *Miscellanea Mediaevalia* 9 (Berlin: 1974), p. 122n, Petrarch warns a correspondent: "Sed quoniam fugiemus a facie insanorum, si ne insule quidem tute sunt... Immo vero iam insularum peculiare malum est, si dyaleticorum agmini britannico ethnea nunc novorum Cyclopum acies accesserit." See also Gilbert, "The Early Italian Humanists and Disputation," in A. Molho and J. Tedeschi, eds., *Renaissance Studies in Honor of Hans Baron* (Florence: 1974), 203–26. On the education of Benedict XII (Jacques Fournier), cf. Courtenay and Tachau, "Ockham, Ockhamists;" on Clement VI (Pierre Roger), see P. Fournier, "Pierre Roger (Clément VI)," *Histoire Littéraire de la France* 37 (1938) 209–38; and Barbet (cited above, chapter XI, n.8).

¹⁶ In addition to the studies of Courtenay and Murdoch already cited in chapter XI and above, nn. 13, 15, see also: N.W. Gilbert, "Richard de Bury and the 'Quires of Yesterday's Sophisms,'" in E. Mahoney, ed. *Philosophy and Humanism, Renaissance Essays in honor of P.O. Kristeller* (Columbia: 1976), 229–57; Murdoch, "Subtilitates Anglicanae in Fourteenth-Century Paris: John of Mirecourt and Peter Ceffons," in M.P. Cosman and B. Chandler, eds. *Machaut's World. Science and Art in the Fourteenth Century*, *Annals of the New York Academy of Sciences* 314 (1978), 51–86.

was woven into the continuing debate over the latter's account of intuition and concept formation.

Probably the most influential theologian of the generation who taught at Paris in the early 1340s, the Augustinian hermit Gregory of Rimini returned in the fall of 1342 to Paris where he had earlier studied. Once there, his order funded the statutory year of preparation before his own baccalaureate lectures on the *Sentences*, which Gregory delivered during the academic year 1343–44.¹⁷ Whatever his sympathies for the Venerable Inceptor on some issues, Rimini was quite critical of the English Franciscan's epistemological and psychological views, which he demonstrably knew from the latter's *Sentences* commentary.¹⁸ Moreover, Ockham's account of cognition probably was already familiar to Rimini when he commented on the *Sentences* at lesser *studia* before being sent to Paris, where his year of study brought him up to date on Parisian scholarship. In that year or the next, he discovered that two colleagues, John Rathe Scotus and Francesco of Treviso, were prepared to some extent to defend the Venerable Inceptor's theory of knowledge. Rimini's colleagues confirmed for him what he had earlier recognized, that Ockham's rejection of species was part and parcel of his understanding of intuition. So Rimini, whose arguments aimed at refuting both aspects of Ockham's noetic, eliminated some of his pre-Parisian treatment of the latter's views, inserting in its place a discussion of Rathe's and Treviso's arguments.¹⁹

¹⁷ On Gregory of Rimini's curriculum vitae, see Venicio Marcolino, "Der Augustinertheologe an der Universität Paris," in H.A. Oberman, ed. *Gregor von Rimini. Werk und Wirkung bis zur Reformation* (Berlin: 1981), pp. 127–94; for Rimini's stay at Paris from 1342–44 cf. pp. 145–47, 165–75.

¹⁸ For Gregory's adoption "with slight modifications" of Ockham's positions on relation, motion, time, and quantity, and a re-evaluation of Rimini's theological positions on grace and justification, see Courtenay, "Role of English Thought," pp. 129–33. Two recent studies of Rimini's epistemology and semantics supersede previous discussions: Willigis Eckermann, *Wort und Wirklichkeit. Das Sprachverständnis in der Theologie Gregors von Rimini und sein Weiterwirken in der Augustinerschule*, in *Cassiciacum* 33 (1978); and V. Wendland, "Die Wissenschaftslehre Gregors von Rimini in der Diskussion," in *Werk und Wirkung*, pp. 242–300. Also of interest is Leo D. Davis, "Knowledge According to Gregory of Rimini," *New Scholasticism* 55 (1981), 331–47.

¹⁹ V. Marcolino, "Der Augustinertheologe," pp. 171–74, 182–83. The "Additiones" to Rimini's *Sentences* commentary are instead pre-Parisian arguments, articles, and questions removed from the final version of his *Lectura*, as Marcolino establishes here and in his introduction to Rimini, *Lectura* [I: pp. xciii–xcvii]. This means that II *Lectura* d.7, q.3, add.36 [V: pp. 98–117] predates II *Lectura* d.7, q.3 [V: pp. 118–62]; in both, Gregory includes cross-references (as, e.g., at p. 109 lin. 10) back to I *Lectura* d.3, q.1. There and in II *Lectura* d.7, q.2 Gregory discusses Ockham's epistemology. Rimini tells us himself that debates with his fellow bachelors have required him to return to matters already treated, at II *Lectura* d.7, q.3 [V: p. 119 lin. 1–7]: "Quamvis autem materia primi articuli sit aliquid pertractata in primo libro distinctione 3, quaestione 1, ad plenior tamen discussionem eius et propter collationem de ipsa habitam in Principiis librorum

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Rimini begins his explication of cognition not by reference to intuition and abstraction, but by distinguishing, as had Ockham and Wodeham, between simple (or incomplex) and complex modes, and by specifying that the latter comprises affirmation and negation.²⁰ Simple cognition has two kinds of objects, Rimini continues: "some [things] are those in which the cognition immediately terminates objectively; but [there are] others in which cognitions terminate not immediately, but in their species or images existing in the soul."²¹ Rimini's final premise is that "some cognition is intellectual, some sensitive," that is, requiring as a concurrent cause either a sensitive power or "something existing in it."²² These claims are consonant with most interpretations that had already been developed for the Scotistic dichotomy; nevertheless, Rimini's definition, which begins not from the difference between the modes of cognition but between their objects, puts what many of his predecessors would have regarded as the cart before the horse.

In so doing, Rimini builds a commitment to species into the very premises of the subsequent discussion, as he underlines when he returns more explicitly to the distinction between intuitive and abstractive modes of simple cognition:

I say ... that some things are known (*cognoscuntur*) by us immediately and in themselves such that this cognition does not terminate in some intermediary (*medium*) through which or in which the thing itself is known; other things, however, are known not immediately in themselves, but in some intermedi-

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Sententiarum inter quosdam baccalaureos concurrentes mecum in Lectura et me volo iterum aliquantulum eam hic tractare, non replicando tamen quae in Primo dicta sunt nisi quatenus oportuerit propter aliqua obiecta vel dicta contraria contra illa;" again, q.4 [V: p. 162 lin. 11–19]: "et hoc ipsum etiam tenui in Primo distinctione 3, quaestione 1; oppositum autem tenui quidam valens baccalaureus mecum in Lectura concurrere, et de hac materia conferendo simul dicta sunt hinc et inde quam plura quae interseri huic operi utile iudicavi, idcirco nunc quaero..."

²⁰ Gregory of Rimini, I *Lectura* d.3, q.1 [I: p. 303 lin. 18–19]: "Est autem prima distinctio quod notiarum alia est simplex, alia est complexa quae dicitur affirmatio et negatio."

²¹ Ibid. [I: p. 303 lin. 20–23]: "Item eorum, quae simplici notitia cognoscuntur, aliqua sunt ad quae huiusmodi notitiae immediate obiective terminantur, quaedam vero ad quae non immediate terminantur suae notitiae, sed ad eorum species seu imagines in anima existentes." Cf. also (against John Rathe Scotus) II *Lectura* d.7, q.3 [V: p. 122 lin. 10–11]: "Quaero, quam notitiam et qua ratione dicis intuitivam alicuius rei. Aut enim eam quae immediate terminatur obiective ad illam—et ideo dicis eam intuitivam, quia sic immediate terminatur—tunc sequitur quod, si cogitatio interior immediate terminatur ad rem extra, ipsa est notitia intuitiva eius; et ulterior sequitur illatum."

²² I *Lectura* d.3, q.1 [I: p. 303 lin. 24–29]: "Item quaedam notitia est sensibilis, quaedam intellectualis. Voco autem sensualem omnem notitiam, ad quam causandam per se concurrat virtus aliqua sensitiva aut aliquid existens in illa. Intellectualem vero omnem notitiam intellectus, sive omnis notitia sensibilis hominis sit intellectualis sive non; de quo videbitur in Secundo, ubi de distinctione et identitate potentiarum animae inquiretur."

ary or through some cognized intermediary in which the cognition itself terminates.²³

On Gregory's understanding, the first of these simple cognitions, "by which *formally* something is known immediately in itself," is intuitive, while the other, "by which formally something is known in some representative intermediary," is abstractive. Furthermore, he insists, anything of which we have cognitions is susceptible of both modes. These we do not have to label "intuitive" or "abstractive," Rimini adds, for we could assign other names to the dichotomy; nevertheless, he suggests, the usual nomenclature is consistent with Pauline and Augustinian teaching.²⁴

If up to this point Rimini's distinction between intuition and abstraction would have seemed relatively uncontroversial to his contemporaries, that would not have been the case for his refusal to include awareness of existence within the scope of what is immediately known. For, in terms that suggest that he was not entirely unsympathetic to Aureol, Rimini explains that existential awareness does not distinguish intuition from abstraction. Because intuition is that cognition in which the object is "objec-

²³ I *Lectura* d.3, q.3, a.1 [I: p. 389 lin.26–33]: "Quantum ad primum articulum dico quod, sicut patet ex duabus quaestionibus proximis praecedentibus, quaedam cognoscuntur a nobis immediate et in se ipsis sic quod notitia illa non terminatur ad aliquod medium per quod vel in quo illa res cognoscatur; quaedam autem cognoscuntur non in se immediate sed in aliquo medio vel per aliquod medium cognitum ad quod terminatur ipsa notitia."

²⁴ *Ibid.* [I: p. 389 lin. 31-p. 391 lin. 31]: "Et omne quod cognoscitur, altero horum modorum cognoscitur, scilicet vel immediate in se ipso vel mediante alio per quod cognitum vel in quo cognitum ipsum cognoscitur. Et secundum hoc potest dici quod notitia intuitiva est notitia simplex, qua formaliter aliquid immediate in se ipso cognoscitur. Abstractiva vero est notitia simplex, qua formaliter aliquid in aliquo medio repraesentativo cognoscitur. Dico autem 'formaliter' quoniam aliquando, quamvis improprie, aliquid dicitur cognosci per aliquam notitiam virtualiter, eo scilicet quod ista notitia continet virtualiter vel totaliter vel partialiter notitiam illius, sicut conclusio posset dici cognosci per notitiam principiorum et causa per notitiam effectus... Si quis autem non velit tales notitias simplices vocare 'intuitivas' vel 'abstractivas' sed aliter, et alias velit his nominibus nuncupare, liberum ei est nec de nomine debet fieri contentio, dummodo constet de re, scilicet quod quaedam est notitia simplex qua res immediate in se cognoscitur, et quaedam qua mediante aliquo repraesentativo cognito. Has tamen sic nominare magis consonum videtur dicto Apostoli, ex quo doctores sumpserunt huiusmodi distinctionem notitiae, scilicet 1 Ad Corinthios 13, ubi ait: 'Videmus nunc per speculum in aenigmate, tunc autem facie ad faciem'... Unde Augustinus 15 De trinitate capitulo 9 praedictum verbum Apostoli exponens... Itaque in hac visione faciali, quam doctores vocant 'intuitivam,' videtur res immediate in se ipsa; in visione vero speculari, quam moderni vocant 'abstractivam,' non videtur res ipsa in se immediate, sed tantum mediante sua imagine quae immediate videtur..." Rimini's stress on the *formal* function of intuition and abstraction echoes that of the anonymous Augustinian hermit cited above, chapter XI, n. 15.

tively present to the mind," then whether the object "really exists" or not, any cognition that immediately terminates in it is, properly speaking, intuitive.²⁵ Similarly, Rimini concludes,

If a cognition does not terminate in a thing but in its representative, the thing is known abstractively, whether it exists or not. And therefore, if one wishes to ponder the signification of these words, it seems that a cognition should be called 'abstractive' not because it abstracts from the existence of a thing ... but because the cognition somehow abstracts from *the objective presentality* of a thing ...²⁶

Although this description echoes aspects of Aureol's views, the Italian scholar nevertheless does not adopt the latter's account of cognition and concept formation in its entirety. Thus, Rimini thinks that Aureol errs in treating dreams as instances of vision, and hence this much of his experiential evidence is irrelevantly adduced in support of the claim that not all intuitions terminate immediately in their objects.²⁷ While Rimini

²⁵ Ibid. [I: p. 392 lin. 4–21]: "Nec quantum ad intuitivam notitiam interest quod obiectum realiter existat vel non existat, quia, si existit et immediate cognitio terminatur ad ipsum, est illa notitia intuitiva eius; similiter si non existit et aliqua notitia terminatur ad ipsum immediate, id est si ipsum immediate cognoscitur, intuitive cognoscitur et illa notitia est eius intuitiva ... Intuitiva vero notitia, quia immediate ipsa res cognita obicitur, ipsa praesens est obiective menti, esto quod non sit praesens existenter, immo etiam si nullibi existat, dummodo tunc ipsa in se immediate noscatur, si hoc possibile sit." Cf. Aureol, above, chapter IV, n. 46.

²⁶ Ibid. [I: p. 392 lin. 9–17]: "Similiter, si notitia non immediate terminetur ad rem sed ad eius repraesentativum, sive illa res existat sive non, abstractive cognoscitur. Et ideo, si significationem vocabuli quis velit ponderare, talis notitia videtur dicenda abstractiva, non quia abstrahat ab existentia rei, <<quia>> ipsa existentia non possit abstractive cognosci, nec quia abstrahit a condicionibus singularibus, sed quia quodammodo abstrahit a praesentialitate obiectiva rei cognitae. Nam in tali notitiae modo non obicitur ipsa res immediate menti secundum se, ut dictum est, sed aliquod eius repraesentativum et ideo quasi absens videtur cognosci res ipsa." Cf. Aureol, above, chapter IV, nn. 68–70, 75.

²⁷ Ibid. [I: p. 394 lin. 4-p. 395 lin. 6]: "(Obiectiones Petri Aureoli) Sed contra illud, quod dictum est in notificatione harum denominationum, et distinctiones harum notitiarum vel modorum cognoscendi, arguit quidam doctor primo probando quod non omnis notitia intuitiva terminatur immediate ad rem ipsam in se intuitive cognitam. Nam, ut dicit, 'visio et intuitio quae fit in somnis est mediante specie et derivatur ab imaginatione ad oculum, nec terminatur ad praesentialitatem rei secundum veritatem cum sit absens, et tamen est vere intuitiva,' ut dicit se declarasse per Augustinum et Commentatorem ... Ad ista respondeo. Ad primum dicendum quod falsum assumit, primo quidem, quia dicit 'in somnis est vere visio,' secundum quod visio dicitur proprie de operatione potentiae visivae, quod utique falsum est, sicut supra in quaestione de intellectione sensibilium clare monstratum est. Nec Augustinus nec Commentator sunt pro eo, ut ibi patet. Secundo dicit falsum, quia illa notitia, quam dicit esse visionem, non est in dormiente notitia rerum absentium, aut si in aliquo est, ipsa non est intuitiva illarum rerum sed abstractiva; est autem intuitiva specierum ad quas immediate terminatur. Quod si dicatur quod non terminatur ad speciem, sed praecise ad rem absentem, et illius est intuitiva, confirmatur propositum, videlicet quod intuitiva est quae terminatur immediate ad rem per ipsam cog-

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agrees that a universal is "only some concept common to many things [and is] created (*fictus*) or formed by the soul," he insists that such a cognition requires prior apprehensions of singulars, and that these are not known *first* by means of anything that the soul creates. Rather, the immediate awareness of singulars from which the mind receives species precedes any subsequent apprehension of those species and any act of concept formation.²⁸ Furthermore, Rimini continues, because species multiplied from objects produce the aberrant visions that Aureol has catalogued, his conclusion that these constitute visions of their absent extramental objects should be rejected. Although God could by his absolute power produce or conserve such a sensation without an existing object, on Rimini's view this cannot occur naturally.²⁹

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nitam. Ad secundum, dico quod imaginans aspicit aliquam imaginem et intuetur sive causatam a sensibus sive fictam per animam, sicut per experientiam et per auctoritates plurimas ac rationes etiam multipliciter est ostensum in quaestione praeallegata;" see also I *Lectura* d.3, q.1 [I: p. 336 lin. 19-p. 341 lin. 5].

²⁸ I *Lectura* d.3, q.3, a.2 [I: p. 396 lin. 18-p. 397 lin. 9]: "Quantum ad secundum articulum dico quod singulare prius est cognitum ab intellectu quam universale. Ad cuius probationem suppono unum, quod in Tertio probabitur, videlicet quod universale non est aliqua res extra animam, sed est tantum quidam conceptus fictus seu formatus per animam communis pluribus rebus, aut forte signum aliquod exterius ad placitum institutum, eo modo quo dicitur in Tertio. Hoc supposito probo propositum primo sic: antequam aliquod universale fingatur seu formetur, aliquod singulare est cognitum. Igitur singulare prius est cognitum quam universale. Antecedens probatur, quoniam impossibile est naturaliter abstrahere seu fingere conceptum aliquem ab aliquibus rebus, nisi illae res vel aliquae illarum sint prius apprehensae, quoniam de rebus omnino ignotis nullus conceptum formare potest, ut supra patet in quaestione de notitia sensibilium, et experientia idem docet. Aut igitur res, de quibus universalis conceptus formatur, sunt notae in se ipsis, et habetur propositum, quoniam quaelibet talis est singularis; aut sunt notae in aliqua specie recepta a rebus, et adhuc habetur propositum, quoniam omne, cuius species sic recipitur et quod per eam cognoscitur, est in se praecognitum, ut ubi supra patet; aut est cognitum in aliquo conceptu ficto, et tunc ut prius arguitur, quoniam et antequam ille fingeretur, necesse fuit praecognosci rem aliquam singularem; aut procedetur in infinitum in conceptibus a parte ante, quod est impossibile." Cf. also (referring to what is in the intellectual part of the soul) p. 363 lin. 20-27: "... sive vocentur species sive intentiones seu formae vel conceptus, quod ultimum vocabulum nunc apud modernos est magis in usu, quamvis in omnibus praenominatis et pluribus aliis inveniantur antiqui usi fuisse in eadem significatione in qua moderni utuntur hoc nomine 'conceptus.'"

²⁹ I *Lectura* d.3, q.1, a.2 [I: p. 320 lin. 6-p. 321 lin. 35]: "(Opinio Petri Aureoli circa primum dubium) Quantum ad primum dubium est opinio unius doctoris dicentis quod huiusmodi 'notitia potest fieri re absente nec actualiter praesente.' Quod duplici via declarat. Primo quidem per experientias. Et sunt quinque, quarum prima est 'in visionibus derelictis ex forti visibili' ... Secunda via idem probandi, ut dicunt, 'procedit a priori.' Nam 'Deus potest facere quidquid non implicat contradictionem' ... Haec opinio, quamvis aliqua vera dicat, plura tamen, quantum mihi apparet, continet falsa. Ideo contra eam et pro solutione praesentis dubii pono tres conclusiones: Prima est quod sensualis notitia exterior de qua agitur non potest naturaliter fieri absque obiecto sensibili existente. Secunda, quod nec potest naturaliter remanere eo destructo, sic quod ipsum destructum videretur. Tertia, quod per divinam potentiam absolutam et fieri potest talis sensatio absque obiecto existente, et facta sive a deo tantum sive etiam ab obiecto sensibili

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As Rimini's reasons for denying a real distinction between intuition and abstraction reveal, his understanding of the dichotomy is indebted to sources other than Aureol. The latter does not share Gregory's conviction that "the same cognition numerically is both intuitive and abstractive, but not with respect to the same object; and every abstractive cognition is also intuitive," although not vice versa. This, he proposes, is clear from the fact that an abstractive cognition of a given object is (by definition) an intuition of the species that represents the object to the mind; and if species are known immediately, then they are known intuitively. This is because to be known immediately is what defines any intuition's object.³⁰ The most explicit defense of this understanding of intuition and abstraction before Rimini is that of Crathorn, whom we may suspect as the Italian scholar's tacit source here.³¹

Regardless of whether Rimini recognized the parallels between his own arguments and those of the English Dominican, he was aware that, by granting such a fundamental role for species, he had determined the irreconcilability of his own views with those of Ockham. Thus, Rimini could hardly have envisioned his initial distinction between simple and complex cognition as in harmony with Ockham's understanding of intuition and abstraction. Indeed, Rimini rejected Ockham's definition of intuitive cognition as "the means by which we know an object to be when it is, and not to be when it is not."³² He considered Ockham's elimination of

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partialiter potest a solo deo conservari illo destructo."

³⁰ I *Lectura* d.3, q.3 [I: p. 392 lin. 32-p. 393 lin. 19]: "Secundum <corollarium> quod sequitur est quod eadem notitia numero est intuitiva et abstractiva, sed non respectu eius dem, immo omnis notitia abstractiva est intuitiva, non autem omnis intuitiva est abstractiva. Hoc patet, quia omnis notitia abstractiva alicuius est intuitiva sui repraesentativi, in quo illud cognoscitur. Nam, ut ex dictis supra patet, quodcumque aliquid cognoscitur in suo repraesentativo, ipsum repraesentativum immediate in se ipso apprehenditur, et per consequens repraesentativum videtur intuitive, et res, quae per illud cognoscitur, abstractive; ac per hoc eadem notitia est intuitiva repraesentativi et abstractiva rei repraesentatae. Non tamen omnis intuitiva est abstractiva, quia non quodcumque res ipsa apprehenditur in se immediate, apprehenditur per illam notitiam aliqua alia res in illa, sicut quando videtur color in pariete vel actus intelligendi in mente; immo etiam, sicut ex superioribus patet, non semper quando species aliqua in memoria cernitur, cognoscitur in illa res cuius est species, sed solum quando cognoscitur ut imago, et ideo tunc illa notitia speciei est tantum intuitiva visio eius et nullius alterius abstractiva. Notitia vero, qua cernitur ut imago, est intuitiva speciei et abstractiva rei extra;" again, II *Lectura* d.7, q.3 [V: p. 152 lin. 27–30]: "eadem notitia qua res cognoscitur abstractive, species cognoscitur intuitive, sicut declaratum est in primo libro ..."

