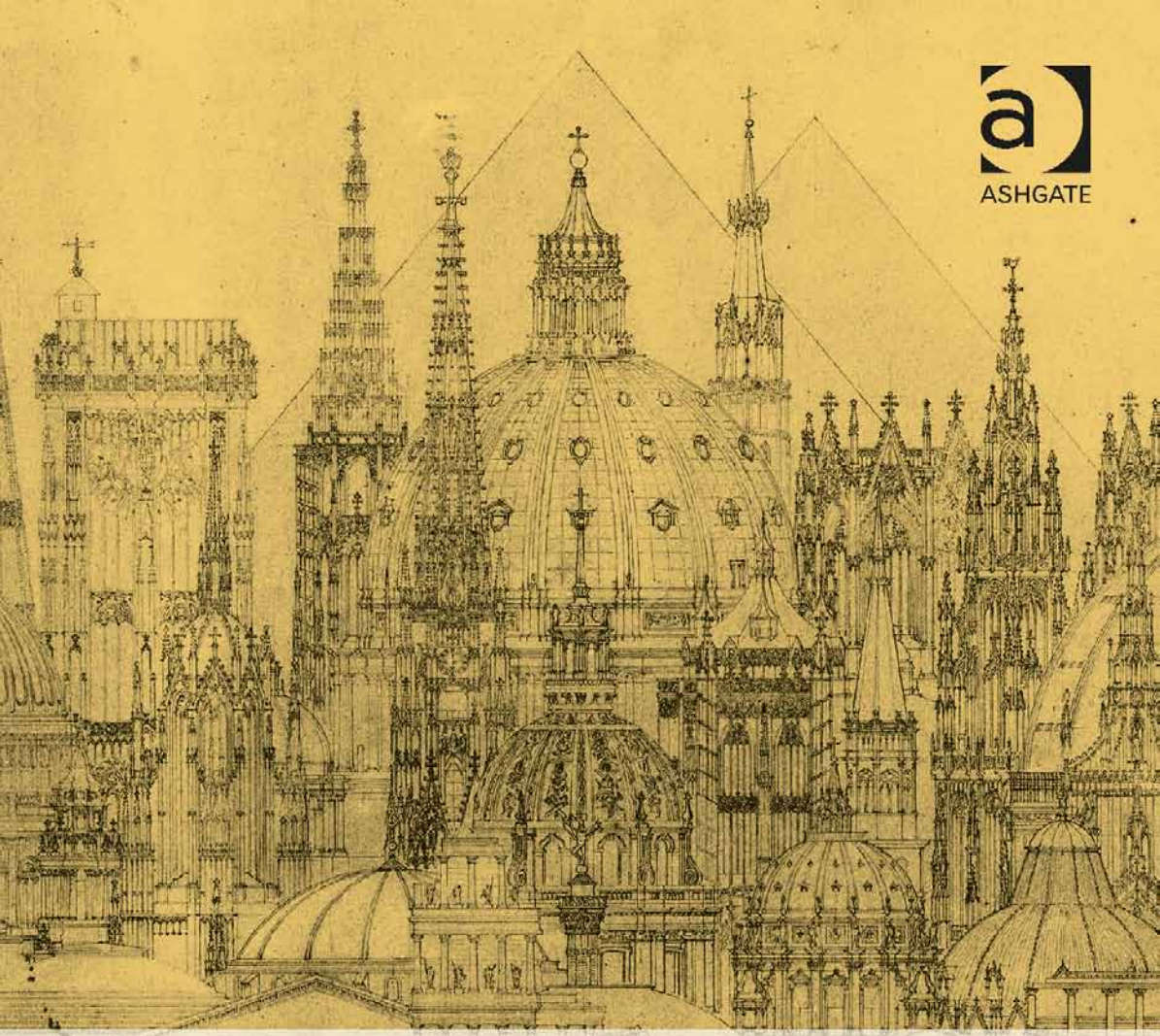

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Reflections around Anachronistic Drawings

Anne Bordeleau

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Anne Bordeleau
University of Waterloo, Canada