³¹ See above, chapter IX, at nn. 69–70. Gregory does not, however, go so far as to identify species with the cognitive act, nor intellections with the intellectually knowing soul; thus, cf. II *Lectura* d.7, q.2 [V: p. 72 lin. 15–23]; q.3 [V: p. 152 lin. 31–33]: "Species autem non est notitia, qua ipsamet cognoscitur intuitive, ut probatum est in quaestione praecedenti articulo 1 conclusione 2. Igitur species non est cognitio, qua res extra cognoscitur abstractive."

³² II *Lectura* d.7, q.3 (arguing against Treviso and Rathe) [V: p. 122 lin. 13–19]: "Vel

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species equally mistaken, and for reasons English scholars had already advanced: it removed the ability to explain perception, memory, and abstractive thinking while, at the same time, conflicting with the evidence of the senses and the authority of Augustine and Aristotle.³³ Rimini's response did more than parallel that common to the scholars at London and Oxford who had rejected Ockham's views, for he drew upon their arguments.³⁴

The most important English source for Rimini's views on the acquisition of knowledge was Wodeham. The distinction between simple and complex cognition is his, for like him and unlike Ockham, Rimini holds that we are able naturally to have both simple and complex sensitive cognitions.³⁵ Among the latter, Rimini includes judgments; and in support

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eam dicis intuitivam, ut *aliqui moderni* dicunt, qua potest sciri rem esse, si est, vel non esse, si non est, et aliae veritates contingentes de illa; et tunc dicere quod hoc non potest sciri per huiusmodi notitiam, quia non est intuitiva ..." See also, e.g., d.7, q.3 add. 36 [V: p. 106 lin. 13–19]: "... quia tunc ipse posset per huiusmodi notitiam evidenter scire utrum illa res esset vel non esset, et alias singulares et contingentes veritates de ipsa. Consequens est falsum secundum experientiam; recordor enim nunc urbis Romae, et tamen nescio nec scire possum per istam notitiam, utrum ipsa sit vel non sit, et quid agatur vel non agatur in ea. <Nec de amico> scire possum evidenter, utrum sit vivus, aut mortuus, vel etiam annihilatus;" I *Lectura* d.3, q.1 [I: p. 333 lin. 18–29]: "Sed contra ista potest argui: primo, quia, si Deus conservaret in me visionem qua nunc video albedinem existentem in pariete, aut virtute illius iudicarem illam existere sicut nunc iudico, aut iudicarem eam non existere. Non potest dici primum, quia tunc iudicium causatum mediante intuitiva esset falsum, et per consequens nulla certitudo posset haberi de existentia rei. Qualiter enim essem certus nunc quod albedo existit, si etiam cum non existeret, iudicarem eam existere sicut et nunc iudico? Nec potest dari secundum, quia impossibile est quod aliqua causa naturaliter activa nunc sit causa unius effectus, postea vero sit causa contrarii. Sed ista intuitiva nunc est causa iudicii quo iudico albedinem existere, igitur non erit postea causa oppositi iudicii, quale esset illud quo iudicarem eam non existere, si aliquod tale iudicium tunc haberem;" compare to Ockham, above, chapter V, nn. 56–58.

³³ II *Lectura* d.7, q.3 add. 36 a.1 [V: p. 99]: "(Opinio Ockham) Quantum ad primum est opinio una quae negat universaliter species tam in sensibus quam in intellectu ... (p. 104) Haec opinio non videtur mihi vera ..." Rimini's arguments occupy the rest of this "quaestio additionalis" and d.7, q.3 [V: pp. 104–62]. Davis, in his important discussion, "Rimini on Knowledge," p. 338, is nevertheless imprecise in reading Gregory as denying the *reception* of species as incompatible with intuition and, "like Ockham," eliminating "any element, like species, which could becloud the immediate vision of reality and lead to skepticism." See II *Lectura* d.7, q.3 [V: p. 139 lin. 25–27]: "Concedo quod praesentatum prius est cognitum, scilicet per notitiam intuitivam, sed illam non praecedit species sed comitatur et remanet post illam, ut in primo libro diffusius declaratum est."

³⁴ As he did on other matters as well; thus, his modern editors have confirmed the marginalia of the 1522 Venice edition, which identified Chatton, Wodeham, FitzRalph ("Hibernicus"), Kilvington, Bradwardine, Halifax, and Heytesbury among Rimini's English sources. Given the further *tacit* parallels to Wodeham's and Crathorn's work, I think it safe to suppose that further research will reveal greater familiarity with their works and with Holcot's, who is not cited by name.

³⁵ I *Lectura* d.3, q.1 [I: p. 304 lin. 2–4]: "His praemissis," i.e. supra, nn. 20–22, "pono aliquas conclusiones: prima est quod de rebus sensibilibus habemus vel habere

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of the claim that the *sensitive* faculties of the soul are capable of adjudicative acts, he considers beings who have no intellectual faculties, namely animals. Rimini thus repeats Wodeham, who had taken Avicenna's defense of the "estimative" sense to argue that animals are innately capable of judgment.³⁶ Moreover, for Rimini as for Wodeham, the admission of sensitive judgment is grounded in a refusal to draw a real distinction between the sensitive and intellectual souls, or even between their faculties; for both scholars it suffices to distinguish the soul's various contents, among them, species, cognitions, volitions.³⁷

On all these issues, Wodeham's reasoning guided Rimini's, as it did when he designated "what is only complexly signifiable" as the adequate

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possimus naturaliter notitiam sensualem tam simplicem quam complexam."

³⁶ Ibid. [p. 304 lin. 20–p. 306 lin. 5]: "Sed hic satis congrue quaeritur, utrum etiam animalia irrationalia habeant aliquam complexam notitiam de sensibilibus, quia, quod simplicem habeant, non est dubium. Et hic dico quod, quamvis istud non possit nobis plene naturaliter esse notum, probabiliter tamen ex his, quae percipimus, possumus arguere quod talem notitiam habeant. Quod primo convinci potest, quia sicut videmus, aliquando brutam apprehendit aliquod sensibile, ut puta panem, et movetur ad ipsum; aliquando vero apprehendit idem, et non movetur ad ipsum. Ergo motus iste, cum sit per appetitum animale et talis appetitus sequatur apprehensionem, praesupponit praeter simplicem apprehensionem sensibilis *indiciu*m quo iudicatur illud utile vel necessarium aut tale et tale ... Quarto, quia disciplina sine complexis notitiis non fit. Sed quaedam animalia sunt disciplinabilia, ut experientia docet; ergo etc. Ad hoc etiam est auctoritas Avicennae 6 Naturalium parte 1 capitulo 5, ubi loquens de aestimativa dat exemplum: 'sicut,' inquit, 'vis quae est in ove diiudicans quod ab hoc lupo est fugiendum et quod huius agni est miserendum.' Constat autem quod omnes tales notitiae sunt complexae. Nec valet ratio *cuiusdam doctoris* qui dicit quod secundum hoc in talibus animalibus esset intellectus practicus et deberent talia animalia appellari rationabilia." As Rimini's editors note, he specifies that the "ratio cuiusdam doctoris" is Wodeham's: "Adam in Secunda lectura quaestione 4 prologi," for which see above, chapter X, nn. 80–83. Wodeham argues *against* the position attributed to him here, as in 1380 by John Brammart, O. Carm. in his lectures on the *Sentences* (Florence, B.N. II.II.281, fol. 80rb): "Igitur, nec valet ratio ipsius Ade, questione quarta prologi, quae dicit secundum hoc in talibus animalibus esset intellectus practicus ..." Wodeham's discussion is quoted also by Mirecourt, I *Sent.* q.5 [ed. cited below n. 60] p. 433.

³⁷ I *Lectura* d.1, q.2 [I: p. 212 lin. 5–p. 217 lin. 7] where Gregory accepts Wodeham's position of the *Lect. sec.* and uses his arguments to counter those of Wodeham's Oxford lectures. See also the passage to which Rimini refers above, n. 22, in II *Lectura* d.16 & 17 [V: p. 361 lin. 19–p. 363 lin. 34]: "(Opinio Adae) Alia opinio est quod sola anima est potentia sensitiva et in ea sola sensatio recipitur subjective ... Quamvis autem prima istarum opinionum," i.e. Scoti, "mihi valde probabilis videatur, haec tamen secunda," i.e. Adae, "plus placet. Et ideo praeter eius probationes adductas confirmo eam auctoritatibus et ratione. Auctoritas prima est Augustini ... Ad hoc arguo etiam per rationem satis mihi probabilem sic: anima humana est memoria sensitiva, igitur est quaelibet potentia sensitiva hominis cuius est forma, igitur et in quolibet animali anima est eius sensitiva potentia ... Secundo idem probo ratione, quia species sensibilium et causatae per sensum sunt subjective in anima intellectiva et remanent in ea, postquam est a corpore separata. Alias non haberet distinctam memoriam singularium sensibilium; quod est contra sanctos;" again, p. 370 lin. 18–p. 373 lin. 15. For Wodeham, see above, chapter X, at nn. 20–23, 57–59.

object of scientific knowledge.³⁸ Thus, like Wodeham, Rimini maintains that science regards both a true mental proposition and its correspondence to a state of affairs, such that for a conclusion enunciating that "thus it is [in reality]," to be true, reality must be as the mental proposition designates it to be; thus, the state of affairs is the cause of a proposition's being true. Moreover, Rimini claims, the proposition is not identical to its truth, for if it were, then anyone [introspectively] apprehending such a proposition would see that it is true.³⁹ Even so, the Italian scholar rejected his source's contention that the scientific object comprises "the total significate of premises and conclusion" together, as well as his distinction of the mental "act of enunciating" from incomplex cognitive acts and the adjudicative acts of assenting and dissenting.⁴⁰ For Rimini, the

³⁸ *Lectura* prol. q.1 [l: p. 3 lin. 31–p. 4 lin. 5]: "(Conclusiones tres contra opinionem Ockham) Ista opinio non apparet mihi vera, ideo contra eam et pro responsione ad articulum istum pono conclusiones tres: prima est quod conclusio demonstrationis non est obiectum scientiae acquisitae per demonstrationem. Secunda est quod nec res extra. Tertia, quod significatum totale conclusionis est obiectum scientiae;" *ibid.* [p. 8 lin. 4–p. 9 lin. 23]: "Dicendum quod hoc nomen 'aliquid' sicut et ista alia sibi synonyma 'res' et 'ens' possunt accipi tripliciter: uno modo communissime secundum quod omne significabile incomplexum vel complexum, et hoc vere vel false dicitur res et aliquid ... Alio modo sumuntur pro omni significabili complexum vel etiam incomplexum, sed vere, id est per veram enuntiationem ... Tertio modo sumuntur ista ut significant aliquam essentiam seu entitatem existentem ... Nunc ad argumentum, cum quaeritur, utrum illud totale significatum sit aliquid vel nihil, dico quod, si 'aliquid' sumatur primo vel secundo modo, est aliquid; si vero tertio modo sumatur, non est aliquid." For Wodeham, cf. above, chapter X, n. 110; Rimini's reliance on him for the notion of the "complexum significabile" was established by Gál, "Adam of Wodeham's Question." See also Wendland, "Wissenschaftslehre Gregors," pp. 283–88, 292–98. The most complete study to date is that of W. Eckermann, *Wort und Wirklichkeit*.

³⁹ *Lectura* prol. q.1 [l: p. 5 lin. 17–31]: "Suppono quod 'sic esse' vel 'non sic esse' non est propositionem enuntiantem 'sic esse' vel 'non sic esse' esse veram. Et haec suppositio nota est, et patet etiam per Philosophum in Praedicamentis capitulo De priori, ubi vult quod quamvis ista ad invicem convertantur secundum convertentiam, nihilominus tamen 'sic esse' est causa quod propositio sit vera, et non e converso, et per consequens 'sic esse' non est propositionem enuntiantem 'sic esse' esse veram. Item suppono quod 'sic esse' non est propositio enuntians 'sic esse' et hoc etiam dicit Philosophus ... Suppono etiam tertio quod propositio aliqua non est ipsam esse veram. Et hoc patet, quia alias quicumque apprehenderet propositionem, apprehenderet ipsam esse veram; item, quia contingit eandem propositionem successive esse veram et falsam." Cf. Wodeham, above, chapter X, nn. 99, 109.

⁴⁰ *Ibid.* [l: p. 7 lin. 16–33]: "Tertia conclusio probatur primo, quia vel obiectum scientiae totale est conclusio vel tota demonstratio vel res extra vel significatum totale conclusionis seu significata totalia praemissarum et conclusionis. Sed non conclusio, ut prius probatum est, nec etiam tota demonstratio, sicut eisdem probari potest, nec etiam res extra, ut patet ex secunda conclusione, nec significata omnium propositionum demonstrationis, quia ut infra patebit, non eodem actu omnia cognoscuntur, igitur significatum totale conclusionis. Secundo, idem est obiectum scientiae et assensus scientialis, sive assensus sit scientia sive distinguatur, nam ei, quod quis scit, assentit, sed obiectum assensus scientialis est significatum conclusionis ... Et idem est de quocumque alio assensu sive fidei sive opinionis, nam per illum illud creditur quod per complexum con-

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object of science is, rather, the "total significate" of the conclusion in a demonstrative mental argument, and he holds that when such conclusions are affirmative, they "enunciate" that "thus it is [in reality]," while if they are negative, they enunciate that "thus it is not [in reality]."⁴¹ Such enunciations, Rimini stresses, are themselves the acts that Wodeham had termed "assenting to" and "dissenting from" what is signified by a proposition.⁴²

Rimini's divergences from Wodeham mark the route of an independent mind rethinking views that it largely accepts. In this, Rimini's attitude towards Wodeham is to be distinguished from his response to Ockham. That is to say, whereas Rimini rejects the latter's entire explanation of cognition, the former's account, in its broad outlines but not in every detail, shapes his own. Furthermore, it is likely that Rimini was more thoroughly familiar with Wodeham's work than Autrecourt had been, and had a

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forme significatur." In addition to nn. 41–42 below, see also I *Lectura* prol., q.3 [I: p. 107 lin. 1–p. 113 lin. 33]; d.1, q.1 [I: p. 203]; and, for Wodeham, above, chapter X, nn. 97, 111.

⁴¹ Ibid., a.3 [I: p. 24 lin. 5–18]: "... Circa obiectum scientiae, quod proprie est illud quod significatur per conclusionem demonstrationis, ut patet ex primo articulo, intellectus habet actum enuntiandi et actum credendi seu assentiendi. Nam per ipsam conclusionem enuntiat sic esse, si est affirmativa, vel non sic esse, si est negativa. Cognoscit etiam sic esse sicut enuntiat," ibid. [I: p. 27 lin. 10–26]: "Pono conclusiones tres: prima est quod conclusio demonstrationis mentalis proprie acceptae est assensus de sic esse, sicut ipsa significat. Secunda, quod huiusmodi conclusio est cognitio, qua cognoscitur sic esse. Tertia conclusio est quod circa taliter demonstratum vel scitum non sunt ponendi tres actus distincti in anima ad enuntiandum conclusive et cognoscendum et credendum sive assentiendum sic esse vel non sic esse, sed quod idem actus sufficit ... Primam conclusionem probo sic: omnis actus assentiendi seu assensus est enuntiatio ... nihil aliud est assentire quam iudicare sic esse; iudicare autem sic esse est enuntiare mentaliter quod sic est ... Praeterea omnis actus intellectus verus vel falsus est enuntiatio; omne iudicium seu assensus est verus vel falsus; igitur etc."

⁴² The preceding passage (note 41 above) is Gregory's response to Wodeham, whose arguments he quotes at ibid., a.3 [I: p. 24 lin. 23–p. 26 lin. 21]: "Potest siquidem primo videri alicui quod ipsa conclusio demonstrationis existens in intellectu est actus distinctus ab actu cognoscendi et ab actu assentiendi. Primo quidem, quia contingit intellectum formare huiusmodi conclusionem et ignorare, an sic sit, sicut enuntiat, et similiter non assentire, sed dubitare, quinimmo et dissentire ... Tertio, sicut quidam doctor," i.e. Wodeham, as Rimini's editors note, "arguit, sequeretur quod 'peril scire, nisi tota demonstratio sit scire, quia, si oblivio deleat praemissas, quantumcumque remaneat conclusio, non est evidens sic esse, sicut significatur per conclusionem evidentia qua prius, licet per memoriam aliquo modo cognoscatur evidenter' ... Sexto, 'non minus sufficit propositio evidentior ad causandum assensum a se distinctum quam alia minus evidens vel aliae minus evidentes' ... Septimo, quia non minus una propositio esset suus assensus quam alia; sed aliqua, cui assentitur, non est suus assensus, 'sicut patet de illo, qui videns baculum, cuius pars est in aqua, format hanc propositionem 'ille baculus est fractus' et iudicat sic esse.' Quod enim ipsa non sit talis assensus, probatur, 'quia postquam est certificatus per tactum vel per demonstrationem aut alio modo quod ille non est fractus, adhuc habet eandem propositionem in mente, nec tamen assentit, alias simul assentiret et dissentiret.'" For Wodeham, see above, chapter X, n. 108.

more articulated notion of the *complexe significabile*; in the event, Parisian scholars became steadily better acquainted with this and other aspects of Wodeham's discussion of knowledge after Rimini.⁴³

The first scholar whom we can demonstrate was not only a sympathetic reader of Ockham's epistemology but was one of the very few who adopted it in the first half of the fourteenth century, had also been present at Paris, as a regent master in Arts and student in Theology, during the years in which Bernard of Arezzo and Autrecourt debated. This was John Rathe Scotus, a member of the English-German nation in which, after being licenced in 1333 and incepting shortly thereafter, he remained a regent master until the end of the academic year 1340–41. While he was a regent in Arts, he was also a student in Theology, giving up his regency when he began to "oppose" in the disputations of that Faculty.⁴⁴ In 1342 he became a bachelor of the Bible, and in 1343 he began his lectures on the *Sentences*.⁴⁵

As none of John Rathe's work seems to have survived, the commentaries of his fellow bachelors on the *Sentences* are the principal witnesses to his opinions.⁴⁶ While both Augustinian hermits record their disputes with John Rathe, Rimini recapitulates Rathe's arguments in greater detail, linking them to those of their Dominican colleague, Francesco of Treviso. Both had argued against species, and whatever their rejection of

⁴³ Rimini's editors have signalled several other (but probably not all) passages where he relies on Wodeham. For later familiarity with Wodeham's theory of knowledge, in addition to scholars considered here, consider Johannes de Burgo who, in 1357, distinguished Wodeham's from Rimini's contribution thus (Wroclaw, Bibl. Univ. Mil.F.64, fol.91rb–92rb): "Hanc conclusionem probat Adam primo sic: quia si complexum sit totale obiectum sciendi, tunc scire non esset causam respectu cognoscere ... Secundo sic: experientia docet quod assensus cadit frequenter ... Hanc conclusionem probat Gregorius ex tribus suppositionibus veris. Prima est quod sic esse vel non sic esse non est propositionem enuntiantem sic esse vel non sic esse. Maior patet per Philosophum in Praedicamentis ..." as above, n. 39. Recognition of the differences between Wodeham's, Autrecourt's, and Rimini's understanding of the "complexe significabile" may permit us to refine further the excellent analyses W. Eckermann offered of several Augustinian hermits in his *Wort und Wirklichkeit*, pp. 238–317. See also: Ashworth, "Theories of the Proposition," and Nuchelmans, *Theories*, pp. 238–71.

⁴⁴ The curriculum vitae of John Rathe (Rate), who was consecrated bishop of Aberdeen in 1350, was established for the most part correctly by D.E.R. Watt, *A Biographical Dictionary of Scottish Graduates to A.D. 1410* (Oxford: 1977), pp. 465–66.

⁴⁵ Watt's dating of Rathe's lectures must be modified to accord both with Rimini's references to him as a "socius" (above, n. 19) and with Alfonso Vargas' references to him as a bachelor who incepted fourth after himself, for which cf. Marcolino, "Der Augustinertheologe," pp. 166, 182.

⁴⁶ Another witness is a student, Etienne Gaudet, whose theological studies began in the early 1340s, and who, as Kaluza has shown, compiled the notebooks attributed by Glorieux to Jean de Falisca. See Glorieux, "Jean de Falisca," pp. 52–53; Kaluza, *Thomas de Cracovie*, pp. 139–42.

species owed to the longstanding Parisian debate, their alignment with Ockham was evidently conscious and deliberate. So, at least, Rimini believed, for he attacked Rathe's definition of intuitive cognition as grounding his elimination of species, and tacitly indicated Ockham as the source for Rathe's understanding of the modes of cognition.

Thus, Rimini states that his two opponents agreed in their distinction of intuition and abstraction:

It was said by two bachelors ... that vision in the exterior sense is intuitive cognition, by virtue of which such contingent truths can be known; but thinking about an absent thing is abstractive cognition, by means of which such contingent truths cannot be known.⁴⁷

Rimini contends at this point that Rathe's and Treviso's definition makes sense only if they propose, like "some modern [scholars]"—that is, as elsewhere specified, Ockham—to call that cognition intuitive "by means of which an object is known to be when it is, or not to be when it is not, and [by means of which] other contingent truths [concerning the object are known]."⁴⁸ Rathe's further arguments establish that this was indeed his position. No one can have a cognition, Rathe claims, that "terminates immediately in an object and, although unaware of his cognition, have an evident judgment by virtue of which he assents to [the proposition] 'this is known to me.'" Such a cognition is assumed, Rathe thinks, by those who believe recollection or knowledge of absent objects requires species;⁴⁹ nevertheless, Rathe claims (as had Ockham), species are not in fact experienced. Gregory, however, insists that he always experiences such images when he thinks of absent objects. As further

⁴⁷ Rimini, II *Lectura* d.7, q.3 [V: p. 122 lin. 4–7]: "Sed ad hanc dicebatur a duobus consociis baccalaureis quod alia ratio erat, scilicet quia visio sensus exterioris est notitia intuitiva, cuius virtute tales veritates contingentes cognosci possunt; cogitatio vero rei absentis est notitia abstractiva, per quam non possunt tales veritates cognosci." On Francesco Massa of Treviso, who willed his library—including copies of Durand of St. Pourçain's and Rimini's *Sentences* commentaries and an *Abbreviatio* of Aureol's—to the Dominican convent at Treviso, see C. Grimaldo, "Due inventari Domenicani del secolo XIV: tratti dall' Archivio di S. Nicolò di Treviso presso l'Archivio di Stato in Venezia," *Nuovo Archivio Veneto* n.s. 36 (1918), pp. 129–80.

⁴⁸ II *Lectura* d.7, q.3 [V: p. 122 lin. 9–29] partly quoted above, n. 21 (where the proposed alternative is Gregory's, not his colleagues') and n. 32.

⁴⁹ *Ibid.* [V: p. 143 lin. 16–26]: "(Argumenta contraria Joannis Scoti) Contra conclusionem <<proprium>> tamen istam ambo praefati socii baccalaurei arguerunt, probare volentes quod talis recordatio vel cognitio absentium non immediate obiective terminatur ad speciem rei existentem in anima. Arguit autem unus sic primo: nulla cognitio terminatur immediate ad aliquod obiectum, quam habens non potest experiri se cognoscere illud sic, quod habeat evidens iudicium quo assentiat huic <<complexo>> 'hoc cognoscitur a me.' Sed habens cognitionem de rosa non praesente non potest experiri se cognoscere speciem rosae, igitur etc. Minor patet, quia nullus cogitans de rosa reputat se habere evidens iudicium quo assentiat huic 'species rosae cognoscitur a me.'"

support, he reminds Rathe of a series of experiences described by Augustine and Aristotle, and that are "common to all," i.e. to everyone's experience. When Rathe responds that these experiences "are not common to him," Rimini is frankly incredulous.⁵⁰ To judge from later scholastics' continued appeal to such examples of our awareness of species, Rimini's disbelief would have been widely shared.⁵¹

Throughout Rimini's discussion of his colleagues' arguments, he specifies that he construes Rathe's and Treviso's position as but a variation upon Ockham's, and objectionable on the same grounds.⁵² Still, Rathe's sources clearly are varied, including among others Aureol and Autrecourt. The latter's understanding of cognition is implied, for example, by Rathe's definition of vision as "the appearance of a visible object,"⁵³ the former's by the acceptance not only of the logical, but also of the *de facto* occurrence of intuitive vision by natural means.⁵⁴

As a scholar who adopted Ockham's epistemology at least in part, Rathe placed himself in a small minority at Paris.⁵⁵ So far as it is possible

⁵⁰ Ibid. [V: p. 120 lin. 1-p. 121 lin. 4]: "Prima <conclusio> est quod in anima nostra sunt tales species rerum sensibilium ... Primam conclusionem probo primo supponendo unum, quod quilibet experiri potest in se ipso, videlicet quod, quandocumque ipse cogitat de aliqua re sensibili non tunc praesente quam tamen alias vidit, verbi gratia de leone, ita suae cogitationi immediate obicitur aliquid, quod est leo vel aliquid simile leoni ... Sic ego pro certo semper experior. Sic se experiri insinuat Augustinus cum XI De trinitate cap. 8 dicebat ... Hoc idem se experiri monstrabat Philosophus in De memoria et reminiscencia ... Cum igitur isti experirentur in se ipsis et ego similiter semper experiar, miror multum quod hanc suppositionem quidam socius (*margin.* Johannes Scotus) negavit dicens talem experientiam sibi non esse communem. Nec pro certo sibi credo, salva gratia sua, supposito quod ipse sit univoce homo mecum."

⁵¹ See Ceffons, below; Pierre d'Ailly, I *Sent.* prol. q.1 (Strasbourg: 1490; repr. Frankfurt: 1968) unnumbered [p. 84] where, in response to Aureol's "experiences," d'Ailly insists upon species.

⁵² See. e.g., above, n. 19.

⁵³ II *Lectura* d.7, q.4 [V: p. 175 lin. 27-p. 176 lin. 9]: "Iste venerabilis baccalaureus adhuc alia dixit ... Eadem apparentia, qua apparet unum simillimorum, apparet reliquum, si similiter obiciatur potentiae. Sed visio est apparentia obiecti visibilis ..." See above, chapter XI, n. 109, for sources of this understanding of vision as appearance in Autrecourt, Aureol, and Godfrey of Fontaines.

⁵⁴ II *Lectura* d.7, q.4 [V: p. 176 lin. 20-p. 177 lin. 5]: "Secunda conclusio eius," i.e. Johannis Scoti, "est: una et eadem visio potest manere duobus sensibilibus simillimis succedentibus sive successive approximatis eidem sensui. Probatur sic: possibile est naturaliter visionem aliquam conservari absque praesentia cuiuscumque sensibilis ... Ex hoc infert corollarie aliqua: primum est quod sensatio exterior nata est remanere per tempus aliquod re sensibili recedente. Secundum est quod visio intuitiva potest esse naturaliter non existentis, immo aliquando de facto est. Et de hoc est principalis inquisitio ..."

⁵⁵ V. Marcolino, "Der Augustinertheologe," p. 183 also suggests that Rathe's theory of knowledge integrates elements from those of Ockham and Aureol. The sources for Francesco of Treviso's views are less readily discernible. It is worth stressing that Rathe was not deterred from adopting elements of Ockham's epistemology even after his own Nation's earlier legislation against the *secta Occanica*, nor, evidently, did Rathe's views

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to tell on the basis of research to date, those theologians whose prominence at Paris in the 1340s was of a level with Rimini's were of accord in defending species and rejecting Ockham's definition of intuitive and abstractive cognition. Thus, Alfonso Vargas, who insisted on species against Ockham in *Sentences* lectures presented in the same year as Rimini and Rathe, thereby developed views he had established earlier in his *De anima* commentary.⁵⁶ Vargas' own definition of intuition was an idiosyncratic variation of what he believed to be the "common opinion." In addition to intuition and abstraction, which he described traditionally but classed novelly as "enigmatic vision"—that is, the vision characteristic of "seeing through a mirror darkly" in this life—he also posited "discursive or deductive" and "superintuitive" cognitions.⁵⁷

A year after the debates of Rimini, Rathe, and Vargas, a Carmelite scholar, Paul of Perugia, argued that, inasmuch as intuitive and abstractive cognition regard the same object, they are not distinct cognitions. In so arguing, he too was far from adopting Ockham's understanding of cognition.⁵⁸ Paul of Perugia's more influential fellow bachelor of the

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hinder his career aspirations; see Courtenay and Tachau, "Ockham, Ockhamists," pp. 64–68.

⁵⁶ Alfonso Vargas was born into a noble family and died, in 1366, an archbishop (of Sevilla). His *De anima* commentary is discussed in Steneck, "Internal Senses," pp. 206–26, who demonstrates Alfonso's reliance for much of his discussion on Giles of Rome's *Quodlibeta*, except when Giles departs from what Alfonso takes to be the correct understanding of Augustine's views on memory (p. 223). For the date of Vargas' *Sentences* lectures, see V. Marcolino, "Der Augustinertheologe," pp. 166–74. Vargas presumably read across a period of two academic years, so that he was also a fellow bachelor to Paul of Perugia, Alphonsus de Portugal (above, chapter XI, nn. 55–56), and Jean de Mirecourt, among others. For Vargas' *Sentences* commentary, I rely upon the Venice ed. of 1490 (reprinted, with column and line numbers, as *Cassiciacum 2* in 1952). Vargas defends species in his *Sentences* commentary at several junctures, as e.g., at I *Sent.* prol., q.1 [col. 9, lin. 29–52]; d.1, q.4, a.3 (distinguishing species from cognitive acts) [col. 195–98]; d.2, q.1, a.4 (arguing that species suffice in lieu of Aureol's apparent being) [col. 282–85]; and d.3, q.1, a.1 (again, against Aureol's experiential evidence) [col. 295–97]. Vargas rejects Aureol's definition of intuition in I *Sent.* prol., q.1 [col. 6–10].

⁵⁷ Vargas, I *Sent.* prol., q.1 [col. 6 lin. 1–23]: "Distinguo de notitia enigmatica, quia quedam est intuitiva, quedam abstractiva, quedam superintuitiva et quedam discursiva seu deductiva. Notitia intuitiva est cognitio rei in seipsa actualiter et presentialiter existentis, qualis est cognitio facialis de qua loquitur Apostolus prima <epistola> ad Corinthianos 13, 'videmus nunc per speculum in enigmate; tunc autem facie ad faciem.' Et quod ista definitio sit convertibilis patet, quia omnis cognitio rei in seipsa est intuitiva, et omnis intuitiva est cognitio rei in seipsa, quod patet in notitia intuitiva sensitiva, que non potest haberi sine actuali presentia obiecti ... Et quia sicut notitia intuitiva sensitiva se habet ad sensibile, sic intellectiva ad intelligibile; idem sequitur ad intellectivam intuitivam." For further discussion of Vargas, see also J. Kürzinger, *Alphonsus Vargas Toletanus und seine theologische Einleitungslehre* BGTPM 22 (1930).

⁵⁸ For the little-studied Paulus de Perugia, see: B.M. Xiberta, *De scriptoribus scholasticis saeculi XIV ex ordine Carmelitarum* (Louvain: 1931), 285–316; Courtenay, *Wodeham*, p. 131. I have had access to the copy of his *Sentences* commentary in Prague, Narod. Museum

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Sentences, Jean Mirecourt, registered some discomfort with species; but for his theory of knowledge, Wodeham rather than Ockham was the principal source.⁵⁹ In particular, Mirecourt held that intuition naturally required the presence and existence of its object, and is the means by which we evidently know that such an object exists; he therefore rejected the expansion of the scope of intuition to include negative existential awareness.⁶⁰

Mirecourt's fellow Cistercian, Pierre Ceffons, was not entirely persuaded at decade's end of the need to posit species, but he too rejected

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XIII. D.5, and the fragment in Prague, Státní Knih. XIII.F.19 fol. 127r–128v. See, e.g. I *Sent.* prol., q.2 (Prague, Narod. Mus., fol. 69va): "notitia intuitiva et abstractiva non sunt due notitie sed unum, et signum huius est quia respiciunt idem obiectum eodem modo presens, et sicut intuitiva requirit obiectum presens in ratione cognoscenti, ita abstractiva assensum."

⁵⁹ For the relatively extensive literature on Jean de Mirecourt, see W.J. Courtenay, "John of Mirecourt and Gregory of Rimini," pp. 224–34, and G. Tessier, "Jean de Mirecourt, Philosophe et Théologien," *Histoire Littéraire de la France* 40 (1974), 1–52. Since then, a number of valuable studies have appeared, including: J.E. Murdoch, "From Social into Intellectual Factors;" idem, "Development of a Critical Temper;" idem, "*Subtilitates Anglicanae*;" Roy Van Neste, "The Epistemology of John of Mirecourt: A Reinterpretation," *Citeaux* 27 (1976), 5–28, idem, "A Reappraisal of the Supposed Skepticism of John of Mirecourt," *RTAM* 44 (1977), 101–26; Massimo Parodi, "Questioni inedite tratte dal I libro del 'Commento alle Sentenze' di Giovanni di Mirecourt (qq. 13–16)," *Medioevo* 3 (1977), 237–84, and 4 (1978), 59–92; idem, "Il linguaggio delle 'proportiones' nella 'Distinctio prima' di Giovanni di Mirecourt," *RCSF* 39 (1984), 657–86. Several questions from Mirecourt's *Sentences* commentary dealing with epistemology have long been available in the edition of Anna Franzinelli, "Questioni inedite di Giovanni di Mirecourt sulla conoscenza," *RCSF* 13 (1958), 319–40, 415–49; his "apologiae," are edited in F. Stegmüller, "Die zwei Apologien des Jean von Mirecourt," *RTAM* 5 (1933), 40–79, 192–204.

⁶⁰ I *Sent.* q.3 [ed. Franzinelli: p. 331 lin. 24–42]: "Prima conclusio probatur sic: cuicumque evidenti iudicio animae de veritate contingenti, habito de re sensibili, naturaliter praesupponitur eiusdem notitia aliqua simplex intellectiva; sed anima habet evidens iudicium de veritate contingenti de re sensibili et notitia quae sibi praesupponitur est intuitiva, igitur anima quadam cognitione simplici intuitiva cognoscere potest rem extra ... prima autem pars minoris patet per experientiam: experimur enim nos scire evidenter quod albedo est ... omnis enim actus incomplexus animae, qui natus est causare evidentem assensum de veritate contingenti et de praesenti et qui requirit naturaliter existentiam et praesentiam, est intuitiva notitia talis huius ex quo praesupponitur; maior non multum probari potest, nisi per placitum utentium et loquentium; persuaderi potest ... sicut se habet exterior sensatio ad obiectum suum <et> vocatur notitia intuitiva propter hoc, id est sensatio exterior est intuitiva obiecti sui;" *ibid.*, p. 332 lin. 84–92: "Tertia conclusio probatur sic contra quosdam ponentes unam tertiam notitiam incomplexam quae ab eis vocatur 'intuitiva imperfecta' et arguitur sic: plura superfluent ubi pauciora sufficiunt." The definition Mirecourt offers of intuition is Wodeham's (above, chapter X, n. 18), as Ceffons knew; cf. nn. 69–70 below. In I *Sent.* q.4 [ed. Franzinelli: pp. 416–19] Mirecourt's discussion of Aureol's "esse apparens" seems at various junctures to be indebted to Wodeham's discussion; again, I *Sent.* q.5 [ed. Franzinelli: p. 433 lin. 199–p. 234 lin. 229] Mirecourt tacitly quotes Wodeham's arguments verbatim from *Lect. sec.* prol. q.4 (Gonville & Caius 281, fol. 117va) on animal instinct and sensation to discuss whether judgment lies exclusively within the realm of the intellect.

Ockham's epistemological views.⁶¹ Among the major sources for Ceffons' positions on cognition, Adam Wodeham, Gregory of Rimini, and Mirecourt are particularly prominent. In discussing cognition, Ceffons does not cite the latter by name; nonetheless, introduced as the views of "another," Mirecourt's interpretation of the experiential evidence adduced in support of the notion of the *esse apparens* testifies to Ceffons' approval of his confrère's stance on the issue.⁶² Wodeham's *Sentences* commentaries Ceffons evidently also knew at first hand, for he quotes passages from Adam's *Lectura secunda* not yet cited in other Parisian commentaries as, for example, the explanation of the "ancient error" of ascribing rotation to the earth rather than to the heavens as due to the relativity of the perception of motion.⁶³ Nevertheless, the manuscript upon which Ceffons relied cannot have resembled precisely the extant copy of the

⁶¹ On Pierre Ceffons, see D. Trapp, "Peter Ceffons of Clairvaux," *RTAM* 24 (1957), 101–54; Courtenay, *Wodeham*, 135–36; idem, "Mirecourt and Rimini, II," 164–65; Murdoch, "Mathesis," pp. 244–46; idem "Subtilitates Anglicanae;" L. Eldredge, "Changing Concepts of Church Authority in the Later Fourteenth Century: Peter Ceffons of Clairvaux and William Woodford, O.F.M.," *Révue de l'Université d'Ottawa* 48 (1978), 170–78. Concerning species, Ceffons remarks at I *Sent.* q.18 (Troyes 62, fol. 45rb): "Iste <Landulphus Caracciolo> autem ponit species rerum sensibilium. Multi tamen sunt qui non ponunt species, sed tamen quicquid sit, sive sit habitus sive actus, constat quod oportet [im]ponere aliquod representativum;" again, at I *Sent.* q.20 (Troyes 62, fol. 47va): "Unde et sic consueverunt dicere doctores quod de sensibilibus habemus aliquam notitiam ... aliam que non est immediate ad ipsa sensibilia terminata, que est abstractiva, quam multi dicunt terminari ad speciem ipsa sensibilia representantem."

⁶² As for example at I *Sent.* q.18 (Troyes 62, fol. 45vb–46ra): "Contra tertiam conclusionem arguo, in qua dicitur quod res non ponitur in aliquo esse. Contra hoc sunt argumenta alterius opinionis que recita<n> Adam in *Prima lectura* et Chatton. Aliqua ponit experientia ... Secunda experientia est in motu subito circulari baculi ignite in aere ... Ad secundam experientiam dicit Chatton quod non probat tale ens fictum distinctum ... Aliter dicunt alii quod visus sua visione vel suis visionibus sequitur unum baculum circulariter motum et propter velocitatem nescit homo iudicare an succedant diverse partes unius circuli vel circulariter moveantur." Compare to Mirecourt, I *Sent.* q.4 [ed. Franzinelli: p. 417 lin. 80–85]: "Quinta propositio est ista: nullus circulus ibi talis videtur, licet iudicetur virtute visionis quod ibi sit talis circulus, nisi dirigatur aliunde, et causa est quia visus visione sua sequitur illum baculum circulariter motum, considerando eum motum circulariter, et propter velocitatem nescit homo iudicare an succedant diversae partes unius circuli vel circulariter moveatur." Mirecourt's answer in turn succinctly summarizes in his own words the lengthy discussion in Wodeham's *Lect. sec. prol.*, q.4 (partly quoted above, chapter X, n. 92). In another context, Ceffons' silent quotation of Mirecourt has been established by Murdoch, "Subtilitates Anglicanae," p. 61.

⁶³ I *Sent.* q.18 (Troyes 62, fol. 45vb): "Prima <experientia> est quia cum quis portatur in aqua, arbores existentes in ripa videntur moveri ... Ad primam experientiam de arboribus, dicit Adam quod non est motus in arboribus illis, nec est iste motus in oculo, quia non videt motum, nec concedit hanc: 'motus apparet.' Causa autem quare sic apparet arbores, etc., est quia continue homo est in alia et alia distantia, et per motum continue plus et plus elongatur ab arboribus; et hec fuit etiam causa quia antiqui dicebant terram circumvolvi, ut sic non per motum celi sed per circumvolutionem terre apparent nobis continue alia et alia pars celi." See above, chapter X, nn. 86, 88.

Lectura secunda, which identifies Aureol as the author of the hypothesis that an "apparent being" is created in intuitions. This we may infer from the fact that Ceffons remained ignorant as to the name of its proponent, even though the Cistercian knew not only the opposing arguments of Wodeham, but those of Landulphus Caracciolo and Chatton as well.⁶⁴

On such issues as whether intuition and abstraction are distinct, the relation of both to judgment, whether intuition can occur without a present object or requires an "apparent being," and on what is complexly signifiable as the object of scientific knowledge, Ceffons relies primarily on Wodeham and, less consistently, on Rimini, drawing on their arguments to defeat the alternatives of both Aureol and Ockham. Thus, Ceffons asserts that two specifically distinct cognitions, the one intuitive and the other abstractive, are naturally possible where any given object is concerned.⁶⁵ In support of this conclusion, Ceffons adduces the

⁶⁴ In addition to n. 62, above, cf. *I Sent.* q.18 (Troyes 62, fol. 45ra): "Tertia conclusio potest probari ex dictis Landulphi sic, quia intellectus non ponit rem in aliquo tali esse; igitur nec <sensus> [ms. sexus] ... Ad istud arguit sic Adam,* quia si ponatur sic res in aliquo esse apparenti—idest in rationali, secundum adversarium—aut igitur illud esse habet obiectivum ita quod nullibi habet esse subiectivum. Primum non potest dari, quia tunc per ipsum sensum numquam apprehenderetur qualitas, vel semper ipsa sensatione et obiecta simul apprehenderentur, scilicet qualitas et illud esse obiectivum ... Et si dicatur quod huiusmodi res est in obiecto, contra arguit Adam: quicquid sufficit adhuc quod potentia videat A sufficit adhuc quod A videatur; sed nulla re posita in obiecto de novo, posita visione, A videatur in potentia visiva ... Contra primam conclusionem arguitur *per unam opinionem cuius motiva recitat Landulphus*. Primo arguitur, quia tunc notitia sensitiva et maxime notitia intuitiva requireret presentiam obiecti. Consequens falsum, ut probat per aliquas experientias. Prima est ... in ludificationibus, dormientibus, et egris, moventur species ab interiori ad exterius ... secunda experientia in *Perspectiva* primo, si quis sit in camera obscura, et aspexerit celum per aliquod foramen diu ... tertia experientia est Augustini, XI *De Trinitate*, cap. 2, si solem et luminaria videmus, et advertamus vel claudamus oculos ab eis ... Quarta experientia est quod si colores ... patet in scriptura que apparet de longe prominens te, prope plana. Et collum columbe apparet uni rubeum, alteri viride. Quinta experientia est Philosophi, III *Meteororum* ... Si autem interrogentur isti quomodo actus notitie intuitive ponit esse sub obiecto, dicunt quosdam sensus quam intellectus per suum actum producat obiecti in aliquo esse intentionali ..." For Landulphus, see above, chapter XI, n. 19. My asterisk marks where Ceffons introduces a lengthy passage from Wodeham's *Lect. sec.* q.4, evidently unaware that the latter quotes Ockham's discussion (above, chapter V, nn. 100–06) of the purported "adversary," i.e. Aureol.

⁶⁵ *I Sent.* q.20 (Troyes 62, fol. 47rb–va): "Hic pono aliquas conclusiones. Prima est quod de eodem obiecto possunt haberi due notitie distincte specie, quam intuitiva et abstractiva <nuncupantur> ... Tertia, quod de rebus sensibilibus possumus habere notitiam intuitivam et etiam abstractivam ... (47va) Tertia conclusio patet, videlicet quod de sensibilibus habeamus notitiam intuitivam; experimur enim nos intueri et per sensum apprehensivum sensibilia et multa evidenter enunciamus de ipsis dum nobis sunt presentia—audimus enim sonantia, et videmus colorata, et iudicamus evidenter quod hec est tale vel tale. Quod etiam habeamus notitiam abstractivam patet etiam, quia in absentia sensibilium habemus notitiam de ipsis virtute cuius non possumus evidenter scire, etc." See also Ceffons' allusion to Chatton's arguments against Campsall's identification of intuition and abstraction, below, n. 68; and, for Ceffons' acceptance of the

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authority of Wodeham, Scotus, and Ockham, but quotes in fact only the first of these, obtaining from him the citations to the discussions of the others.⁶⁶ Such references suggest that Ceffons not only rejected Ockham's views on cognition, but also knew them only at second hand.⁶⁷ Still, it is difficult to evaluate whether Ceffons was merely a careless or hurried reader, for despite his demonstrably direct acquaintance with many sections of Wodeham's work, the French scholar did not always recognize his thoughts as the source for Rimini's. So, for instance, Ceffons directs his scribe to insert "Gregory's four arguments in book one, distinction three, question one, article one, folio 28" in support of animals' ability to form mental propositions, unaware that Rimini quoted Wodeham at that juncture.⁶⁸

Be that as it may, Ceffons sides again with Wodeham against Ockham's acceptance of an "imperfect intuitive cognition,"⁶⁹ as against his refusal to differentiate intuition from abstraction on the basis of whether their

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complexe significabile from Wodeham and Rimini, below, n. 74.