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List of Abbreviations

ARCHIVES

BL	British Library, London
BM	British Museum, London
CCA	Canadian Centre for Architecture, Montreal
CUL	Cambridge University Library, Cambridge
NAL	National Art Library, London
NH	Natural History Museum, London
RA	Royal Academy, London
RIBA	Royal Institute of British Architects, London
SM	Sir John Soane's Museum, London
TCL	Trinity College Library, Cambridge
V&A	Victoria & Albert Museum, London

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Introduction

The drawings of Charles Robert Cockerell (1788–1863) brush history against the grain. They resist the reductive arrow of time – they are anachronistic. Consider Cockerell's best known drawing: *The Professor's Dream* (1849). This dream: a graphic lucubration, grounded in the calling forth of the past as embodied in architecture. At first glance, the beautiful drawing appears like a straightforward representation of chronological progress. It shows constructions from earliest times, lowest in the frame, and moves gradually through the Greek and Roman periods, whose structures occupy the center of the composition, to the most recent constructions of the nineteenth century upon an implied and highest fourth platform. But it is not that simple. In fact, Egyptian buildings appear on both the lower and upper platforms. Like Cockerell himself, who travels between different times to reconstruct from ruins and invent completed projects from unfinished constructions, these Egyptian buildings claim space in more than one time. In fact, none of the buildings represented belong to a single slice of time. Their foundations are in earlier constructions and prefigure the ones that will follow; these buildings are informed by their contexts and transformed as cultures and societies shift.

The *Dream* offers a daring if precarious positioning between potential pasts and futures, an effect that actually marks many of Cockerell's drawings. A plate he published in 1860, from a sketch first drawn upon visiting a temple in 1812, becomes a device in which Cockerell brings different times at play (Plate 2). A study of the Ionic capital at Bassae emerges and re-emerges graphically and physically throughout Cockerell's travels, practice, and publications, every new appearance richer from its previously accumulated iterations (Plate 5). Likewise, Cockerell composed his restoration and project construction drawings in such a way as to suggest interchangeability: one cannot tell if the envisioned project has been found to pre-exist in the site, if the ruined fragments are projected back into a possible past, or projected forward in a state in which they could have never existed (Plates 3 and 4). Cockerell's drawings act as shifters that allow the observers to move through the making of architecture – or the writing of history – a process of construction as much as one of reconstruction and deconstruction.

If in the historian's discourse, shifters can run against chronology, in his drawings Cockerell appears to claim the power to change temporalities. He creates non-linear complexities, 'frictions of heterogeneous times'.[1]

Cockerell's drawings are rich, masterful, and erudite studies of a range of architectural issues that span centuries, scales, fields of inquiries, and even philosophies of history. They are thresholds into the period, windows into the architect's conception of architecture and time, complex documents of past and projected constructions, great examples that can grant insight into the depth of architectural representation. In *Charles Robert Cockerell, Architect in Time*, six drawings provide the foundation of an itinerary through Cockerell's conception of architecture specifically and, more broadly, across the temporal depths of drawings and buildings.

THE TIMELESS AND THE TIMELY

While preparing his Royal Academy lectures, and composing *The Professor's Dream* in the late 1840s, Cockerell confided to his faithful pupil John Eastly Goodchild (1810–99) that they should consider themselves 'architects in Time'.[2] His desire to be an architect in time would defy the simple identification of architecture as historical record. And yet, there were other instances when Cockerell acknowledged that architects 'are identified with Time'.[3] Architecture was 'born with history', according to Cockerell, but architects were always in a form of struggle with history. Architects had to compete with history so as to mark it and avoid mere identification with time by building 'in Time'. Engaging the complexities of time, Cockerell posited architecture's timeliness as well as its timelessness. The tension between being 'identified with Time', and being architects 'in Time', is the paradoxical position from which Cockerell's comprehension of architecture emerges.

The resulting position can only be awkward: temporal yet striving for the eternal; of its time yet responding to all history; timely yet timeless? Indeed, in discussions on Cockerell's buildings, when reading his lecture notes, and considering his drawings, this slightly obdurate quality emerges over and over again. Cockerell's drawings and buildings do not settle. They remain poised between times. They are fundamentally anachronistic. Like historical knowledge, they reflect a process that moves against chronological time.[4] But perhaps more importantly, they move towards the past not as an objective and immutable entity, but as a reality that is necessarily in movement, to be continuously sought and mnemonically retrieved.