⁶⁶ Ibid. (Troyes 62, fol. 47rb): "Primam conclusionem probat Adam et est argumentum Scoti libro quarto distinctione 45 q.3, et Okam libro primo questione prima: omnis notitia <in> complexa que potest esse causa naturaliter notitie vel iudicii evidentis respectu propositionis contingentis de presenti illius rei significate per talem propositionem realiter et specificie distinguitur a notitia incomplexa que quantumcumque intendatur non potest esse <causa> assensus evidentis vel iudicii talis evidentis. Sed anima potest habere tales duas noticias respectu eiusdem singularis, puta unam virtute <cuius> naturaliter potest cognoscere evidenter quod Sortes est albus, et huiusmodi naturaliter etc., puta nisi Deus miraculose operetur hic, vel nisi sit impedimentum, puta propter dispositionem medii vel potentie vel organi vel huiusmodi. Et aliam potest habere anima virtute cuius non potest cognoscere naturaliter utrum existat vel non, sicut patet per experientiam; ergo etc. ..." Ceffons quotes here Wodeham, *Lect. sec.*, q.2, for which see above, chapter X, n. 16.

⁶⁷ Thus, the passage quoted above, n. 66, precedes Wodeham's summary of Ockham's discussion in *I Ord. prol.*, q.1 of intuitive cognition, which Ceffons presents as Wodeham has reorganized it; and cf. n. 64 above.

⁶⁸ *I Sent.* q.20 (Troyes 62, fol. 47va): "Ex hiis infero quod non est vera illa opinio que ponit quod notitia intuitiva et abstractiva sunt idem, sic quod illud quod modo est necessaria intuitiva erit postea abstractiva, unde contra hec arguit Chaton questione secunda prologi articulo primo. Recita dicta Chaton et rende ad argumenta opinionis quam tangit Landulphus. Et move hic duo dubia. Primum, quod sensitiva est ab obiecto et nihil causat in obiectum solet aliqui dubitare; secundum vel primum dubium illud erit utrum bruta formet complexam. Quod sic in Gregorio <Ariminensis> per quatuor argumenta libro primo distinctione tertia questione prima articulo primo folio 28. Et dubita si velle ad illa sicut diceret adversarius qui teneret oppositum; dubita hic de fescinatione ut tertio quolibet questione 12."

⁶⁹ Ibid., q.21 (Troyes 62, fol. 47va-vb): "Sed hic sunt dubia. Primum est utrum sit aliqua notitia media intellecta que non sit intuitiva nec abstractiva. Ad hoc dicunt aliqui quod sic; ponunt enim sicut Okam unam notitiam incomplexam que ab eis vocatur 'intuitiva imperfecta,' virtute cuius possumus <judicare> rem fuisse. Sed tamen videtur mihi cum aliis quod oppositum potest teneri, unde arguitur sic<ut> per Adam: plura superfluent ubi pauciora sufficiunt, sed duo sufficiunt, puta abstractiva notitia cum memoria ..."

occurrence requires an object's presence.⁷⁰ Ceffons is aware of Ockham's claim that by virtue of intuitive cognitions we are able to judge that an object does not exist when it does not, such that if God were to conserve an intuition but destroy its object, through the intuition its possessor would judge that the object does not exist.⁷¹ On this issue, Ceffons looks also to Rimini to refute the Venerable Inceptor, and quotes the Augustinian hermit's argument that, whenever a partial cause is lacking, then the effect which depends in part upon that cause cannot occur. Hence, because the intuited object is, on Ockham's own admission, a partial cause of existential judgments, Gregory concludes that when the object is absent, neither a judgment of non-existence nor of existence is possible.⁷²

Ceffons recognizes that one could (as Chatton had) instead object against Ockham that, if God were to conserve such an intuitive vision, it would result in the judgment that the destroyed object still exists, and that "thereby all certitude perishes." Responding that God is not, however, "in fact accustomed to so act," that is, he "does not miraculously conserve" such visions without their objects, Ceffons rejects the force of the objection. Instead, he remarks, "I am certain that you [i.e. an auditor]

⁷⁰ Ibid. (Troyes 62, fol. 47vb): "Secundum dubium: quomodo differunt intuitiva nostra et abstractiva? Non per hoc quod una est de presenti et alia de absente seu non existente, quia Deus [non] potest dare notitiam intuitivam Sorti de re non existente, nam et Deus intuetur non existentia. <Sed contra:> ad hoc <dubium> dicit Adam quod omnis actus incomplexus qui natus est causare evidentem assensum de presenti, de veritate contingenti, et qui naturaliter requirit presentiam rei, est notitia intuitiva; et omnis alius est notitia abstractiva. Et videtur mihi quod ad bonum intellectum illud satis potest conteneri. Unde cum dicitur quod Deus potest conservare notitiam obiecto destructo, dico quod esto quod sic." Ceffons quotes Wodeham, *Lect. sec. prol.*, q.2, concl.3 (above, chapter X, n.17).

⁷¹ Ibid., q.18 (Troyes 62, fol. 45vb): "Aliter respondetur, et communius, quod Deus potest adnihilare obiectum et conservare visionem et notitiam intuitivam obiecti B. Sed tunc est dubium, quia ex quo est visio manet visio. Queritur utrum per illam [et] notitiam intuitivam iudicabit B esse vel non. Si sic, tunc decipitur, et habet notitiam intuitivam rei; si non, tunc iudicabit virtute illius B non esse, quia per illam habebit seu virtute illius habebit aliquod iudicium. Et sic notitia illa erit successive causa oppositorum iudiciorum. Ad illud dubium respondet Okam prout mihi videtur, unde dicit quod virtute illius iudicabit rem non esse quam prius iudicabat esse ... Sed secundum veritatem aliud est de Deo et de notitia nostra intuitiva, quia notitia Dei intuitiva est infinita seu infinite perfectionis, et falli non potest; estque incomprehensibilis et inestimabilis. Nos vero de fallibili decipi possumus."

⁷² Ibid.: "Et similiter, tunc ut dictum est aliqua causa erit successive causa assensuum contrariorum; sed diceret iste quod non esset inconveniens quod cum presentia rei quam videret presentem illa notitia causaret aliud iudicium quam <quando> videt illam non esse, etc. Aliter tamen dicit Gregorius <Ariminensis> quod scilicet virtute illius notitie que est sensitio vel etiam notitia incompleta intuitiva intellectiva, iste non iudicabit rem esse, nam ibi deficit una causa partialis talis iudicii, scilicet ipsa albedo que simul cum sui notitia intuitiva causabat iudicium quo iudicabatur res existere. Nec in talis iudicaret ipsam rem non esse, quia tunc causaretur successive ab eadem notitia assensus oppositi."

are a man, and nevertheless God can and could have made you" a stone or an angel.⁷³ But from the question of the evidence for such certitude, Ceffons shies clear, presumably because of the focus of Autrecourt's attackers on the acceptable notion of what is evident.⁷⁴

Autrecourt's Condemnation in the Context of the 1340s

Having sketched the alignments of several Parisian scholars who integrated English accounts of cognition into their own during the 1340s, we are now in a position to suggest what may have transpired at Paris after theologians began to object to Autrecourt's teaching. Although it was certainly not the *right* of the Faculty of Arts to involve itself in originating motions to censure theological teaching, some members of the Faculty may well have been *aware* of the initial moves against Autrecourt and the other theologians called to Avignon. No documentary evidence informs us of any stage of the process against Autrecourt until the actual summons ar-

⁷³ Ibid.: "Ad hoc aliter dicerent forsitan alii, quod per talem notitia talis iudicaret rem esse sicut prius, quia notitia nata est causare assensum similem sicut prius. Et si dicas quod tunc periret certitudo, dicitur quod non, quia de facto sic non consuevit facere Deus, puta quod miraculose conservet, etc. Et sicut dicimus quod sum certus quod tu <es> [et] homo et tamen Deus potest et potuisset unum corpus hoc posuisse simile tibi vel Raphaellem, etc. ita etc." This repeats Ceffons' earlier remark, *ibid.*: "Et si dicas quod tunc periret certitudo, dicitur quod non, quia in quolibet instanti habet visionem alicuius certe albedinis et illum iudicat esse et in hoc non decipitur; sed bene potest decipi iudicando quod hec est illa albedo quod prius vidi. Unde autem habemus evidentiam quod Deus nec sic faciat, potest responderi sicut de evidenciis communiter dicitur: unde est mihi evidens quod tu es homo et non angelus sicut Raphael, etc."

⁷⁴ Ibid.: "Non libenter intro materiam de evidentiis eo quod est evidentie odiosa." For a cause of Ceffons' concern, cf. the charge against Autrecourt in "alia cedula" [ed. Lappé: p. 41*]: "Quod in lumine naturali intellectus viatoris non <potest habere noti-> ciam evidentie de existentia rerum evidencia reducta <seu reducibili> ad evidentiam seu certitudinem primi principii—falsum et erroneum." Ceffons is equally defensive in tone concerning his support for the view that what is complexly signifiabile is the object of knowledge. Thus, cf. I *Sent.* q.21 (Troyes 62, fol. 48ra): "De significabilibus complexis, utrum istis diebus sit securius ea ponere sicut ea posuerunt Adam, Chatton, et Gregorius, aut ea negare sit securius, aut ea ponere saltem per imaginationem sit securius, et possit argui pro qualibet parte, quia est aliis securior, unde et iste modus loquendi ponere significabilia complexe saltem per imaginationem videtur quedam novitas non nimis secuta. Sed tamen hoc non obstante, sive modus loquendi sit novus sive antiquus, facile est videre quod securius est hoc dicere. Utrum autem sit magis scientificum—hec est alia questio ..." again, q.25 (Troyes, fol. 51va): "In ista questione periculum est hiis diebus ut estimo aliquid definire; ideo non volo aliquid determinare. Unde et dudum multa de hac materia scripsi que ego debem, quia scio quod viderentur nimis miranda. Sed tamen circa rem sciendum quod est una opinio que tenet significabilia complexe multum generat et multas conditiones eis attribuunt, et illa non recito quia possunt inveniri in Adam in *primo opere*, et Gregorius super primum in prologo, et credo etiam quod aliquid vidi de ea in Cattone."

rived in Paris.⁷⁵ The University chartulary also records the papal letter dropping the charges against one of the theologians summoned with Autrecourt to Avignon, the Cistercian Richard of Lincoln.⁷⁶ In May 1346, however, the papal commission required Autrecourt, under pain of excommunication, to revoke publicly at Avignon and again at Paris those views that had been condemned at Avignon. He was further required to burn his works in public, which we know that he did from Parisian records.⁷⁷ It is therefore significant that not *all* copies of Autrecourt's work were lost to the flames, and that Autrecourt—far from living out his life in anonymity or disgrace—went on to become the Dean of the Cathedral chapter at Metz in 1350. This indicates that his submission to the curial decision, like the submission of Durand earlier in the century, removed much of the cloud over his head as an orthodox theologian.⁷⁸

⁷⁵ We do not know when the summons from Avignon dated November 21, 1340 actually reached Paris [CUP II, n.1041, p.505]: "...Cum magistros Nicolaum de Ultricuria licentiatum, et Johannem, Ordinis Servorum Beate Marie, Heliam de Corso, Guidonem de Veeli, et Petrum de Monteregali, bacalarios, ac Henricum Anglicum Cisterciensis Ordinis scolarem, in theologia studentes Parisius, contra quos apostolatui nostro aliqua catholicam fidem tangentia sunt relata, velimus in Romana curia habere presentes, ut super hiis ab eis possimus noscere veritatem..." The final revocation decree includes a list of articles sent from Paris at some unknown date, presumably thereby initiating the Avignon proceedings; see "Alia cedula" [ed. Lappé: pp. 36*, 41*–42*].

⁷⁶ CUP II, n.1076, pp. 541–42; see also Courtenay, "Mirecourt and Rimini, I" p. 229.

⁷⁷ "Alia cedula" [ed. Lappé: pp. 42*–45*]: "... et etiam ordinamus, libellos, quos composuisse dicitur supradictus magister Nicolaus de Ultricuria, et qui ascribuntur eidem, videlicet epistole ad Bernardum, et illum qui incipit 'Exigit ordo executionis, etc.' tamquam multa falsa, periculosa, presumptuosa, suspecta et erronea et heretica continentes, fore in Prato Clericorum seu Sancti Germani Parisius comburendos et postmodum per dictum magistrum Nicolaum huiusmodi quatuor articulos per eum, ut predicatur, confessatos, necnon omnes et singulas propositiones predictas contentas in cedula 'Ve michi,' tamquam erroneas, erroneas, falsos et falsas, dubios, dubias, presumptuosas, suspectos et suspectas, hic et Parisius in dicto Prato, vocato et congregato inibi ad hoc clero, infra tempus per nos statuendum eidem in scriptis, revocandos esse ac revocandas publice, solenniter et expresse, omnes et alios articulos superius positos falsos, suspectos et erroneos asserendo, ita quod in revocatione huiusmodi facienda dictus magister Nicolaus dicere debeat alte et intelligibiliter quod propter ipsos articulos et propositiones et multos alios articulos dicti libelli combusti fuerunt. Et iurare habeat hic post dictam suam revocationem et consimiliter Parisius ad sancta Dei evangelia quod nunquam tenebit nec docebit contenta in dictis libellis seu aliquod eorumdem... Et ne ipsius magistri Nicolai effusa locacitas et temeritas remaneat penitus impunita, ipseque iuxta scripturam non plus sapiat quam oporteat, sed ad sobrietatem sapere ulterius non attemptet omittere: magistrum Nicolaum honore magistrali certis ex causis per hanc sententiam apostolica auctoritate privamus, eumque ad ascendendum ad magistralem honorem in theologica facultate specialiter tenore presentium inhabilem reddimus et indignum..."

⁷⁸ See Lappé, *Autrecourt*, p.3; Hissette, "Note," p.96. In a note (p.47*), Lappé indicated that the "magisterial title" of which the Avignonese commission "deprived" Autrecourt was his masters in Arts; but it is not clear to me on what juridical authority a pontifical commission comprising *theologians* could have done so. It is more likely that

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We have, however, reason to infer more than this. During the same weeks in May 1346 in which the curia ordered Autrecourt's revocation, Clement VI sent a letter to the Parisian Faculty of Theology, enjoining them from unnecessarily introducing "philosophical disputations," "sophistications," or "the new doctrines that are reportedly taught at other universities" into their theological teaching.⁷⁹ If Autrecourt's difficulties stemmed, in fact, from his importation of the sophisms and other techniques of linguistic analysis into his theological work, then it is no coincidence that the papal letter accompanied the articles of condemnation from Avignon to Paris. Autrecourt's Parisian accusers, if they were still at Paris, should at any rate have seen the papal injunction as vindication of their firm stance against the introduction of such novelties.

Given the normal career patterns of fourteenth-century theologians, however, the likelihood is that many members of the Faculty already senior in 1340 were beginning to depart from Paris to teach at other *studia* or to pursue the careers to which their degrees gave them expect-

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the phrase reduplicates the stress that he must never be granted the magisterium in *Theology*. This would not only be consonant with the generally iterative legal style of the document, but would be more readily reconciled with the commission's silence on the two baccalaureate degrees in Law and Theology, which they did not revoke and which were surely more significant to Autrecourt. On Durand's rehabilitation, cf. above, chapter IV, n.7.

⁷⁹ CUP II, n.1125, pp. 587–590: "Dilectis filiis universitati magistrorum et scholarium in studio Parisiensi commorantium... Nam nonnulli magistri et scolares artium et philosophie scientiis insudantes ibidem, dimissis et contemptis philosophi et aliorum magistrorum et expositorum antiquorum textibus, quos sequi deberent in quantum fidei catholice non obviant, ac veris expositionibus et scripturis, quibus fulcitur ipsa scientia, ad alias varias et extraneas doctrinas sophisticas, que in quibusdam aliis doceri dicuntur studiis, et opiniones apparentes non existentes et inutiles, et ex quibus fructus non capitur, se convertunt, studium predictum, a quo velut precellente ac dominante aliis fonteque vivo fluentia scientiarum et doctrine haurire solebant cetera studia, peregrinis inherendo opinionibus persepe inutilibus et erroneis quantum in eis est quasi faciendo servile. Plerique quoque theologi, quod deflendum est amarius, de textu Biblie, originalibus et dictis sanctorum ac doctorum expositionibus (ex quibus vera illa acquiritur theologia, cui non attribuendum est quicquid ab hominibus sciri potest, ubi plane nulla vanitatis et curiositatis noxia reperitur...) non curantes, philosophicis quaestionibus et aliis curiosis disputationibus et suspectis opinionibus doctrinisque peregrinis et variis se involvunt, non verentes in illis expendere dies suos, que nec domi nec militie nec alicubi prosunt, et ommissis necessariis supervacua docere et dicere satagunt in tanta temporis egestate, sic quod, unde deberent prodire fructus uberes sicut antiquitus reficientes fideles delectabiliter ad salutem, pestifera pululant quandoque semina, et in perniciosam segetem, de quo profecto dolendum est, coalescunt... universitatem vestram requirimus et hortamur in Domino, paterno sanoque vobis nichilominus consilio suadentes, quatinus hujusmodi peregrinis, variis et inutilibus, immo nocivis et periculosis doctrinis, opinionibus, et sophisticationibus ommissis totaliter et abjectis ad veritatem scientiarum inherendo testibus veris scripturis et opinionibus catholicam fulcientibus veritatem..." In what follows, with slightly divergent cadence, I go over ground that has been covered before by Gilbert, "Bury and Quires;" Eldredge, "Changing Concepts;" and Courtenay, "Role of English Thought," pp. 132–37.

tation.⁸⁰ In their places, it seems, there were bachelors of the *Sentences* whose theological training had begun in the middle years of the 1330s, and who were increasingly conversant with and engaged in the new theology from England. As early as 1344, after all, the powerful English patron of the greatest Oxford theologians, the bishop of Durham, had remarked that the English subtleties condemned by day at Paris were the subject of furtive studies by night.⁸¹ By the time the papal letter of May 1346 reached Paris, the methodology of the *Sentences* commentaries of John of Mirecourt and Gregory of Rimini, like that of Pierre Ceffons a couple of years later, all fell *outside* the manner of teaching of which the Pope approved.

Ceffons is our best witness that it was a methodology at stake, for he urges the old guard among the theologians to quit the kingdom, deriding them for "slandering what they have not understood," for not being able "to compose a question, nor compile one, nor even understand one," in a *Sentences* commentary. The echo of Bury's astonishment that Parisians presume to condemn the English subtleties that they study in secret, reverberates in Ceffons' statement that he had seen profound subtlety condemned by a judge into whose head "subtlety would have entered as easily as a fully loaded elephant could get through a finger ring."⁸² Ceffons' *Sentences* commentary is, in fact, studded with references to the ignorance shown in the condemnations that Paris witnessed in the 1340s, and the unclear status in which such notions as the *complexe significabile* were thereby cast.⁸³

⁸⁰ See, Courtenay and Tachau, "Ockham, Ockhamists," pp.77–78; and especially the forthcoming study by Courtenay, "Teaching Careers at the University of Paris in the High and Late Middle Ages," to whom I am grateful for a copy of the paper in an early version.

⁸¹ Richard of Bury, *Philobiblion* (as quoted in Gilbert, "Bury and Quires," p. 232): "Involunt sententias sermonibus imperitis, et omnis logicae proprietates privantur; nisi quod Anglicanas subtilitates, quibus palam detrahut, vigilis furtivis addiscunt." For the date of the *Philobiblion*, see Murdoch, "Subtilitates Anglicanae," p.51.

⁸² Ceffons, "Epistola introductoria" to I *Sent.* [ed. Trapp, "Ceffons," p.137 lin. 17–27]: "Pluresque rudes novos et veteres conspeximus asinellos in nulla Facultate sciolos qui artes liberales omnemque scientiam omnemque virtuosorum famam extinguere satagunt. Et qui nec Quaestionem non dico noverint ex se componere sed nec compilare vel intelligere norunt, ea tamen quae nec viderunt aut intellexerunt importunis clamoribus deiciunt et infamant. Litteratioresque vidi frequenter illitteratis subici; immo litteratorum profundae Sententiae grossorum et rudium nonnumquam supponuntur. Vidi ego profundam subtilitatem examinari rusticorum per iudicem eamque ut erroneam confutari. Et revera subtilitas illa tantum caput illius intrasset hebetis quantum elephas exiguum per anulum ingenti cum sarcina pertransiret." See also the discussion in Eldredge, "Changing Concepts," pp. 170–74.

⁸³ See above, n.74. The original recognition of the ubiquity and significance of Ceffons' comments on the condemnations of the 1340s in his *Sentences* lectures was D. Trapp's, and although my interpretation differs from his, I am indebted to his "Augustin-

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Whatever the inability to understand the Oxford learning that motivated the condemnations of the mid-1340s, the Parisian theologians who urged them did *not* successfully inhibit the intellectual acceptance of English theology much beyond the outset of the 1350s, nor did they prevent its early proponents from attaining successful careers in ecclesiastical and secular hierarchies. Gregory of Rimini's career may have been the most illustrious of those whom the condemnations of mid-decade touched, but Mirecourt's appointment to an abbacy was no mean fate.⁸⁴ The generation of theologians who began their theological studies in time to hear Mirecourt, Rimini, Ceffons, and their colleagues of the 1340s, demonstrate the triumph of the English theology at Paris in the 1350s. Nicole Oresme may be the most famous example, but he is hardly alone.⁸⁵ Although his *Sentences* commentary has not yet been discovered, the references in his Aristotelian commentaries to the *complexe significabile*⁸⁶ and, tacitly, to Autrecourt's worry concerning evidence,⁸⁷ like the discussion of

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ian Theology of the Fourteenth Century, Notes on Editions, Marginalia, Opinions, and Book-Lore," *Augustiniana* 6 (1956), 146–274, especially pp. 223–27.

⁸⁴ Of scholars concerned with Mirecourt, only Tessier, "Mirecourt," p.3, seems to have expressed caution concerning whether Mirecourt in fact became abbot of Royaumont, however briefly. For Rimini's career after Paris, see V. Marcolino's introduction to *Lectura* [I: pp. xi–xiii].

⁸⁵ At the outset of the academic year 1348–49, Oresme was already master of Arts and a student (for how long, we do not know) of theology resident at the Collège de Navarre. Two recent works on Oresme provide a guide to the immense literature on his œuvre: Susan M. Babbitt, *Oresme's Livre de Politiques and the France of Charles V*, in *Transactions of the American Philosophical Society* 75, pt. 1 (1985); and especially Bert Hansen, *Nicole Oresme and the Marvels of Nature*, in *Studies and Texts* 68 (Toronto: 1985). A single question of Oresme's *Sentences* commentary has been discovered by Boehner, "Eine Quaestio aus dem Sentenzenkommentar des Magisters Nikolaus Oresme," *RTAM* 14 (1947) 305–28; Etienne Gaudet also reported some of Oresme's teaching as a theologian, for which see Tachau, "French Theology," pp. 69–80.

⁸⁶ Oresme, *I De anima*, q.1 [ed. Peter Marshall, "Nicholas Oresme's 'Questiones super Libros Aristotelis de Anima': A Critical Edition with Introduction and Commentary," Ph.D. dissertation, Cornell, 1980, vol. I, p.113, lin. 66–74]: "Scientia non dicitur de aliquo nisi de tribus vel de aliquo trium—videlicet de conclusione, vel significabili complexe per conclusionem, si sit aliquod tale, sicut est 'hominem esse risibilem.' Dicitur etiam secundo de terminis conclusionis sicut de subiecto aut predicato. Et dicitur tertio de rebus significatis per huiusmodi terminos. Et proprie magis debet dici scientia de rebus significatis per terminos quam de terminis;" again, *I De anima* q. 4 [ed. Marshall: I, p. 149, lin. 95–96]. Peter Marshall generously provided me with copies of his dissertation and articles (some unpublished) concerning Oresme. I hope elsewhere to expand on the present remarks, but it may here suffice to note that this passage reveals that by "complexe significabile," Oresme understands Rimini's (not Wodeham's) notion. The importing of epistemological notions (such as the "complexe significabile") developed outside the context of Aristotle commentaries into the latter has been consistently overlooked by most scholars concerned with the genre.

⁸⁷ Oresme, *I De anima* q.4 [ed. Marshall: I, pp. 150–52, lin. 125–63]: "Secunda conclusio est quod ex cognitione complexa de simplicis et non equivalenti complexo de tertio adiacente numquam sequitur aliqua alia cognitio similis de alia re. Probatur, quia ex

(footnote continued on next page)

Aureol's experiential evidence in the treatise *De causis mirabilium*⁸⁸ hint at the extent to which Oresme's sources should be sought in the theological debates of the three decades before he became the College of Navarre's Grand Master.⁸⁹

Oresme's generation in its turn witnessed condemnations of suspect theological positions by the Faculty of Theology at Paris with, if anything, a more disinterested papal curia—a curia, after all, no longer headed by theologians.⁹⁰ As in the 1340s, Parisian condemnations applied only to Paris unless affirmed elsewhere, and retraction of condemned propositions removed the difficulties of pursuing a successful post-University career.⁹¹ The lists of propositions drawn up by the masters of the Faculty of Theology continue to provide us with insights into the progress of the route laid out early in the century at Oxford; those lists do not, on the other hand, appear to mark turning points either in the careers of the theologians whose views were censured, or in the academic vitality of the university community as a whole. Whether these condemnations, like those we have examined, betray the perplexity of senior faculty in the face of new methods and terminology in the works of the bachelors they supervised, is a question that must await the study of the commentaries extant

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ista cognitione vel ista propositione, 'A est, numquam sequitur 'ergo B est,' precipue et per se. Et propter hoc dicunt aliqui quod ex nulla re sequitur alia, i.e., quod ex eo quod una est, non sequitur aliam esse. Et dico notabiliter non equivalenti de tertio adiacenti, quia tunc valde bene <sequeretur> sicut sequitur: 'causatum est, igitur causa est;' 'pater est, ergo filius est.' Et, secundum Aristotelem, 'accidens est, ergo substantia est' ... Et ideo nimis generaliter enunciant dicentes quod ex nulla re sequitur alia, modo exposito ... Et ideo consequenter dicunt quod non est *simpliciter evidens* aliquam substantiam esse; ymmo solum probabile." Cf. Autrecourt, "Secunda epistola ad Bernardum" [ed. Lappé: pp.9*-13*]; "prima cedula" [ed. Lappé: p.31* lin. 11-21].

⁸⁸ See Hansen, *Oresme and Marvels*, pp. 111-12.

⁸⁹ Historians of science, especially, have long assumed that Buridan's thought was the major source for Oresme's except where the mathematics of proportion were concerned. Hansen's *Oresme and Marvels* is one of two studies particularly noteworthy for endeavoring to set Oresme in the context of English and Parisian theologians' work; the other, from which I have long benefitted, is Stephen McCluskey, Jr., "Nicole Oresme on Light, Color, and the Rainbow: an Edition and Translation, with Introduction and Critical Notes, of Part of Book Three," Ph.D. dissertation, University of Wisconsin-Madison, 1974.

⁹⁰ See, e.g., CUP III, n. 1201, pp. 11-12; n. 1218, pp. 21-23; nn. 1298-1300, pp. 114-124.

⁹¹ Denis de Foullechat, O.F.M., translator of John of Salisbury's *Policraticus* for Oresme's patron, Charles V, and Pierre Bersuire, whose *Repertorium morale* was a medieval best-seller establishing his reputation as a solid theologian, were each the subject of condemnations while teaching in the Parisian Faculty of Theology. Each nevertheless became a well-rewarded member of Charles V's royal household. Moreover, other members of the entourage had signed the original documents involving Foullechat's case as witnesses: Jean Daudin (CUP III, n. 1298); Nicole Oresme and Jean Golein (CUP III, n. 1299). Bersuire is known to modern scholars not so much for his theological career as for his translation of Livy and friendship with Petrarch; cf. e.g., Charles Samaran, "Pierre Bersuire," *Histoire Littéraire de la France* 39 (1962).

from the 1350s and 1360s. For the present, it is clear that, from the 1340s onward, the attention of Parisian scholars to developing an account of human knowledge that incorporated the English interpretations of Scotus's epistemology inimical to Ockham's, helped ensure the permanence of the perspectivist account long beyond the bounds of the century. This is an important story, but it awaits another time.

BIBLIOGRAPHY

Reference Works

- EMDEN, A. B., *A Biographical Register of the University of Oxford to A. D. 1500*, 3 vols. (Oxford: 1957–59).
- GLORIEUX, Palémon, *La Littérature Quodlibetique de 1260 à 1320*. [I] in *Bibliothèque Thomiste* 5 (1925); [II], *Bibliothèque Thomiste* 21 (1935).
- GRANT, Edward, ed. *A Source Book in Medieval Science* (Cambridge, Mass.: 1974).
- LINDBERG, David C., *A Catalogue of Medieval and Renaissance Optical Manuscripts*, in *Subsidia Mediaevalia* 4 (Toronto: 1975).
- LOHR, Charles, "Medieval Latin Aristotle Commentaries," in *Traditio* 23 (1967), 313–413; 24(1968), 149–245; 26(1970), 135–216; 27 (1971), 251–351; 28 (1972), 281–396; 29 (1973), 93–197; 30 (1974), 119–44; *Bulletin de philosophie médiévale* 14 (1973), 116–26.
- NIERMEYER, J. F., *Mediae Latinitatis lexicon minus* (Leiden: 1976).
- WATT, D. E. R., *A Biographical Dictionary of Scottish Graduates to A.D. 1410* (Oxford: 1977).

Primary Sources

I—

Manuscripts:

- Adam WODEHAM, O.F.M., *Lectura secunda*, in Cambridge, Gonville and Caius College 281/674, fols. 105ra–250vb.
- , *In libros Sententiarum. Opus Oxoniense*, in Paris, Bibliothèque Mazarine 915; Paris, Bibliothèque de l'Université 193; Vatican, Biblioteca Apostolica Vat. lat. 955.
- Anonymous, *In I librum Sententiarum*, in Vatican, Biblioteca Apostolica Vat. lat. 986, fol. 1ra–31vb.
- Anonymous, *In libros Sententiarum*, in Erfurt, Wissenschaftliche Bibliothek, C. A. 2. 180, fols. 1–101.
- Anonymous Eremitarum Augustinianum, *In I librum Sententiarum*, in Wien, Dominikanerkloster 160/130, fols. 1ra–24vb.
- Anonymous Franciscanus, *In I librum Sententiarum*, in Kraków, Biblioteka jagiellonska * 1584, fol. 39ra–106va.
- AUFREDUS GONTERI BRITO, O.F.M., *In I et II libros Sententiarum*, in Wrocław, Biblioteka Uniwersytecka A 211 (formerly I.F. 184).
- BERNARDUS LOMBARDI, O.P., *In libros Sententiarum*, in Erfurt Wissenschaftliche Bibliothek C.A. 2. 368.
- DURANDUS DE SANCTO PORCIANO [Durand de St. Pourçain] O.P., *In libros Sententiarum*, in Vatican, Biblioteca Apostolica, Vat. lat. 1072.
- FRANCISCUS MEYRONNES, O.F.M., *In libros Sententiarum*, Vatican, Biblioteca Apostolica Vat. lat. 894.
- GUALTERUS CHATTON, O.F.M., *In libros Sententiarum*, in Cambridge, University Library Ff.iii.26; Firenze, Biblioteca nazionale, conv. soppr. C.5.357; Paris, Bibliothèque nationale, lat. 15886; Paris, Bibliothèque nationale, lat. 15887.
- GUALTERUS DE ODINGTON, O.S.B., *Tractatus de multiplicatione specierum in visu*, in Cambridge, University Library Ii.1.13.
- GUILLELMUS CRATHORN, O.P., *In I Sententiarum*, in Basel, Universitätsbibliothek B.V.30; Erfurt, Wissenschaftliche Bibliothek C.A. 4.395a; Wien, Österreichische Nationalbibliothek palat. lat. 5460.

- GUILLELMUS DE BRIENNE, O.F.M., *Reportatio in libros Sententiarum*, in Praha, Universitní knihovna [Statní knihovna], VIII.F.14.
- GUILLELMUS DE OCKHAM, O.F.M., *Abbreuiatio lectionum in libros Sententiarum* (ed. Adam Wodeham, O.F.M.) in Paris, Bibliothèque nationale, lat. 15904.
- GUILLELMUS DE WARE, O.F.M., *In I librum Sententiarum*, in Vatican, Biblioteca Apostolica, Chigi B.viii.135.
- HARTMANUS (frater), *In libros Sententiarum*, in Kraków, Biblioteka jagiellonska * 1276.
- HERVAEUS NATALIS, O.P., *De quatuor materiis contra Henricum de Gandavo*, in Firenze, Biblioteca nazionale, conv. soppr. B.1.569 (77ra–100vb).
- HUGO DE LAWTONIA, O.P., *In libros Sententiarum*, in Erfurt, Wissenschaftliche Bibliothek C.A. 2.105; Vatican, Biblioteca Apostolica, Vat. lat. 829.
- IOHANNES BRAMMART, O.Carm., *In libros Sententiarum*, in Firenze, Biblioteca nazionale, Magliab. II.II.281.
- IOHANNES DE BURGO, O.E.S.A., *In libros Sententiarum*, in wroclaw*, Biblioteka Uniwersytecka, Milich F.64.
- IOHANNES DE READING, O.F.M., *In I librum Sententiarum*, in Firenze, Biblioteca nazionale, conv. soppr. D.IV.95.
- IOHANNES DE RODINGTON, O.F.M., *In libros Sententiarum*, in Assisi, Biblioteca comunale 133; Brussels, Bibliothèque Royale 11578 (1552); Vatican, Biblioteca Apostolica, Vat. lat. 5306.
- IOHANNES DUMBLETON, *Summa logicae et philosophiae*, in Oxford, Merton College 306.
- IOHANNES STUKLE, O.S.B., *In libros Sententiarum*, in Troyes, Bibliothèque municipale 505, fols. 84r–109v.
- LANDULPHUS CARACCIOLIO, O.F.M., *In I librum Sententiarum*, in Wien, Österreichische Nationalbibliothek, 1496; *In II librum Sententiarum*, in Cambridge, Gonville and Caius College, 526/326.
- MICHAELIS DE MASSA, O.E.S.A., *Abbreuiatio in libros Sententiarum*, in Oxford, Bodleian Library, canon misc. 276.
- , *In libros Sententiarum*, in Bologna, Università 2214.
- , (?) *In libros Sententiarum*, in Vatican, Biblioteca Apostolica, Vat. lat. 1087.
- OSBERTUS PICKINGHAM, O.Carm., *In libros Sententiarum*, in Erfurt, Wissenschaftliche Bibliothek, C.A. 2.132, fol. 1r–34v.
- PAULUS DE PERUGIA, O.Carm., *In libros Sententiarum*, in Praha, Narodni Museum XIII.D.5; Praha, Universitní knihovna [Statní knihovna], XIII.F.19.
- PETRUS AUREOLI, O.F.M., *In libros Sententiarum. Reportatio Parisiensis*, in Vatican, Biblioteca Apostolica, Borghese lat. 123; Firenze, Biblioteca nazionale, conv. soppr. A. III. 120.
- , *Scriptum in I Sententiarum*, Vatican, Biblioteca Apostolica, Borghese lat. 329.
- PETRUS CEFFONS, O.Cist., *In libros Sententiarum*, in Troyes, Bibliothèque municipale 62.
- PETRUS DE AQUILA, O.F.M., *In libros Sententiarum*, in München, Bayerische Staatsbibliothek, C.L.M. 8879.
- PETRUS PLAOUT DE PALMA, *In libros Sententiarum*, in Vatican, Biblioteca Apostolica, Vat. lat. 4284.
- RICHARDUS FITZRALPH, *In libros Sententiarum*, in Oxford, Oriel College 15; Paris, Bibliothèque nationale, lat. 15853; Troyes, Bibliothèque municipale 505; Vatican, Biblioteca Apostolica, Vat. lat. 11517; Worcester Cathedral, Q 71.
- RICHARDUS KILVINGTON, *In I librum Sententiarum*, in Vatican, Biblioteca Apostolica, Vat. lat. 4353.
- ROBERTUS GRAYSTANES, O.S.B., *In I librum Sententiarum*, in London, Westminster Abbey 13.
- ROBERTUS HALIFAX (Eliphath), O.F.M., *In libros Sententiarum*, in Paris, Bibliothèque nationale, lat. 15880.
- ROBERTUS HOLCOT, O.P., *In libros Sententiarum*, in London, British Library, Royal 10.C.VI; Oxford, Oriel College 15.
- , *Quaestiones Quodlibetales*, in Cambridge, Pembroke College 236; London, British Library, Royal 10.C.VI; and Oxford, Balliol College 246.

——, *Tractatus de stellis*, in Oxford, Oriel College 15.

ROGERUS ROSETUS, O.F.M., *In I librum Sententiarum*, Vatican, Biblioteca Apostolica, Chigi B.V.66.

"Statutum factum 1339 Parisius," in Kraków, Biblioteka Jagiellonska *, 1391.

THOMAS BRADWARDINE, *Propositiones de perspectiva*, in Vatican, Biblioteca Apostolica, Vat. lat. 3102.

II—

Early Printed Editions:

ALHAZEN [Ibn al-Haytham], *De aspectibus*. In Friedrich Risner, ed. *Opticae thesaurus Alhazeni Arabis libri septem*, (Basel: 1572; repr. New York: 1972).

ALPHONSUS VARGAS DE TOLEDO [Alfonso Vargas], O.E.S.A., *In I librum Sententiarum* (Venice: 1490; repr. New York: 1952).

DU PLESSIS D'ARGENTRÉ, Charles, *Collectio judiciorum de novis erroribus*, I (Paris: 1728; repr. Bruxelles: 1963).

DURANDUS DE SANCTO PORCIANO [Durand de St. Pourçain], O.P., *In libros Sententiarum. Redactio tertia* (Venice: 1571).

FRANCISCUS MEYRONNES, O.F.M., *In libros Sententiarum*, ed. Mauritius de Portu, O.F.M. (Venice: 1504–07); (Venice: 1520; repr. Frankfurt-am-Main: 1966).

HENRICUS GANDAVENSIS [Henricus de Gandavo; Henry of Ghent], *Quodlibeta Magistri Henrici Goethals a Gandavo Doctoris Solemnis*, 2 vols. (Paris: 1518; repr. Louvain: 1961).

——, *Summa Quaestionum Ordinarium* [SQO], 2 vols. (Paris: 1520; repr. St. Bonaventure, N.Y.: 1953).

HERVAEUS NATALIS [Hervé Nedelec], O.P., *In libros Sententiarum* (Paris: 1647).

——, *Quodlibeta* (Venice: 1513; repr. New York: 1966).

JOHANNES DE JANDUNO, *In libros De anima* (Venice: 1587).

JOHANNES KEPLER, *Ad Vitellionem paralipomena, quibus astronomiae pars optica traditur* (Frankfurt: 1604).

PETRUS DE ALLIACO [Pierre d'Ailly], *In libros Sententiarum* (Strasbourg: 1490; repr. Frankfurt-am-Main: 1968).

PETRUS DE AQUILA, O.F.M., *In libros Sententiarum* (Speyer: 1480).

THOMAS DE ARGENTINA [THOMAS OF STRASBOURG], O.E.S.A., *In libros Sententiarum* (Venice: 1564).

WITTELO, *Perspectiva libri decem*, in Friedrich Risner, ed. *Opticae thesaurus Alhazeni Arabis libri septem*, (Basel: 1572; repr. New York: 1972).

III—

Critical Editions, Single Questions, and Translations

ADAM WODEHAM, O.F.M., *Lectura secunda*, in Rega Wood, ed. (St. Bonaventure, N.Y.) forthcoming.

——, *Lectura secunda*, d.1, q.1, see Gál, Gedeon.

——, *Lectura secunda*, d.23, see Tachau, Katherine H.

AEGIDIUS, "Epistoli Egidii ad Nicholaum," see Lappé, Joseph.

ARISTOTLE, *Nicomachean Ethics*, in Jonathan Barnes, ed. *The Complete Works of Aristotle. The Revised Oxford Translation* (Princeton: 1984) vol. II, pp. 1729–867.

Auctarium Chartularii Universitatis Parisiensis, vol. I: *Liber procuratorum nationis Anglicanae (Alemanniae) in Universitate Parisiensi*, ed. Heinrich Denifle and E. Chatelain (Paris: 1894) [AUP].

AUGUSTINUS, *De trinitate*, in *Corpus Christianorum, series latina*, vol. 50 (Turnholt: 1968).

AVERROES [Ibn Rushd], *In Aristotelis De anima*, in F.S. Crawford, ed. *Averrois Cordubensis Commentarium magnum in Aristotelis De anima libros in Corpus Commentariorum Averrois in Aristotelem* 6 (Cambridge, Mass.: 1953).

AVICENNA [Ibn Sina], *Philosophia prima*, in Simone Van Riet, ed. *Avicenna latinus: liber de*

Philosophia prima sive Scientia divina, 2 vols. (Leiden: 1977, 1980).

—, *Liber sextus de naturalibus*, in Simone Van Riet and Gérard Verbeke, eds. *Avicenna latinus: Liber de Anima seu Sextus de Naturalibus*, 2 vols. (Leiden: 1968, 1972).

BARTHOLOMAEUS ANGLICUS, in R. James Long, ed. *Bartholomaeus Anglicus On the Properties of Soul and Body, De proprietatibus rerum libri III et IV* (Toronto: 1979).

CHARTULARIUM UNIVERSITATIS PARIENSIS, ed. Heinrich Denifle and E. Chatelain, vol. II (Paris, 1891).

GODEFRIDUS DE FONTIBUS [Godfrey of Fontaines], *Quodlibeta V-VIII*, in M. de Wulf and J. Hoffmans, eds. in *Les philosophes belges. Textes et Études*, vols. 3–4 (Louvain: 1914–1924).

GREGORIUS ARIMINENSIS [Gregory of Rimini], O.E.S.A., *Lectura in I et II libros Sententiarum*, in A. Damasus Trapp, V. Marcolino, W. Eckermann, M. Santos-Noya, M. Schulze, W. Simon, W. Urban, and V. Vendland, eds. *Gregorii Ariminensis OESA Lectura super primum et secundum Sententiarum*, in H. A. Oberman, ed. *Spätmittelalter und Reformation Texte und Untersuchungen*, vols. 6–11 (Berlin/New York: 1979–84).

GUALTERUS BURLEY, *Tractatus de sensibus*, in Herman Shapiro and Frederick Scott, "Walter Burley's De Sensibus," *Mitteilungen des Grabmann-Instituts der Universität München* 13(1966), 3–10.

GUALTERUS CHATTON [Walter Chatton], O.F.M., *Lectura in I Sententiarum*, prol., q.1, in Maria Elena Reina, ed. "La prima questione del Prologo del 'Commento alle Sentenze' di Walter Catton," *RCSF* 25 (1970), 48–74, 290–314.

—, *Lectura in I Sententiarum*, prol., q.2, in J. O'Callaghan, ed. "The Second Question of the Prologue to Walter Catton's Commentary on the Sentences. On Intuitive and Abstractive Knowledge," in J. R. O'Donnell, ed., *Nine Medieval Thinkers* (Toronto: 1955), pp. 233–69.

—, *Lectura in I Sententiarum*, prol., q.3, in Luciano Cova, ed. *Walter Catton. Commento alle Sentenze: Prologo, questione terza* (Rome: 1973).

—, *Lectura in I Sententiarum*, prol., q.4, in Luciano Cova, ed. "La quarta questione del Prologo del 'Commento alle Sentenze' di Walter Catton," *RCSF* 30 (1975), 303–30.

—, *Lectura in I Sententiarum*, prol., q.5, in Christian Knudsen, "Chatton contra Ockham über Gegenstand und Einheit von Wissenschaft und Theologie," *CIMAGL* 50 (1985), 3–112.

—, "Quaestio de continuo," in John E. Murdoch and Edward Synan, "Two Questions on the Continuum: Walter Chatton (?), O.F.M. and Adam Wodeham, O.F.M.," *FrSt* 26 (1966) 212–88.

—, *Reportatio in I Sententiarum*, dd.22–23 in Christian Knudsen, "Ein Ockhamkritischer Text zu Signification und Supposition und zum Verhältnis von erster und zweiter Intention," *CIMAGL* 14 (1975), 1–26.

—, *Reportatio in II Sententiarum*, d.4, qq. 1–4, in Katherine H. Tachau, ed. "Walter Chatton on Sensible and Intelligible Species," *RCSF* 40 (1985), 711–48.

—, see also: Etzkorn, Girard; Fitzpatrick, Noel; Gál, Gedeon; Knudsen, Christian.