Cockerell's position in British architectural history is also somewhat anachronistic. Despite his outstanding achievements in a wide range of areas – he charted architectural history in *The Professor's Dream*; participated in early discussions of polychromy; he was the first to measure *enthasis* on a Greek building; he was a respected member of numerous European academies and the successor of Sir John Soane in the important offices of Surveyor of St Paul, Architect of the Bank of England, and Professor at the Royal Academy of London – Cockerell has remained in shadow. In contrast to the Pompeian style of Robert Adam, the neo-classicism of Sir Christopher Wren, and the celebrated eclecticism of Sir John Soane,

the difficult categorization of Cockerell within the British nineteenth-century context obfuscates the fair recognition of his work and thought. The relation of Cockerell's work to international concerns also gives him an unusual dimension amongst nineteenth-century British architects. Acquainted with Quatremère de Quincy and Hittorff, reader of Schiller and Schlegel, member of numerous foreign academies (in Rome, Bavaria, Belgium, Denmark, Geneva and Genoa, and of the Académie des Beaux-Arts in France), Cockerell was more in touch with European ideas about architecture than most of his contemporaries. His knowledge of European architectural theory influenced his attempts to overcome the historical relativism that branded nineteenth-century British architecture.

Slightly younger than the better-known Soane, Cockerell made his most important contributions to architecture at the time of the nascent world exhibitions, that is, during a period characterized by progress and a generally increased access to knowledge, in territories that had expanded across geographical as well as temporal borders. The nineteenth century was a period marked as much by the acceleration of progress as it was noisy with intense questionings of traditional views – around religion, the relation of human beings to nature, and the nature of knowledge and truth. While architects had been discussing taste for over a century, and had already challenged the dogmatic classical proportions for some time, the debates intensified in the first half of the nineteenth century. The tension as to whether architecture should seek coherence cosmologically, or internally and structurally was deeply felt.[5] The world, once coherent, was fractured; the truth, once singular, was being challenged; total knowledge, once thought feasible, was irretrievably receding from possibility.

The nineteenth century was the century of history.[6] As historian Reinhart Koselleck observed, it was not until the late eighteenth century that the notion of a single history took precedence over the long-standing tradition of *Historie* as the account of events.[7] In the field of architecture, the eighteenth and early nineteenth centuries saw a number of British travellers sailing to the continent, and not only recording ancient Greek and Roman monuments, but also opening their eyes to Italian Renaissance and Baroque architecture and contemporary constructions in Germany and France.[8] Coupled with the greater availability of books, with new historical research, and the increasingly scientific manner in which fragments of the past were being categorized and presented, these travels had a tremendous influence on architects whose work now emerged from a greater variety of precedents, across remote times and remote lands. The 'Battle of the styles'[9] in England, and the series of publications prompted in Germany by Heinrich Hübsch's, *In What Style Should We Build*,[10] were manifestations of the crisis nineteenth-century architects faced when conceiving their work within an unfolding history. Underlying the question of style was the attempt to grasp what constituted the essence of architecture beyond its formal – and possibly historical – appearance. From Vitruvius to Quatremère de Quincy, myths of foundation had literally been stories about the forms that grew out of particular rituals and materials. Whether in the myth of the birth of the Corinthian capital, or in the typological account of Asian, European, and Egyptian architecture in the forms of the tent, the cave, and the hut, architecture had been defined in relation to geographical locations and

situated cultures. And yet, when Cockerell commented on an actual geographical translation from the mother country to the colony, he spoke from a historical perspective. He framed the displacement in space by two different times, thus challenging the predominant importance being attached to architecture's relation to specific geographical locations.