GUILLELMUS CRATHORN [William Crathorn], O.P., see Kraus, Johannes.

GUILLELMUS DE OCKHAM [William of Ockham], O.F.M., *Expositio in libros I–III Physicorum Aristotelis*, eds. V. Richter and G. Liebold, in *Guillelmi de Ockham Opera philosophica et theologica ad fidem codicum manuscriptorum edita. Opera philosophica* IV (St. Bonaventure, N.Y.: 1985) [OPh IV].

—, *Expositio in librum Perihermenias Aristotelis*, eds. A. Gambatese and S. Brown, in *Guillelmi de Ockham Opera philosophica et theologica ad fidem codicum manuscriptorum edita. Opera philosophica* II (St. Bonaventure, N.Y.: 1978) [OPh II].

—, *Expositio in librum Porphyrii de Praedicabilibus*, ed. Ernest A. Moody in *Guillelmi de Ockham Opera philosophica et theologica ad fidem codicum manuscriptorum edita. Opera philosophica* II (St. Bonaventure, N.Y.: 1978) [OPh II].

—, *Ordinatio*, eds. G. Gál, S. Brown, G. Etzkorn, and F. Kelley, in *Guillelmi de Ockham Opera philosophica et theologica ad fidem codicum manuscriptorum edita. Opera Theologica. Scriptum in Librum Primum Sententiarum* I–IV (St. Bonaventure, N.Y.: 1967–1979) [OTh I–IV].

- , *Reportatio in libros II–IV Sententiarum*, eds. G. Gál, R. Wood, G. Etzkorn, F. Kelley, and R. Green, in *Guillelmi de Ockham Opera philosophica et theologica ad fidem codicum manuscriptorum edita. Opera Theologica V–VII* (St. Bonaventure, N.Y.: 1981–1984) [OTh V–VII].
- , *Quodlibeta septem*, ed. Joseph C. Wey, in *Guillelmi de Ockham Opera philosophica et theologica ad fidem codicum manuscriptorum edita. Opera Theologica IX* (St. Bonaventure, N.Y.: 1980) [OTh IX].
- , *Summa logicae*, eds. Ph. Boehner, G. Gál, S. Brown, in *Guillelmi de Ockham Opera philosophica et theologica ad fidem codicum manuscriptorum edita. Opera Philosophica I* (St. Bonaventure, N.Y.: 1974) [OPh I].
- HENRICUS GANDAVENSIS, *Quodlibeta*, in R. Macken, O.F.M. and R. Wielockx, eds. *Henrici de Gandavo Opera Omnia* (Leuven/Leiden, 1979-present).
- JOHANNES DE MIRECOURT [Jean de Mirecourt], O.Cist., "Apologiae," in F. Stegmüller, ed. "Die zwei Apologien des Jean von Mirecourt," *RTAM* 5 (1933), 40–79, 192–204.
- , *In I librum Sententiarum*, qq. 13–16, in Massimo Parodi, ed. "Questioni inedite tratte dal I libro del 'Commento alle Sentenze' di Giovanni di Mirecourt (qq. 13–16)," *Medioevo* 3 (1977), 237–84; *Medioevo* 4 (1978), 59–92.
- , *In I librum Sententiarum*, qq. 2–6, in Anna Franzinelli, ed. "Questioni inedite di Giovanni di Mirecourt sulla conoscenza," *RCSF* 13 (1958), 319–40, 415–49.
- JOHANNES DE READING [John of Reading], O.F.M., *In I librum Sententiarum*, d.3, q.3, in Gedeon Gál, O.F.M., ed. "Quaestio Ioannis de Reading de necessitate specierum intelligibilium Defensio doctrinae Scoti," *FrSt* 29 (1969), pp. 68–75.
- JOHANNES DE RODINGTON [John of Rodington], O.F.M., *In I librum Sententiarum* see Tweedale, Martin.
- JOHANNES DUNS SCOTUS [John Duns Scotus], O.F.M., in Charles balic *, ed. *Joannis Duns Scoti opera omnia* (Vatican City: 1950-present) [balic*].
- , in Luke Wadding, ed. *Joannis Duns Scoti opera omnia* (1639; repr. by Vivès, Paris: 1891–95) [Vivès].
- , *In II librum Sententiarum*, d.13, see McCarthy, Edward R.
- JOHANNES GRANDISSON, *Register*, in F. C. Hingeston-Randolph, ed. *The Register of John Grandisson, Bishop of Exeter, 1327–69*, 3 vols. (London: 1894–1899).
- JOHANNES PECHAM [John Pecham], O.F.M., *Perspectiva communis*, in David Lindberg, *John Pecham and the Science of Optics* (Madison, Wisconsin: 1970).
- MATTHAEUS DE AQUASPARTA [Matthew of Aquasparta], O.F.M., *Quaestiones disputatae de anima separata* in *Bibliotheca Franciscana Scholastica* v. 18 (Quaracchi: 1959).
- NICHOLAUS DE AUTRECOURT, "Epistolae ad Bernardum," see Lappé, Joseph.
- , *Exigit ordo*, in J. R. O'Donnell, ed. "Nicholas of Autrecourt," *MedSt* 1 (1939), 179–280.
- , "Revocationis 'prima cedula' et 'secunda cedula,'" see Lappé, Joseph.
- NICHOLAUS ORESME [Nicole Oresme], *De causis mirabilium* in Bert Hansen, *Nicole Oresme and the Marvels of Nature*, in *Studies and Texts* 68 (Toronto: 1985).
- , *In tertium librum Meteororum Aristotelis*, in Stephen McCluskey, Jr., "Nicole Oresme on Light, Color, and the Rainbow: an Edition and Translation, with Introduction and Critical Notes, of Part of Book Three of his *Quaestiones super quatuor libros Meteororum*," Ph.D. dissertation, University of Wisconsin-Madison, 1974.
- , *Livre du ciel et du monde*, eds. Albert D. Menut and Alexander J. Denomy (Madison, Wisconsin: 1968).
- , *Quaestiones De anima*, in Peter Marshall, ed. "Nicholas Oresme's *Questiones super libros Aristotelis de Anima*: A Critical Edition with Introduction and Commentary," Ph.D. dissertation, Cornell, 1980.
- PETRUS AUREOLI [Peter Aureol], O.F.M., *Reportatio in I librum Sententiarum*, prol. see Boehner, Philotheus.
- , *Scriptum in I librum Sententiarum*, in Eligius Buytaert, ed. *Petri Aureoli Scriptum super primum Sententiarum, prooemium-dist.* 8 2 vols. (St. Bonaventure, N.Y.: 1953–56).

- PETRUS CEFFONS [Pierre Ceffons], O.Cist., "Epistola introductoria in *lectura super libros Sententiarum*," see Trapp, Damasus, "Ceffons."
- PETRUS DE ALLIACO [Pierre d'Ailly], *Conceptus et Insolubilia* in Paul Spade, trans. *Peter of Ailly: Concepts and Insolubles* (Dordrecht: 1980).
- PETRUS IOANNIS OLIVI [Peter Olivi], O.F.M., *Quaestiones in secundum librum Sententiarum*, ed. Bernard Jansen, 3 vols., in *Bibliotheca Franciscana Scholastica Medii Aevi* (Quaracchi: 1922–26).
- RADULPHUS BRITO, see Pinborg, Jan.
- RENÉ DESCARTES, *Oeuvres et Lettres* (Paris: 1953).
- RICHARDUS CAMPSALL [Richard Campsall], *Quaestiones super librum Priorum Analeticorum* in Edward Synan, ed. *The Works of Richard of Campsall*, I (Toronto: 1968).
- , "Quaestio utrum materia possit esse sine forma?" in Edward Synan, ed., *The Works of Richard of Campsall*, II (Toronto: 1982).
- ROBERTUS GROSSETESTE, *De lineis, angulis, et figuris*, see Baur, Ludwig.
- ROBERTUS HOLCOT [Robert Holcot], O.P., "Sermo finalis", in Joseph Wey, "The *sermo finalis* of Robert Holcot," *MedSt* 11 (1949), 219–23.
- , *Quodlibeta* I, q. 1, in J. T. Muckle, "Utrum Theologia sit scientia. A Quodlibet Question of Robert Holcot, O.P.," *MedSt* 20 (1958), 127–53.
- , *Quodlibeta* I, qq. 2–4, in Hester Goodenough Gelber, *Exploring the Boundaries of Reason. Three Questions on the Nature of God by Robert Holcot, O.P.*, (Toronto: 1983).
- , *Quodlibeta* I, q. 6, in Ernest A. Moody, "A Quodlibetal Question of Robert Holcot, O.P. on the Problem of the Objects of Knowledge and of Belief," *Speculum* 39 (1964) 53–74 (repr. in idem. *Studies*, pp. 321–52).
- , *Quodlibeta* I, q. 6, in William J. Courtenay, ed. "A Revised Text of Robert Holcot's Quodlibetal Dispute on Whether God is Able to Know More Than He Knows," *Archiv für Geschichte der Philosophie* 53 (1971), 1–21.
- , *Quodlibeta*, in William J. Courtenay, Hester G. Gelber, Paul A. Streveler, and Katherine H. Tachau, eds. *Robert Holcot on Future Contingents* (forthcoming).
- , *Quodlibeta* I, q. 9; III, q. 7, in Paolo Molteni, *Roberta Holcot, O.P. Dottrina della grazia e della giustificazione con due questioni quodlibetali inedite* (Pinerolo: 1968).
- ROGERUS BACON [Roger Bacon], O.F.M., *Communia naturalia* in Robert Steele, ed. *Opera hactenus inedita Rogeri Baconi*, 16 vols. (Oxford: 1905–40), vols. 2–3.
- , *Compendium studii philosophie* in J. S. Brewer, ed. *Opera quaedam hactenus inedita* (London, 1859).
- , *Compendium studii theologiae* in H. Rashdall, ed. *Fratris Rogeri Bacon, Compendium studii theologiae* (Aberdeen: 1911).
- , *De multiplicatione specierum* in David C. Lindberg, *Roger Bacon's Philosophy of Nature. A Critical Edition, Introduction, and Notes, of De multiplicatione specierum and De speculis comburentibus* (Oxford: 1983).
- , "De signis" in K. Margareta Fredborg, Lauge Nielsen, and Jan Pinborg, eds. "An Unedited Part of Roger Bacon's 'Opus Maius': *De Signis*," *Traditio* 34 (1978), 75–136.
- , *Opus maius* in John Bridges, ed. *The Opus maius of Roger Bacon*, 3 vols. (London: 1900).
- , *Opus Tertium* in A. G. Little, ed. *Part of the Opus Tertium of Roger Bacon, including a fragment now printed for the first time* (Aberdeen: 1912).
- , *Quaestiones super IV Metaphysicae* in Robert Steele, ed. *Opera hactenus inedita Rogeri Baconi*, 16 vols. (Oxford: 1905–40), vol. 11.
- WITTELO, *Perspectiva*, in A. Mark Smith, ed. *Witelonis Perspectivae Liber Quintus*, in *Studio Copernicana XXIII* (Wroclaw: 1983).

Secondary Sources

- ADAMS, Marilyn M., "Intuitive Cognition, Certainty, and Scepticism in William Ockham," *Traditio* 26 (1970), 389–98.

- , "Ockham's Nominalism and Unreal Entities," *Philosophical Review* 86 (1977), 144–76.
- , "Was Ockham a Humean About Efficient Causality?" *FrSt* 39 (1979), 5–48.
- ADAMS, Marilyn, and Rega Wood, "Is To Will It As Bad As To Do It? The Fourteenth Century Debate," *FrSt* 41 (1981), 5–60.
- AMORÓS, León, "Anfredo Gontero, O.F.M. discípulo de Escoto y lector en el estudio general de Barcelona," *Revista Española de Teología* 1 (1940–41), 345–72.
- ASHWORTH, E. J., "Can I Speak More Clearly Than I Understand? A Problem of Religious Language in Henry of Ghent, Duns Scotus and Ockham" *Historiographia Linguistica* VII (1980), 29–38.
- , "The Scholastic Background to Locke's Theory of Language," *Studies in the History of Linguistics* 20 (1980), 59–68.
- , "Theories of the Proposition: Some Early Sixteenth Century Discussions," *FrSt* 38 (1978), pp. 81–121.
- BABBITT, Susan M., *Oresme's Livre de Politiques and the France of Charles V*, in *Transactions of the American Philosophical Society* 75, pt. 1 (1985).
- BARBET, Jeanne, *François de Meyronnes-Pierre Roger Disputatio (1320–1321)* (Paris: 1961).
- , "Le Commentaire des *Sentences* de Jean de Rodington, O.F.M. († 1348) d'après les manuscrits Reims 503 et Toulouse 192," *CNRS, Bulletin d'information et de l'institut de recherche et d'histoire des textes* 3 (1954), 55–63.
- BAUDRY, Leon, "Gauthier de Chatton et son Commentaire des *Sentences*," *AHDLMA* 14 (1943), 337–69.
- BAUR, Ludwig, ed., *Die philosophischen Werke des Robert Grosseteste, Bischofs von Lincoln*, BGPTM 9, (1912).
- BEAUJOUAN, Guy, "L'Enseignement de l'arithmétique élémentaire à l'Université de Paris aux XIIIe et XIVe siècles," in *Homenaje a Millas Vallicrosa*, vol. I (Barcelona: 1954), pp. 93–124.
- BÉRUBÉ, Camille, "La première école scotiste," in Z. Kaluza and P. Vignaux, eds., *Logique, Ontologie, et Théologie au XIVe Siècle. Preuve et Raisons à l'Université de Paris* (Paris: 1984), 9–24.
- BÉRUBÉ, Camille and Servus GIEBEN, "Guibert de Tournai et Robert Grosseteste, sources inconnues de la doctrine de l'illumination," in *S. Bonaventure, 1274–1974*, II (Grottaferrata: 1973), pp. 627–54.
- BOEHNER, Philotheus, "Eine Quaestio aus dem Sentenzenkommentar des Magisters Nikolaus Oresme," *RTAM* 14 (1947), 305–28.
- , "Notitia Intuitiva of Non Existents According to Peter Aureoli, O.F.M. († 1322)," *FrSt* 8 (1948), 388–416.
- , "Ockham's Theory of Signification," *FrSt* 6 (1946), 143–70.
- , "The Notitia Intuitiva of Non-Existents According to William Ockham: With a Critical Study of the Text of Ockham's Reportatio and a Revised Edition of Rep. II, Q.14–15," *Traditio* 1 (1943), 223–75.
- , "The Realistic Conceptualism of William Ockham," *Traditio* 4 (1946), 307–35.
- BOLER, John F., "Intuitive and Abstractive Cognition," in *CHLMP*, 460–78.
- , "Ockham on Evident Cognition," *FrSt* 36 (1976), 85–98.
- , "Ockham on Intuitive Cognition," *Jour. Hist. Phil.* 11 (1973), 95–106.
- , "Scotus and Intuition: Some Remarks," *The Monist* 49 (1965), 551–70.
- BOTTIN, Francesco, *La Scienza degli Occamisti. La scienza tardo-medievale dalle origini del paradigma nominalista alla rivoluzione scientifica* (Rimini: 1982).
- BRAAKHUIS, H. A. G., "The View of William of Sherwood on Some Semantical Topics and Their Relation to Those of Roger Bacon," *Vivarium* 15 (1977), 111–42.
- BRAMPTON, Charles K., "Personalities at the Process Against Ockham at Avignon, 1324–26" *FrSt* 26 (1966), 4–25.
- , "Scotus, Ockham, and the Theory of Intuitive Cognition," *Antonianum* 40 (1965), 449–66.
- BRINKLEY (Birk), Ann W., "Robert Holcot: Toward an Empirical Theory of Knowledge," Ph.D. dissertation, Harvard 1972.

- BROWN, Jerome V., "Abstraction and the Object of the Human Intellect According to Henry of Ghent," *Vivarium* 11 (1973), 80–104.
- , "Divine Illumination in Henry of Ghent," *RTAM* 41 (1974), 177–99.
- , "Duns Scotus on the Possibility of Knowing Genuine Truth: The Reply to Henry of Ghent in the 'Lectura Prima' and in the 'Ordinatio,'" *RTAM* 51 (1984), 136–82.
- , "Henry of Ghent on Internal Sensation," *Jour. Hist. Phil.* 10 (1972), 15–28.
- , "John Duns Scotus on Henry of Ghent's Arguments for Divine Illumination: The Statement of the Case" *Vivarium* 14 (1976), 94–113.
- , "Sensation in Henry of Ghent: A Late Medieval Aristotelian-Augustinian Synthesis," *Archiv für Geschichte der Philosophie* 53 (1971), 238–66.
- BROWN, Stephen F., "A Modern Prologue to Ockham's Natural Philosophy," in *Sprache und Erkenntnis im Mittelalter, Miscellanea Mediaevalia* 13/1 (1981), pp. 107–29.
- , "Sources for Ockham's Prologue to the Sentences [I]," *FrSt* 26 (1966), 36–65.
- , "Sources for Ockham's Prologue to the Sentences, II," *FrSt* 27 (1967), 39–107.
- , "The Unity of the Concept of Being in Peter Aureol's *Scriptum* and *Commentarium*," Ph.D. dissertation, Institut Supérieur de Philosophie, Université Catholique de Louvain, 1964.
- , "Walter Chatton's *Lectura* and William of Ockham's *Quaestiones in Libros Physicorum Aristotelis*" in W. A. Frank and G. J. Etzkorn, eds., *Essays Honoring Allan B. Wolter* (St. Bonaventure, N.Y.: 1986), pp. 81–115.
- , "Words, Concepts and Things in the Period Between Aquinas and Ockham: Reflections on *Perihermenias* Commentaries During the Late Thirteenth and Early Fourteenth Centuries," unpublished paper (March, 1978).
- BUNGE, Mario, "The Weight of Simplicity in the Construction and Assaying of Scientific Theories," *Philosophy of Science*, 28 (1961), 120–49.
- BURR, David, "Petrus Ioannis Olivi and the Philosophers," *FrSt* 31 (1971), 41–71.
- , "Quantity and Eucharistic Presence: The Debate from Olivi through Ockham," *Collectanea Franciscana* 44 (1974), 5–44.
- , *The Persecution of Peter Olivi*, in *Transactions of the American Philosophical Society*, n.s., v.66, part 5 (1976).
- CANNIZZO, G., *Il Sorgere di "Notitia Intuitiva" all'alba del pensiero moderno. Oxford/Parigi nell'Europa del primo trecento (1298–1318)* (Palermo: 1984).
- CANNON, Joanna, "Inghilterra," in *Le scuole degli ordini mendicanti (secoli XIII-XIV)* (Todi: 1978), pp. 93–149.
- CANTOR, Geoffrey, "Light and Enlightenment: An Exploration of Mid-Eighteenth-Century Modes of Discourse," in U.C.L.A., William Andrews Clark Library Seminar, *The Discourse of Light from the Middle Ages to the Enlightenment* (Pasadena: 1985), pp. 69–106.
- , *Optics after Newton. Theories of Light in Britain and Ireland, 1704–1840* (Manchester 1983), pp. 16–21.
- CATTO, J. I., ed. *The Early Oxford Schools* (volume I of T. H. Aston, ed. *The History of the University of Oxford [Oxf. Hist.]*) (Oxford: 1984).
- , "Theology and Theologians 1220–1320," *Oxf. Hist.* I, pp. 471–517.
- CHENU, Marie Dominique, *La Théologie comme science au XIIIe siècle*, 3d ed. in *Bibliothèque Thomiste* 33 (Paris: 1957).
- CORVINO, Francesco, "La Nozione di 'specie intelligibile' da Duns Scoto ai Maestri Agostiniani del secolo XIV (Gregorio da Rimini e Ugolino da Orvieto)" *Rivista di filosofia neo-scolastica* 70 (1978), pp. 149–78.
- COURTENAY, William J., *Adam Wodeham. An Introduction to His Life and Writings*, in *Studies in Medieval and Reformation Thought* 21 (Leiden: 1978).
- , "Augustinianism at Oxford in the Fourteenth Century," *Augustiniana* 30 (1980), 58–70.
- , "Force of Words and Figures of Speech: The Crisis over *Virtus sermonis* in the Fourteenth Century," forthcoming.
- , "John of Mirecourt and Gregory of Rimini on Whether God Can Undo the Past," I, *RTAM* 39 (1972), 224–56, II, *RTAM* 40 (1973), 147–74

- , "Nicholas of Assisi and Vatican Ms. Chigi B V 66," *Scriptorium* 36 (1982), 260–63.
- , "Nominalism and Late Medieval Religion," in Charles Trinkaus and Heiko A. Oberman, eds. *The Pursuit of Holiness* (Leiden: 1974), pp. 26–59.
- , "Ockhamism among the Augustinians: the Case of Adam Wodeham," *Cassiciacum* 30 (1975), 267–75.
- , "Some Notes on Robert of Halifax, O.F.M.," *FrSt* 33 (1973), 135–42.
- , "Teaching Careers at the University of Paris in the High and Late Middle Ages" (forthcoming).
- , "The Dialectic of Omnipotence in the High and Late Middle Ages," in T. Rudavsky, ed. *Divine Omniscience and Omnipotence in Medieval Philosophy* (Dordrecht/Boston: 1985), pp. 243–69.
- , "The Lost Matthew Commentary of Robert Holcot, O.P.," *Archivum Fratrum Praedicatorum* 50 (1980), 104–12.
- , "The Reception of Ockham's Thought at the University of Paris," in Zenon Kaluza and Paul Vignaux, eds. *Logique, Ontologie, Théologie au XIVe Siècle. Preuve et Raisons à l'Université de Paris*, pp. 43–64.
- , "The Reception of Ockham's Thought in Fourteenth-century England," in Anne Hudson and Michael Wilks, eds. *From Ockham to Wyclif*, in *Studies in Church History*, subsidia 5 (Oxford: 1987), pp. 89–107.
- , "The Role of English Thought in the Transformation of University Education in the Late Middle Ages," in J. M. Kittelson and P.J. Transue, eds., *Rebirth, Reform and Resilience, Universities in Transition 1300–1700* (Columbus, Ohio: 1984), pp. 103–62.
- , "The 'Sentences'-Commentary of Stukle: A New Source for Oxford Theology in the Fourteenth Century," *Traditio* 34 (1978), 435–38.
- COURTENAY, William J. and Katherine H. TACHAU, "Ockham, Ockhamists, and the English-German Nation at Paris, 1339–1341," *History of Universities* 2 (1982), 53–96.
- COVA, Luciano, "Francesco de Meyronnes e Walter Catton nella controversia scolastica sulla 'notitia intuitiva de re non existente,'" *Medioevo* 2 (1976), 227–51.
- CREMASCOLI, G., "Il 'Libellus de visione Dei' di Durando di S. Porziano," *Studi medievali* 3 ser., 25 [1984], 393–442.
- CROMBIE, Alistair C., *Robert Grosseteste and the Origins of Experimental Science 1100–1700* (Oxford: 1953, 1971).
- DAL PRA, Mario, "La fondazione dell'empirismo e le sue aporie nel pensiero di Nicola di Autrecourt," *RCSF* 7 (1952), 389–402.
- , "La proposizione come oggetto della conoscenza scientifica nel pensiero di Roberto Holcot," in idem, *Logica e realtà: momenti del pensiero medievale* (Bari: 1974), pp. 83–119.
- , "Linguaggio e conoscenza assertiva nel pensiero di Roberto Holcot," *RCSF* 9 (1956), 15–40.
- DALES, Richard C., "Henricus de Harclay. Quaestio 'utrum mundus potuit fuisse ab aeterno,'" *AHDLMA* 50 (1983), 223–55.
- , "Henry of Harclay on the Infinite," *Journal of the History of Ideas* 45 (1984), 295–301.
- , "The Influence of Grosseteste's 'Hexaemeron' on the 'Sentences' Commentaries of Richard Fishacre, O.P. and Richard Rufus of Cornwall, O.F.M.," *Viator* 2 (1971), 271–300.
- D'ALVERNY, Marie-Thérèse, "Un adversaire de Saint Thomas: Petrus Iohannis Olivi," in *St. Thomas Aquinas 1274–1974 Commemorative Studies*, II (Toronto: 1974), pp. 179–218.
- DAVIS, Leo Donald, "Knowledge According to Gregory of Rimini," *New Scholasticism* 55 (1981), 331–47.
- , "The Intuitive Knowledge of Non-Existents and the Problem of Late Medieval Scepticism," *New Scholasticism*, 49 (1975), 410–30.