Living in an age of historicism, Cockerell was essentially preoccupied with the adaptation of historical practices and symbols to a contemporary world in transformation. The principal ground *was* historical, and the displacement architects were primarily concerned with was temporal, the movement from one time to another.[11] Architectural historian Mary Hvattum links this passage from the geographical to the temporal to the emerging historicist tradition of the time:

> *Whereas for Montesquieu and the enlightenment historians, national character was primarily connected to place – to climate, soil and topography – for Herder, it became primarily temporal, a continually changing Spirit of the Age [Zeitgeist]. […] For Herder, as well as for the historicist tradition following him, Volksgeist was temporalized into Zeitgeist, into an organic coherence of the epoch.*[12]

No longer under the Judeo-Christian temporal order which had dominated for 1,500 years, architecture was now set in chronological time. If eighteenth-century French revolutionaries unsuccessfully tried to rid themselves of the calendar inherited from the Church by creating one based in contemporary France (a mixture of decimal rationality, poetry, and vernacular reality), architects of the nineteenth century were soon plagued not by Christian time but by human-made history. It was in the face of this dominating historical frame of reference that modern architects adopted what has been referred to as a forgetfulness of history, seeking to emancipate themselves from historical time when they could not longer conceive of ways to adapt the past to propel the present into the future.[13] Architecture was now to be conceived against the temporal ground of a flowing history.

HISTORICISM AND HISTORICITY

This publication on Cockerell responds to two related motivations. First, it seeks to provide a critical study of this important nineteenth-century architect that finally points to a fundamental aspect of Cockerell's practice: his sustained interest in the relation between architecture and time. Considered from this perspective, Cockerell's work brings to light how architects' acquaintance with history informed their comprehension of architectural meaning. This feeds the second motivation: to bring to the fore the larger issue of human historicity as it is played out against the backdrop of historicism. Historicism is essentially an elevation of history to dogma,[14] through which human beings may come to consider themselves as the products of their history, a situation that effectively annihilates the possibility of a stable and common ground for meaning.[15] From the historicist debates of the nineteenth century to the quest for the ephemeral expressed in some of the architecture produced in recent decades, it is clear that different ways of

envisioning humanity's relation to time have had an effect on the conception of the cultural role of architecture.

As the world is increasingly marked by the acceleration of time, architecture continues to affect our conception of the temporal dynamic, and vice versa, our conception of architecture is still being affected by our relation to time.[16] This play is perhaps most explicitly expressed on the surface of architecture, in its ornamentation. Indeed, the building's surface becomes the wax upon which architects impress their view of the relation of their work to history. From a quick glance at the architecture of the past two centuries, the shifting conceptions of historicity and ornamentation seem to have been running a parallel course. The old dichotomy that exists between ornament and essence is often paired with the distinction between the ephemeral and the eternal. Either something is necessary, essential, and somewhat ahistorical, or it is merely ornamental, accessory, and ephemeral. Following this logic, history's dominance in the nineteenth century is concomitant with the wide appeal of 'historical' ornamentation; the early twentieth-century rejection of history to the benefit of universal reason corresponds with the decline of ornamentation; and the recent return to some form of history (or histories, even if only through postmodern quotations) runs parallel with a more or less subtle return of ornaments, though in a changed form.

Historical debates play out on the surface of buildings. To display their particular attitude to history, nineteenth-century architects adopted distinct approaches to ornamentation, and the ornament was thus undeniably caught in the dichotomy between the ephemeral and the durable, between the 'matter of taste' and the 'matter of reason'. But if ornaments register these shifting conceptions it is because they are fundamentally tied to questions of representation and communication. In other words, ornaments are inevitably bound to questions of what is accessible or not, what is directed at the laymen (and women!), or discernable by the educated person. Indeed, a central issue in debates around ornamentation is the communicability of architecture, the surface being where cues can be given as to the meaning and destination of a certain construction. Discussions of ornament bring up the consideration of architecture as it is experienced, that is, the phenomenology of architecture. In this manner, ornaments are tied as much to historicism as they are to historicity.[17] To consider ornaments is to look at how architecture frames a phenomenological relation within a larger temporal *episteme*. Indeed, Cockerell considered ornaments to be the foil through which architecture communicated its motives.

While much has changed in the past 200 years, contemporary architects can gain great insights from a better comprehension of nineteenth-century approaches to the already shifting relation between architecture, time, and history. This book stems from the consideration of the contemporary situation of architecture. In the past 30 years, the conditions that led to the advent of postmodernism, and the lingering difficulty of qualifying contemporary architecture as modern, super-modern, hyper-modern or simply late-modern have brought to the fore some fundamental questions in relation to architecture's relation to time. In a world where, as Marshall Berman has reiterated, 'all that is solid melts into air', how can architecture continue to act as an important cultural signifier? If architecture

implies a quality of durability and the translation of values across time, does the modern fluidity of time challenge the fundamental cultural role of architecture? Because nineteenth-century architects were acutely aware of the schism between a new sociohistorical interpretation of architecture and its more traditional grounds, re-examination of this period offers the opportunity to reconsider issues still relevant today – the struggle between imitation and innovation, the definition (or rejection) of aesthetic experience, the stakes behind architectural judgment (who decides and how), or fundamentally, how to act (that is, build) when there is no longer a single grand narrative but a plurality of possible histories.

Moving between history, theory, and practice, this book offers a critical study of the play between history and historicity as it arises through the work of an important nineteenth-century architect. Resonating with recent writings by Mari Hvattum and Micheal Gubser, who respectively look at Gottfried Semper and Alois Riegl in the context of historicism, the book is also founded upon the established research on nineteenth-century beaux-arts by Robin Middleton, David Watkin, Barry Bergdoll, and David van Zanten. Hence, while the book brings Cockerell's conception of time and history to light, the larger intention is to contribute to British architectural history as well as to the understanding of nineteenth-century European context. But as it pertains more specficially to Cockerell, the present work is indebted to previous writings on Cockerell by David Watkin, Frank Salmon, Adrian Forty, Peter Kohane and John Olley. These authors have dug out hidden drawings, forgotten letters, dusty studies, and misplaced fragments; they have elucidated stories and sought to establish the truth between what one says, what one recalls, what actually happened, and what can be read between the lines. Unlike these previous histories however, this new monograph on Cockerell focuses on the temporal depth of architectural representation. In the present study, we do not primarily seek to fill gaps in the current historical knowledge of the period, we do not set out to rectify facts, refute earlier theses or make sweeping or even small claims: we investigate the phenomenological and epistemological groundings of architecture.

Our reappraisal of Cockerell is ultimately informed by the larger consideration of the epistemology and phenomenology of architecture, and the present work moves between these two representational poles. It considers how, on the one hand, architecture is rooted in a given tradition and a specific time, and how, on the other hand, it comes to life as diverse users experience it in different times. In other words, we consider architecture's historiographical nature together with its presence as a trace that one actively engages with mnemonically. Weighting the experiential nature of architecture against its epistemological underpinnings, the work points to the varying ways in which Cockerell sought to play out the significance of architecture as a cultural signifier. As Cockerell and his fellow travellers did of the ruins they encountered, our ambition is to bring to life the story of the making of the drawings and buildings, revealing the intentions of their makers, the world as they comprehended it then, as well as hinting at what we can learn from them now.

Six drawings – moments in time – offer windows into different aspects of time, taking us from historicism and historicity, through fragments and anachronism, between representation and communication.[18] Part I opens on *The Professor's Dream*

to describe Cockerell's approach to history (Chapter 1). Was history a science to the nineteenth-century architect, or did it hark back to earlier definitions? Then considering a peculiar plate included in Cockerell's publication on the Temple of Aegina, the discussion turns to the ways in which Cockerell allowed the interplay of multiple temporalities in his graphic records (Chapter 2). In Part II, we delve more specifically into Cockerell's buildings and drawings, revealing the ways in which they operated in time. Based on two ambiguous drawings that oscillate between a restorative and projective nature, one of St George's Hall in Liverpool (Chapter 3) and the other of Cambridge University Library (Chapter 4), the second part considers how Cockerell's temporal sensibility translates to his constructed buildings. Finally, Part III brings to light Cockerell's kinetic approach to ornamentation. Through a closer study of the recurrences of the Bassae capital on the one hand (Chapter 5), and an interpretation of how Cockerell understood his presence to be latent in drawings (Chapter 6), the two final chapters consider more generally the communicative dimension of buildings and drawings against larger conceptions of time.