- DAY, Sebastian J., O.F.M., *Intuitive Cognition. A Key to the Significance of the Later Scholastics* (St. Bonaventure, N.Y.: 1947).
- DE LIBERA, Alain, "Bulletin d'histoire de la logique médiévale," *Revue des sciences philosophiques et théologiques* 69 (1985), 273–309.
- , "The Oxford and Paris Traditions in Logic," in CHLMP, pp. 174–87.
- DE RIJK, Lambert M., "Origins of the Theory of the Properties of Terms," in CHLMP, pp. 161–73.
- DECKER, Bruno, *Die Gotteslehre des Jakob von Metz: Untersuchungen zur Dominikanertheologie zu Beginn des 14. Jahrhunderts*, BGPTM 42/1 (1967).
- DETTLOFF, Werner, *Die Lehre von der acceptatio divina bei Johannes Duns Scotus mit besonderer Berücksichtigung der Rechtfertigungslehre* (Werl: 1954).
- DREILING, R., *Der Konzeptualismus des Petrus Aureoli* BGPTM 11, 6 (1913).
- DUHEM, Pierre, *Le système du monde*, 10 vols. (Paris: 1913–59).
- DUMONT, Richard, "Scotus' Intuition Viewed in the Light of the Intellect's Present State," *De doctrina Ioannis Duns Scoti*, in *Studia Scholastico-Scotistica* II (Rome: 1968), pp. 47–64.
- , "The Role of the Phantasm in the Psychology of Duns Scotus," *The Monist* 49 (1965), 617–33.
- DUMONT, Stephen D., "Being and Difference: Footnotes to Plato in the Fourteenth Century," paper presented to the Medieval Academy of America meeting (April, 1987).
- , "The Univocity of the Concept of Being in the Fourteenth Century: John Duns Scotus and William of Alnwick," *MedSt* 49 (1987).
- EBBESEN, Sten, "Roger Bacon and the Fools of his Time," *CIMAGL* 3 (1970), 40–44.
- ECKERMANN, Willigis, *Wort und Wirklichkeit. Das Sprachverständnis in der Theologie Gregors von Rimini und sein Weiterwirken in der Augustinerschule*, in *Cassiciacum* 33 (1978).
- ELDRIDGE, Laurence, "Changing Concepts of Church Authority in the Later Fourteenth Century: Peter Ceffons of Clairvaux and William Woodford, O.F.M.," *Révue de l'Université d'Ottawa* 48 (1978), 170–78.
- ELIE, Hubert, *Le complexe significabile* (Paris: 1936).
- ETZKORN, Girard, "John Reading on the Existence and Unicity of God, Efficient and Final Causality," *FrSt* 41 (1981), 110–221.
- , "Walter Chatton and the Controversy on the Absolute Necessity of Grace," *FrSt* 37 (1977), 32–65.
- FISHER, N. W., and Sabetai UNGURU, "Experimental Science and Mathematics in Roger Bacon's Thought," *Traditio* 27 (1971), 353–78.
- FITZPATRICK, Noel, "Walter Chatton on the Univocity of Being: A Reaction to Peter Aureoli and William Ockham," *FrSt* 31 (1971), 88–177.
- FOURNIER, P., "Pierre Roger (Clément VI)," *Histoire Littéraire de la France* 37 (1938), 209–38.
- FREDBORG, K. Margareta, "Roger Bacon on 'Impositio vocis ad significandum'" in H. A. G. Braakhuis, C. H. Kneepkins, and L. M. de Rijk, eds. *English Logic and Semantics from the End of the Twelfth Century to the Time of Ockham and Burleigh*, (Nijmegen: 1981), pp. 167–91.
- FUCHS, Oswald, *The Psychology of Habit According to William Ockham* (St. Bonaventure, N.Y.: 1952).
- GÁL, Gedeon, "Adam of Wodeham's Question on the 'Complexe significabile' As the Immediate Object of Scientific Knowledge," *FrSt* 37 (1977), 66–102.
- , "Gualteri de Chatton et Guillelmi de Ockham controversia de natura conceptus universalis," *FrSt* 27 (1967), 191–212.
- , "William of Ockham died 'Impenitent' in April 1347," *FrSt* 42 (1982), 90–95.
- GELBER, Hester Goodenough, "I Cannot Tell A Lie: Hugh of Lawton's Critique of Ockham on Mental Language," *FrSt* (forthcoming).
- , "Logic and the Trinity: A Clash of Values in Scholastic Thought, 1300–1335," Ph.D. dissertation, University of Wisconsin 1974.

- , "The Contingencies of Propositions as Contingent Facts: The Dominicans William Crathorn and Robert Holcot," paper delivered at the Twentieth International Congress on Medieval Studies, Kalamazoo, Michigan 1985.
- , "The Fallacy of Accident and the *dictum de omni*: Late Medieval Controversy Over A Reciprocal Pair" (forthcoming).
- GENEST, Jean-François, "*Le De futuris contingentibus* de Thomas Bradwardine," *Recherches Augustiniennes* 14 (1979), 249–336.
- GHISALBERTI, Alessandro, "L'Intuizione in Ockham," *Rivista di filosofia neo-scolastica* 70 (1978), 207–26.
- GILBERT, Neal W., "Ockham, Wyclif, and the 'Via Moderna,'" in *Antiqui und Moderni: Traditionsbewusstsein und Fortschrittsbewusstsein im späten Mittelalter*, *Miscellanea Mediaevalia* 9 (Berlin: 1974), pp. 85–125.
- , "Richard de Bury and the 'Quires of Yesterday's Sophisms,'" in E. Mahoney, ed. *Philosophy and Humanism, Renaissance Essays in honor of P. O. Kristeller* (Columbia: 1976), 229–57.
- , "The Early Italian Humanists and Disputation," in A. Molho and J. Tedeschi, eds. *Renaissance Studies in Honor of Hans Baron* (Florence: 1974), 203–26.
- GILLESPIE, Richard E., "Robert Holcot's Quodlibeta," *Traditio* 27 (1971), 480–90.
- GILSON, Etienne, *History of Christian Philosophy in the Middle Ages* (New York: 1955).
- GLORIEUX, Palemon, "Jean de Falisca: la formation d'un maître en théologie au XIVe siècle," *AHDLMA* 33 (1966), 23–104.
- GODDU, André, *The Physics of William of Ockham* (Leiden: 1984).
- , "William of Ockham's Arguments for Action at a Distance," (unpublished paper presented at St. Bonaventure, N. Y. October 1985).
- GRANT, Edward, "Late Medieval Thought, Copernicus, and the Scientific Revolution," *Journal of the History of Ideas* 23 (1962), 197–220.
- , "Science and Theology in the Middle Ages," in David C. Lindberg and Ronald L. Numbers, eds., *God and Nature. Historical Essays on the Encounter Between Christianity and Science* (Berkeley and Los Angeles: 1986), pp. 49–75.
- , "The Condemnation of 1277, God's Absolute Power, and Physical Thought in the Late Middle Ages," *Viator* 10 (1979), 211–44.
- GRASSI, Onorato, "Il problema della conoscenza di Dio nel commento alle Sentenze di Adam Wodeham (Prologo e q.1)," *Medioevo* 8 (1982), 43–136.
- , "Le Tesi di Robert Holcot sul valore non scientifico della conoscenza teologica," *Rivista di filosofia neo-scolastica* 71 (1979), 49–79.
- GREEN-PEDERSEN, Niels Jørgen, "Nicolaus Drukken de Dacia's Commentary on the Prior Analytics—With Special Regard to the Theory of Consequences," *CIMAGL* 37 (1981), 42–69.
- , *The Tradition of the Topics in the Middle Ages* (Munich, 1984).
- GRIMALDO, C., "Due inventari Domenicani del secolo XIV: tratti dall' Archivio di S. Nicolò di Treviso presso l'Archivio di Stato in Venezia," *Nuovo Archivio Veneto* n.s. 36 (1918), pp. 129–80.
- GWYNN, Aubrey, "Archbishop Richard FitzRalph," *Studies* 25 (1936), 81–96.
- , "Archbishop FitzRalph and the Friars," *Studies* 26 (1937), 50–67.
- , "Richard FitzRalph, Archbishop of Armagh," *Studies* 22 (1933), 389–405.
- , "Richard FitzRalph, Archbishop of Armagh, Part III," *Studies* 23 (1934), 395–411.
- , "Richard FitzRalph at Avignon," *Studies* 22 (1933), 591–607.
- , *English Austin Friars in the Time of Wyclif* (Oxford: 1940).
- HACKETT, Jeremiah M. G., "The Attitude of Roger Bacon to the *Scientia* of Albertus Magnus," in J. A. Weisheipl, ed., *Albertus Magnus and the Sciences: Commemorative Essays 1980* (Toronto: 1980), pp. 53–72.
- HAMMERICH, L. L., "The Beginning of the Strife Between Richard FitzRalph and the Mendicants, with an edition of his autobiographical prayer and his proposition *unusquisque*," *Det Kgl. Danske Videnskabernes Selskab. Historisk-filologiske Meddelelser* 26 (1938).

- HEDWIG, Klaus, *Sphaera Lucis. Studien zur Intelligibilität des Seienden im Kontext der mittelalterlichen Lichtspekulation*, BGPTM, n.f. 18 (1980).
- HENNINGER, Mark, "Henry of Harclay's Questions on Divine Prescience and Predestination," *FrSt* 40 (1980), 167–243.
- HIRST, R. J., "Realism," *Encyclopedia of Philosophy*, VII (1967), 77–83.
- HISSETTE, Roland, "Note sur Nicolas d'Autrecourt," *Bulletin de philosophie médiévale* 23 (1981), 94–96.
- HOCHSTETTER, Ernst, *Studien zur Metaphysik und Erkenntnislehre Wilhelms von Ockham* (Berlin: 1927).
- HÖDL, Ludwig, "Studien zum nominalistischen Schöpfungsbegriff in der spätscholastischen Theologie des Michael de Massa O.E.S.A. († 1337)," *Cassiciacum* 30 (1975), 234–56.
- HOFFMANN, Fritz, "Der Satz als Zeichen der theologischen Aussage bei Holcot, Crathorn, und Gregor von Rimini," *Der Begriff der Repraesentatio im Mittelalter*, *Miscellanea Mediaevalia* 8 (Berlin: 1971), pp. 296–313.
- , *Die Schriften des Oxforder Kanzlers Johannes Lutterell*, in *Erfurter Theologische Studien* 6 (1959).
- , *Die theologische Methode des Oxforder Dominikanerlehrers Robert Holcot*, BGPTM, n.f. 5 (1971).
- , "Robert Holcot—die Logik in der Theologie," *Die Metaphysik im Mittelalter*, *Miscellanea Mediaevalia* 2 (Berlin: 1963), pp. 624–39.
- HUDSON, Anne and Michael WILKS, eds. *From Ockham to Wyclif in Studies in Church History subsidia* 5 (Oxford: 1987).
- HUMPHREYS, K.W., *The Library of the Carmelites of Florence at the End of the Fourteenth Century* (Amsterdam: 1964).
- JACKSON, Frank, *Perception. A Representative Theory* (Cambridge, England: 1977).
- JOLIVET, Jean, "L'Intellect et le Langage selon Radulphus Brito," in Z. Kaluza et P. Vignaux, eds. *Logique, Ontologie, Théologie au XIVe Siècle. Preuve et raisons à l'Université de Paris* (Paris: 1984), pp. 83–95.
- KALUZA, Zenon, *Thomas de Cracovie. Contribution à l'histoire du collège de la Sorbonne* (Wrocław: 1979).
- KALUZA, Zenon et P. VIGNAUX, eds. *Logique, Ontologie, Théologie au XIVe Siècle. Preuve et raisons à l'Université de Paris* (Paris: 1984).
- KELLEY, Francis, "Some Observations on the 'Fictum' Theory in Ockham and its Relation to Hervaeus Natalis," *FrSt* 38 (1978), 260–82.
- , "Walter Chatton vs. Aureoli and Ockham Regarding the Universal Concept," *FrSt* 41 (1981), 222–49.
- KENNEDY, Leonard, "Philosophical Scepticism in England in the Mid-Fourteenth Century," *Vivarium* 21 (1983), 35–57.
- KNUDSEN, Christian, "Intentions and Impositions," in CHLMP pp. 479–95.
- , *Walter Chattons Kritik an Wilhelm von Ockhams Wissenschaftslehre* (Bonn: 1976).
- KNUUTILA, Simo, and Anja I. LEHTINEN, "Change and Contradiction: a Fourteenth Century Controversy," *Synthese* 40 (1979), 189–207.
- KOCH, Josef, *Durandus de S. Porciano O.P.* BGPTM 26 (1927).
- , "Neue Aktenstücke zu dem gegen Wilhelm Ockham in Avignon geführten Prozess," *RTAM* 7 (1935), 353–80; *RTAM* 8 (1936), 79–93, 168–97.
- KRAUS, Johannes, "Die Stellung des Oxforder Dominikanerlehrers Crathorn zu Thomas von Aquin," *Zeitschrift für katholische Theologie* 57 (1933), 66–88.
- , *Quaestiones de universalibus Magistrorum Crathorn, O.P., Anonymi O.F.M., Joannis Canonici, O.F.M.*, *Opusculus et textus*, series scholastica 18 (Münster: 1937).
- KRETZMANN, Norman, "Continuity, Contrariety, Contradiction, and Change," in idem, ed., *Infinity and Continuity in Ancient and Medieval Thought* (Ithaca: 1982), pp. 270–96.
- , "Medieval Logicians on the Meaning of the *Propositio*," *The Journal of Philosophy* 67 (1970), 767–87.
- KRETZMANN, Norman, Anthony KENNY, and Jan PINBORG, eds. *The Cambridge History of*

- Later Medieval Philosophy: From the Rediscovery of Aristotle to the Disintegration of Scholasticism, 1100–1600* [CHLMP] (Cambridge: 1982).
- KRÖMER, Alfred, *Potenzienhierarchie und Dynamismus des Geistes, Ein Beitrag zur Erkenntnismetaphysik des Petrus Iohannis Olivi (1248/49–1298)* (Freiburg-in-Breisgau: 1974).
- KURZINGER, J., *Alphonsus Vargas Toletanus und seine theologische Einleitungslehre* BGTPM 22 (1930).
- KUKSEWICZ, Z., "The Potential and Agent Intellect," *CHLMP*, pp. 595–601.
- LANGSTON, Douglas, "Scotus and Ockham on the Univocal Concept of Being," *FrSt* 39 (1979), 105–29.
- LAPPÉ, Joseph, *Nicholaus von Autrecourt, sein Leben, seine Philosophie, seine Schriften*, BGPTM 6 (1908).
- LECHNER, Josef, *Johann von Rodington, O.F.M. und sein Quodlibet de conscientia*, BGPTM suppl. III.2 (1935).
- , "Die Quästionen des Sentenzkommentars des Johannes von Rodington O.F.M.," *Franziskanische Studien* 22 (1935), 232–48.
- LEFF, Gordon, *Richard FitzRalph, Commentator of the Sentences: A Study in Theological Orthodoxy* (Manchester: 1963).
- , *The Dissolution of the Medieval Outlook: An Essay on the Intellectual and Spiritual Change in the Fourteenth Century* (New York: 1976).
- , *William of Ockham: the metamorphosis of scholastic discourse* (Totowa: 1975).
- LEWRY, P. Osmund, "Grammar, Logic, and Rhetoric, 1220–1320," in J. I. Catto, ed. *Oxf. Hist.* I, pp. 401–33.
- , "Rhetoric at Paris and Oxford in the Mid-Thirteenth Century," *Rhetorica: Journal of the History of Rhetoric* 1 (1983), pp. 45–63.
- , "Robert Kilwardby on Meaning: A Parisian Course on the *Logica vetus*," in *Sprache und Erkenntnis im Mittelalter, Miscellanea Mediaevalia* 13/1 (Berlin/New York: 1981), pp. 376–84.
- LINDBERG, David C., "A Reconsideration of Roger Bacon's Theory of Pinhole Images," *Archive for History of Exact Sciences*, 6 (1970), 214–23.
- , "Alhazen's Theory of Vision and Its Reception in the West," *Isis* 58 (1967), 321–41.
- , Introduction to Risner ed., *Opticae thesaurus* (Basel: 1572; repr. New York and London: 1972), pp. v–xxxiv.
- , "Lines of Influence in Thirteenth-Century Optics: Bacon, Witelo, and Pecham," *Speculum* 46 (1971), pp. 66–83.
- , "Medieval Latin Theories of the Speed of Light," in René Taton, *Roemer et la vitesse de la lumière* (Paris: 1978), pp. 45–72.
- , "On the Applicability of Mathematics to Nature: Roger Bacon and His Predecessors," *British Journal for the History of Science* 15 (1982), 3–25.
- , *Studies in the History of Medieval Optics* (London: 1983).
- , *Theories of Vision from Al-Lindi to Kepler* (Chicago: 1976).
- , "The Transmission of Greek and Arabic Learning to the West," in idem, ed., *Science in the Middle Ages* (Chicago: 1978), pp. 52–90.
- LINDBERG, David C. and Nicholas H. STENECK, "The Sense of Vision and the Origins of Modern Science," in A. G. Debus, ed., *Science, Medicine, and Society in the Renaissance. Essays to Honor Walter Pagel* (New York: 1972), pp. 29–45.
- LONGPRÉ, Ephrem, "Jean de Reading et le B. Jean Duns Scot," *La France Franciscaine* 7 (1924), 99–109.
- LYCAN, William G., "Occam's Razor," *Metaphilosophy* 6 (1975), 223–37.
- LYNCH, John E., "The Knowledge of Singular Things According to Vital du Four," *FrSt* 29 (1969), 271–301.
- , *The Theory of Knowledge of Vital du Four* (St. Bonaventure, N.Y.: 1972).
- MACKEN, R., "Les Quodlibets d'Henri de Gand et leur exemplar parisien," *RTAM* 36 (1970).
- MAHONEY, Edward P., "Sense, Intellect, and Imagination in Albert, Thomas, and Siger," in CHLMP, pp. 602–21.

- MAIER, Anneliese, "Das Problem der *species sensibiles in media* und die neue Naturphilosophie des 14. Jahrhunderts," in idem, *Ausgehendes Mittelalter II* (Rome: 1967), pp. 419–51.
- , *Metaphysische Hintergründe der spätscholastischen Naturphilosophie* (Rome: 1955).
- MAIERÙ, Alfonso, *Terminologia logica della tarda scolastica* (Rome: 1972).
- MALONEY, Thomas S., "Roger Bacon on Equivocation," *Vivarium* 22 (1984), 85–112.
- , "The Semiotics of Roger Bacon," *Mediaeval Studies* 45 (1983), 120–54.
- MARCOLINO, Venício, "Der Augustinertheologe an der Universität Paris," in Heiko A. Oberman, ed. *Gregor von Rimini. Werk und Wirkung bis zur Reformation* (Berlin: 1981), pp. 127–94.
- MARRONE, Steven P., "Matthew of Aquasparta, Henry of Ghent and Augustinian Epistemology after Bonaventure," *Franziskanische Studien* 65 (1983), 252–90.
- , *Truth and Scientific Knowledge in the Thought of Henry of Ghent*, in *Speculum Anniversary Monographs* 11 (Cambridge, Mass.: 1985).
- , *William of Auvergne and Robert Grosseteste: New Ideas of Truth in the Early Thirteenth Century* (Princeton: 1983).
- MARSCHALL, John, "The Causation of Knowledge in the Philosophy of Peter John Olivi, O.F.M.," *FrSt* 16 (1956), 313–18.
- MARSHALL, Peter, "Parisian Psychology in the Mid-Fourteenth Century," *AHDLM* 50 (1983), 101–93.
- MAURER, Armand, "Henry of Ghent and the Unity of Man," *MedSt* 10 (1948), 1–20.
- , "Ockham's Razor and Chatton's Anti-Razor," *MedSt* 46 (1984), 463–75.
- McCARHY, Edward R., "Medieval Light Theory and Optics and Duns Scotus' Treatment of Light in D.13 of Book II of his Commentary on the Sentences," Ph.D. dissertation, City University of New York 1976.
- McEVOY, James, "La connaissance intellectuelle selon Robert Grosseteste," *Revue philosophique de Louvain* 75 (1977), 5–48.
- , "Questions of authenticity and chronology concerning works attributed to Robert Grosseteste and edited 1940–1980," *Bulletin de philosophie médiévale* 23 (1981), 64–90; 24 (1982), 69–89.
- , *The Philosophy of Robert Grosseteste* (Oxford: 1982).
- , "The Sun as 'res' and 'signum': Grosseteste's Commentary on *Ecclesiasticus* ch. 43, vv. 1–5," *RTAM* 41 (1974), 38–91.
- McGRADE, A. STEPHEN, "Enjoyment at Oxford After Ockham: Philosophy, Psychology, and the Love of God," in Anne Hudson and Michael Wilks, eds. *From Ockham to Wyclif* (Oxford: 1987), pp. 63–88.
- , "Seeing Things: Ockham and Representationalism," in Christian Wenin, ed., *L'Homme et son Univers au Moyen Age*, (Acts of the Seventh International Conference on Medieval Philosophy [S.I.E.P.M.]), *Philosophes Médiévaux* 27 (Louvain-la-Neuve: 1986), 591–97.
- MICHALSKI, Konstanty, "Le criticisme et le scepticisme dans la philosophie du XIVe siècle," *Bulletin de l'Académie Polonaise des Sciences et des Lettres. Classe d'histoire et de philosophie* 1925 [repr. in idem, *La Philosophie au XIVe siècle* (Frankfurt-am-Main: 1969), pp. 67–150].
- , "Le problème de la volonté à Oxford et Paris au XIV siècle," (1937) in idem, *La Philosophie au XIVe siècle* (Frankfurt-am-Main: 1969), pp. 282–413.
- , "Les Courants philosophiques à Oxford et à Paris pendant le XIVe siècle," (1921) in idem, *La Philosophie au XIVe siècle*, pp. 3–32.
- , "Les sources du criticisme et du scepticisme dans la philosophie du XIVe siècle," (1924) in idem, *La Philosophie au XIVe siècle* (Frankfurt-am-Main: 1969), pp. 35–65.
- MIETHKE, Jürgen, *Ockhams Weg zur Sozialphilosophie* (Berlin: 1969).
- MOLLAND, A. G., "Roger Bacon as Magician," *Traditio* 30 (1974), pp. 445–60.
- MOODY, Ernest A., "Empiricism and Metaphysics in Medieval Philosophy" (1958), repr. in idem, *Studies in Medieval Philosophy, Science, and Logic. Collected Papers, 1933–1969* (Berkeley and Los Angeles: 1975), pp. 287–304.
- , "Ockham, Buridan, and Nicholas of Autrecourt: The Parisian Statutes of 1339 and

- 1340" (1947) repr. in idem, *Studies in Medieval Philosophy, Science, and Logic. Collected Papers, 1933–1969* (Berkeley and Los Angeles: 1975), pp. 127–60.
- , "William of Auvergne and His Treatise on *De Anima*," in idem, *Studies in Medieval Philosophy, Science, and Logic. Collected Papers, 1933–1969* (Berkeley and Los Angeles: 1975), pp. 1–110.
- , "William of Ockham," *Encyclopedia of Philosophy* VI (1967), pp. 306–17.
- MURDOCH, John E., "Henry of Harclay and the Infinite," in A. Maierù and A. Paravicini Bagliani, eds. *Studi sul XIV secolo in memoria di Anneliese Maier* (Rome: 1981), pp. 219–62.
- , "Infinity and Continuity," in CHLMP, pp. 564–91.
- , "*Mathesis in philosophiam scholasticam introducta: the Rise and Development of the Application of Mathematics in Fourteenth Century Philosophy and Theology*," in *Arts libéraux et philosophie au moyen âge* (Montreal/Paris: 1969), pp. 215–54.
- , "Propositional Analysis in Fourteenth-Century Natural Philosophy: A Case Study," *Synthese* 40 (1979), 117–46.
- , "*Scientia mediantibus vocibus: Metalinguistic Analysis in Late Medieval Natural Philosophy*," in *Sprache und Erkenntnis im Mittelalter, Miscellanea Mediaevalia* 13/1 (1981), 73–106.
- , "*Subtilitates Anglicanae* in Fourteenth-Century Paris: John of Mirecourt and Peter Ceffons," in M. P. Cosman and B. Chandler, eds. *Machaut's World. Science and Art in the Fourteenth Century*, *Annals of the New York Academy of Sciences* 314 (1978), 51–86.
- , "Superposition, Congruence and Continuity in the Middle Ages," in *Mélanges Alexandre Koyré* I (Paris: 1964), pp. 416–41.
- , "The Development of a Critical Temper: New Approaches and Modes of Analysis in Fourteenth-Century Philosophy, Science, and Theology," *Medieval and Renaissance Studies: Proceedings of the Southeastern Institute of Medieval and Renaissance Studies* 7 (1975), 51–79.
- NUCHELMANS, Gabriel, "Adam Wodeham on the Meaning of Declarative Sentences," *Historiographia Linguistica* 7 (1980), 177–87.
- , "The Semantics of Propositions," in CHLMP, pp. 197–210.
- , *Theories of the Proposition: Ancient and Medieval Conceptions of the Bearers of Truth and Falsity* (Amsterdam and London: 1973).
- OSBERMAN, Heiko A., ed. *Gregor von Rimini. Werk und Wirkung bis zur Reformation* (Berlin: 1981).
- , "Facientibus quod in se est Deus non denegat gratiam. Robert Holcot, O.P. and the Beginnings of Luther's Theology," *Harvard Theological Review* 55 (1962), 317–42.
- OZMENT, Steven, *The Age of Reform 1250–1550. An Intellectual and Religious History of Late Medieval and Reformation Europe* (New Haven and London: 1980).
- OWENS, Joseph, "Faith, Ideas, Illumination, and Experience," in CHLMP, pp. 446–58.
- PAQUÉ, Ruprecht, *Das Pariser Nominalistenstatut. Zur Entstehung des Realitätsbegriffs der neuzeitlichen Naturwissenschaft* (Berlin: 1970).
- PARK, Katharine, "Albert's Influence on Late Medieval Psychology," in J. A. Weisheipl, ed. *Albertus Magnus and Sciences: Commemorative Essays 1980* (Toronto: 1980), pp. 501–35.
- PARODI, Massimo, "Il linguaggio delle 'proportiones' nella 'Distinctio prima' di Giovanni di Mirecourt," *RCSF* 39 (1984), 657–86.
- PARTÉE, Carter, O.F.M., "Peter Olivi: Historical and Doctrinal Study," *FrSt* 20 (1960), 215–60.
- PELZER, Auguste, "Les 51 articles de Guillaume Occam censurés en Avignon, en 1326," *Revue d'histoire ecclésiastique* 18 (1922), 240–70.
- PHILLIPS, Heather, "John Wyclif and the Optics of the Eucharist," in Anne Hudson and Michael Wilks, eds. *From Ockham to Wyclif* (Oxford: 1987), pp. 245–58.
- PINBORG, Jan, "A Note on Some Theoretical Concepts of Logic and Grammar," *Révue Internationale de Philosophie* (1975), 286–96.

- , "Bezeichnung in der Logik des XIII. Jahrhunderts," *Miscellanea Mediaevalia* 8 (Berlin: 1971), pp. 238–81.
- , *Die Entwicklung der Sprachtheorie im Mittelalter*, BGPTM 42/2 (1967).
- , "Die Logik der Modistae," *Studia Mediewistyczne* 16 (1975), pp. 39–97.
- , *Logik und Semantik im Mittelalter: ein Überblick* (Stuttgart: 1972).
- , *Medieval Semantics*, ed. Sten Ebbesen, (London: 1984).
- , "Radulphus Brito on Universals," *CIMAGL* 35 (1980), 56–142.
- , "Radulphus Brito's Sophism on Second Intentions," *Vivarium* 13 (1975), 119–52.
- , "Roger Bacon on Signs: A Newly Recovered Part of the *Opus Maius*," in *Sprache und Erkenntnis im Mittelalter*, *Miscellanea Mediaevalia* 13/1 (1981), pp. 403–12.
- , "Some Problems of Semantic Representations in Medieval Logic," in H. Parret, ed. *History of Linguistic Thought and Contemporary Linguistics* (Berlin: 1976), pp. 254–78.
- , "Speculative Grammar," in *CHLMP*, pp. 254–69.
- , "The English Contribution to Logic Before Ockham," *Synthese* 40 (1979), 19–42.
- , "The Summulae, Tractatus I De Introductionibus," in idem, ed. *The Logic of John Buridan. Acts of the Third European Symposium on Medieval Logic and Semantics* (Copenhagen: 1976), pp. 71–90.
- , "Zum Begriff der intentio secunda: Radulphus Brito, Hervaeus Natalis, und Petrus Aureoli in Diskussion," *CIMAGL* 13 (1974), 45–59.
- PRATT, Robert A., "Some Latin Sources of the Nonnes Preest on Dreams," *Speculum* 52 (1977), 538–70.
- PREZIOSO, A. F., "La teoria dell'essere apparente nella gnoseologia di Pietro Aureolo, O.F.M. (& D1322)," *Studi Francescani* 46 (1950), 15–43.
- , "L'intuizione del non-esistente in P. Aureolo e in G. Ockham e i prodromi del fenomenismo moderno," *Rassegna di scienze filosofiche* 2 (1968), 116–36.
- RANDI, Eugenio, "A Scotist Way of Distinguishing Between God's Absolute and Ordained Powers," in Anne Hudson and Michael Wilks, eds. *From Ockham to Wyclif* (Oxford: 1987), pp. 43–50.
- , "*Lex est in potestate agentis*. Note per una storia dell'idea scotista di *potentia absoluta*," in *Sopra la volta del mondo. Onnipotenza e potenza assoluta di Dio tra medioevo e età moderna* (Bergamo: 1986), 129–38.
- READ, Stephen, "The Objective Being of Ockham's *ficta*," *Philosophical Quarterly* 27 (1977), 14–31.
- REINA, Maria Elena, "Cognizione intuitiva ed esperienza interiore in Adamo Wodeham," *RCSF* 41 (1986), 19–49, 211–44.
- , *Note sulla psicologia di Buridano* (Milan: 1959).
- RICHTER, Vladimir, "Handschriftliches zu Crathorn," *Zeitschrift für katholische Theologie* 94 (1972), 445–49.
- ROBSON, J. A., *Wyclif and the Oxford Schools. The Relation of the 'Summa de Ente' to the Scholastic Debates at Oxford in the later fourteenth century* (Cambridge: 1961, 1966).
- ROENSCH, Frederick J., *Early Thomistic School* (Dubuque: 1964).
- ROHMER, Jean, "La théorie de l'abstraction dans l'école franciscaine de Alexandre de Halès a Jean Peckam," *AHDLMA* 3 (1928), 105–84.
- ROOS, Heinrich, "Zur Begriffsgeschichte des Terminus 'apparens' in den logischen Schriften des ausgehenden 13. Jahrhunderts," in *Virtus Politica*, Festgabe zum 75. Geburtstag von Alfons Hufnagel (1974), pp. 323–34.
- ROSIER, Irène, "Grammaire, Logique, Sémantique, Deux positions opposées au XIIIe siècle: Roger Bacon et les Modistes," *Histoire Epistémologie Langage* 6 (1984), 21–34.
- SABRA, A. I., "Sensation and Inference in Alhazen's Theory of Visual Perception," in Peter Machamer and Robert G. Turnbull, eds. *Studies in Perception: Interrelations in the History of Philosophy and Science* (Columbus, Ohio: 1978), pp. 160–85.
- SACCARO, Giuseppa Battisti, "Il Grossatesta e la luce," *Medioevo* 2 (1976), 21–75.
- SAMARAN, Charles, "Pierre Bersuire," *Histoire Littéraire de la France* 39 (1962), 259–405.
- SCHEPERS, Heinrich, "Holkot contra dicta Crathorn, I: Quellenkritik und biographische Auswertung der Bakkalareatsschriften zweier Oxforder Dominikaner des XIV.

- Jahrhunderts," *Philosophisches Jahrbuch* 77 (1970), 320–54.
- , "Holcot contra dicta Crathorn, II: Das 'significatum per propositionem'. Aufbau und Kritik einer nominalistischen Theorie über den Gegenstand des Wissens," *Philosophisches Jahrbuch* 79 (1972), 106–36.
- SCHMITT, Charles B., "Henry of Ghent, Duns Scotus, and Gianfrancesco Pico on Illumination," *MedSt* 25 (1963), 231–58.
- SCOTT, T. K., "Nicholas of Autrecourt, Buridan, and Ockhamism," *Jour. Hist. Phil.* 9 (1971), 15–41.
- , "Ockham on Evidence, Necessity, and Intuition," *Jour. Hist. Phil.* 7 (1969), 27–49.
- SHEEHAN, M. W., "The Religious Orders 1220–1370," in J. I. Catto, ed. *Oxf. Hist.*, pp. 193–224.
- SMALLEY, Beryl, "Robert Holcot, O.P.," *Archivum Fratrum Praedicatorum* 26 (1956), 5–97.
- , *English Friars and Antiquity in the Early Fourteenth Century* (Oxford: 1960).
- SMITH, A. Mark, "Getting the Big Picture in Perspectivist Optics," *Isis* 72 (1981), 568–89.
- SOUTHERN, Richard W., *Robert Grosseteste: The Growth of an English Mind in Medieval Europe* (Oxford: 1986).
- SPADE, Paul, "Ockham's Distinction Between Absolute and Connotative Terms," *Vivarium* 13(1975), 55–76.
- , "Semantics of Terms," in CHLMP, pp. 188–96.
- , "Quasi-Aristotelianism," in Norman Kretzmann, ed. *Infinity and Continuity in Ancient and Medieval Thought* (Ithaca: 1982), pp. 297–307.
- STENECK, Nicholas, "The Problem of the Internal Senses in the Fourteenth Century," Ph.D. dissertation, University of Wisconsin 1970.
- STREVELER, Paul A., "Ockham and his Critics on: Intuitive Cognition," *FrSt* 35 (1975), 223–36.
- , "Robert Holcot: God's Absolute and Ordained Power—With an edition of the Quodlibetal Question *Utrum caritas beatorum in patria possit corrumpi*" (unpublished paper).
- SUAREZ-NANI, Tiziana, "'Apparentia' und 'Egressus.' Ein Versuch über den Geist als Bild des trinitarischen Gottes nach Petrus Aureoli," *Philosophisches Jahrbuch* 93 (1986), 39–60.
- SYLLA, Edith, "Medieval Quantifications of Qualities: The 'Merton School,'" *Archive for History of the Exact Sciences* 8 (1971), 9–39.
- SYNAN, Edward, "Richard of Campsall, an English Theologian of the Fourteenth Century," *MedSt* 14(1952), 1–8.
- TACHAU, Katherine H., "Adam Wodeham on First and Second Intentions," *CIMAGL* 35 (1980), pp. 29–55.
- , "French Theology in the Mid-Fourteenth Century: Vatican Latin 986 and wroclaw *, Milich F.64," *AHDLMMA* 51 (1984), pp. 41–80.
- , "Richard FitzRalph's Commentary on Peter Lombard's *Sentences*," (forthcoming).
- , "The Influence of Richard Campsall on Fourteenth-Century Oxford Thought," in Anne Hudson and Michael Wilks, eds., *From Ockham to Wyclif*, (Oxford: 1987), 109–23.
- , "The Problem of the *Species in medio* at Oxford in the Generation After Ockham," *MedSt* 44 (1982), 394–443.
- TAMNY, Martin, "Newton, Creation, and Perception," *Isis* 70 (1979), 48–58.
- TEETAERT, A., "Pierre Auriol," *Dictionnaire de Théologie catholique* XII, 2 (Paris: 1935), cols. 1810–1881.
- TESSIER, G., "Jean de Mirecourt, Philosophe et Théologien," *Histoire Littéraire de la France* 40 (1974), 1–52.
- THIJSEN, J. M., "Buridan on Mathematics," *Vivarium* 23 (1985), 55–78.
- , "Roger Bacon (1214–1292/1297): A Neglected Source in the Medieval Continuum Debate," *Archives internationales d'histoire des sciences* 34 (1984), 25–34.
- TIERNEY, Brian, *Origins of Papal Infallibility 1150–1350. A Study on the Concepts of Infallibility, Sovereignty, and Tradition in the Middle Ages* (Leiden: 1972).

- TORRANCE, Thomas F., "Intuitive and Abstractive Knowledge: From Duns Scotus to John Calvin," *De doctrina Ioannis Duns Scoti*, in *Studia Scholastico-Scotistica IV* (Rome: 1968), pp. 291–305.
- TRAPP, Damasus, "Augustinian Theology of the 14th Century: Notes on Editions, Marginalia, Opinions, and Book Lore," *Augustiniana* 6 (1956), 146–274.
- , "Notes on some Manuscripts of the Augustinian Michael de Massa (†1337)," *Augustinianum* 5 (1965), 58–133.
- , "Peter Ceffons of Clairvaux," *RTAM* 24 (1957), 101–54.
- TWEEDALE, Martin, "John of Rodynton on Knowledge, Science, and Theology," Ph.D. dissertation, University of California, Los Angeles, 1965.
- VAN NESTE, Roy, "The Epistemology of John of Mirecourt: A Reinterpretation," *Cîteaux* 27 (1976), 5–28.
- , "A Reappraisal of the Supposed Skepticism of John of Mirecourt," *RTAM* 44 (1977), 101–26.
- VANNI-ROVIGHI, Sofia, "L'Intenzionalità della conoscenza secondo P. Aureolo," in *L'homme et son destin, d'après les penseurs du Moyen-Âge* (Actes du Premier Congrès international de philosophie médiévale) (Louvain/Paris: 1960), pp. 673–80.
- VERHULST, Christine, "A propos des intentions premières et des intentions secondes chez Jean Duns Scot," *Annales de l'Institut de Philosophie* (1975), 7–32.
- VESCOVINI, Graziella Federici, *Studi sulla prospettiva medievale* (Torino: 1965).
- VIGNAUX, Paul, *Justification et prédestination au XIVe siècle: Duns Scot, Pierre d'Auriole, Guillaume d'Occam, Grégoire de Rimini* (Paris: 1934).
- , "La connaissance comme *apparentia* dans les *prologi quaestiones* de Jean de Ripa," *Studi internazionali di filosofia* 7 (1976), 39–56.
- WALLACE, William, *The Scientific Methodology of Theodor of Freiberg. A Case Study in the Relationship Between Science and Philosophy* (Fribourg: 1959).
- WALSH, Katherine, *A Fourteenth-Century Scholar and Primate: Richard FitzRalph in Oxford, Avignon, and Armagh* (Oxford: 1981).
- , "The Later Medieval Schoolman in Theory and Practice," *Innsbrucker historische Studien* 2 (1979), 171–76.
- WÉBER, Edouard, "La Démonstration de l'Existence de Dieu chez Hervé de Nedellec et ses confrères precheurs de Paris," in Z. Kaluza and P. Vignaux, eds., *Logique, Ontologie, Théologie au XIVe siècle. Preuve et raisons à l'Université de Paris*, pp. 25–41.
- WEINBERG, Julius R., *Nicolaus of Autrecourt: A Study in 14th Century Thought* (Princeton: 1948).
- , "The Problem of Sensory Cognition," in idem, *Ockham, Descartes, and Hume* (Madison, Wisconsin: 1977), 33–49.
- WEISHEIPL, James, "Appendix I. Albert's Works on Natural Science (*libri naturales*) in Probable Chronological Order," in idem, ed., *Albertus Magnus and the Sciences: Commemorative Essays 1980* (Toronto: 1980), pp. 565–77.
- , "Life and Works of St. Albert," in idem, ed., *Albertus Magnus and the Sciences: Commemorative Essays 1980* (Toronto: 1980), pp. 1–23.
- , "Ockham and the Mertonians," in J. I. Catto, ed. *Oxf. Hist.*, pp. 607–58.
- WENDLAND, Volker, "Die Wissenschaftslehre Gregors von Rimini in der Diskussion," in Heiko A. Oberman, ed. *Gregor von Rimini. Werk und Wirkung bis zur Reformation* (Berlin: 1981), pp. 241–300.
- WENGERT, R. G., "The Sources of Intuitive Cognition in William of Ockham," *FrSt* 41 (1981), 415–47.
- WIPPEL, John F., "Godfrey of Fontaines and Henry of Ghent's Theory of Intentional Distinction Between Essence and Existence," in T. W. Kohler, ed., *Sapientiae Procerum Amore. Mélanges Médiévistes offerts à Dom Jean-Pierre Müller O.S.B.*, *Studia Anselmiana* 63 (1974), pp. 289–321.
- , *The Metaphysical Thought of Godfrey of Fontaines. A Study in Late Thirteenth-Century Philosophy* (Washington, D.C.: 1981).
- wlodek *, Zofia, "Quelques remarques sur le manuscrit 1276 de la Bibliothèque Jagellonne," *Mediaevalia Philosophica Polonorum* 10 (1961), 87–95.

WOLFSON, Harry A., "The Internal Senses in Latin, Arabic, and Hebrew Philosophical Texts," *Harvard Theological Review* 28 (1935), 69–133.

WOLTER, Allan B., "Duns Scotus on Intuition, Memory and Our Knowledge of Individuals," in L. J. Thro, ed., *History of Philosophy in the Making. A Symposium of Essays to Honor Professor James D. Collins* (University Press of America: 1982), pp. 81–104.

——, *Duns Scotus on the Will and Morality* (Washington, D.C.: 1986).

WOOD, Rega, "Adam Wodeham on Sensory Illusions with an Edition of 'Lectura Secunda,' prologus, quaestio 3," *Traditio* 38 (1982), 214–52.

XIBERTA, Bartholomaeus M., *De scriptoribus scholasticis saeculi XIV ex ordine Carmelitarum* in *Bibliothèque de la Revue d'histoire ecclésiastique* 6 (Louvain: 1931).

ZOUBOV, Vassily, "Walter Catton, Gerard d'Odon et Nicolas Bonet," *Physis. Rivista di storia della scienza* 1 (1959), 261–78.

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Assisi, Bibl. comunale 133: 216n, 220n.

B

Basel, Universitätsbibl. B. V. 30: 257n-74n.

Bologna, Università 2214: 318n.

Brussels, Bibl. Royale 11578 (1552): 216n, 220n-21n, 223n-24n, 226n-35n.

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Cambridge, University Library,

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London, British Library, Royal. 10.C.VI: 244n-48n, 251n-53n.

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Paris, Bibl. Mazarine 915: 237n, 277n, 303n, 305n-07n.

Paris, Bibl. nationale,

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Praha (Prague), Narod. Museum XIII. D.5: 317n-72n.

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