NOTES

1 Some of these expressions are borrowed from Didi-Huberman's discussion of shifters in historiography. Georges Didi-Huberman, 'Before the Image, Before Time', in Claire Farago and Robert Zwignenberg, eds, *Compelling Visuality: The Work of Art In and Out of History* (Minneapolis: University of Minnesota Press, 2003), 31–44, 38.

2 'I remember in one occasion Mr C saying, – "I tell you what John, you and I ought to be architects in Time, we should never have known so much about architecture but for the work upon these lectures"'. RIBA archives, Goodchild Album, vol. 8, 72.

3 Cockerell, RA Archives, mis/co 9, Third Lecture, 1843.

4 Georges Didi-Huberman, *Confronting Images, Questioning the End of a Certain History of Art* (Pennsylvania State University Press, 2005), 95.

5 For example, the '*querelle des anciens et des modernes*' in eighteenth-century France was a conflict which had roots in all these oppositions. Ultimately, this 'dispute of the ancients and the moderns' was related to whether architectural signification could be conceptualized in absolute or relative terms. See Alberto Pérez-Gómez, *Architecture and the Crisis of Modern Science* (Cambridge: MIT Press, 1983), 44–6.

6 Architectural historians Barry Bergdoll, David Watkin, Robin Middleton, and J. Mordaunt Crook all acknowledge this situation. See J. Mordaunt Crook, *The Dilemma of Style: Architectural Ideas from the Picturesque to the Post-modern* (London: John Murray, 1987), Robin Middleton and David Watkin, *Neoclassical and 19th Century Architecture* (New York: Harry N. Abrams, 1980), and Barry Bergdoll, *European Architecture 1750–1890* (Oxford: Oxford University Press, 2000), who sets nineteenth-century architectural development between a rational/philosophical impetus and a historical/empirical quest.

7 R. Koselleck, *Futures Past: On the Semantics of Historical Time,* trans. K. Tribe (Cambridge, MA: MIT Press, 1985), 21–38.

8 While the Grand Tour was prevalent in the eighteenth century, by the turn of the nineteenth century, the nature of the accounts produced and printed from Grand

Tours became more systematic and even scientific in their approach. See Frank Salmon, '"Storming the Campo Vaccino": British Architects and the Antique Buildings of Rome after Waterloo', *Architectural History* 38 (1995): 146–75.

9 For a discussion of the issue of style in England, see Crook, *The Dilemma of Style.*

10 See Heinrich Hübsch, *In What Style Should We Build? The German Debate on Architectural Style*, intro. and trans. Wolfgang Herrmann (Santa Monica, CA: Getty Centre for the History of Art and the Humanities, 1992).

11 C.R. Cockerell, *Supplement to the Antiquities of Athens, The Temple of Jupiter Olympius at Agrigentum, Commonly Called the Temple of the Giants* (London: Priestley and Weale, 1830), 2 (Note a).

12 Mary Hvattum, *Gottfried Semper and the Problem of Historicism* (Cambridge: Cambridge University Press, 2004).

13 Alan Colquhoun, 'Three Kinds of Historicism', In *Modernity & the Classical Tradition, Architectural Essays 1980–87* (Cambridge, MA: MIT Press, 1989), 88. See also Paul Connerton, *How Modernity Forgets* (Cambridge: Cambridge University Press, 2009).

14 Wolfgang Götz, *Historismus, Ein Vershuch zur Definition des Begriffes.* Weitschrift des Deutschen Vereins für Kunstwissenschaft, XXIV, quoted in Jacop Ahrenber, Ville Lukkarinen and Gustaf Nyström, *Classicism and History, Anachronistic Architectural Thinking in Finland at the Turn of the Century* (Helsinki: Vammalan Kirjapaino Oy, 1989), 20.

15 See Colquhoun, 'Three Kinds of Historicism'. On architecture and historicism, see also Robert Jan van Pelt and Carroll William Westfall, *Architectural Principles in the Age of Historicism* (New Haven; London: Yale University Press, 1991).

16 Harmut Rosa, *Alienation and Acceleration: Towards a Critical Theory of Late-modern Temporality* (Malmö, Sweden: NSU Press, 2010).

17 For the ties between human historicity and human temporality, see the work of Paul Ricoeur, *La mémoire, l'histoire, l'oubli* (Paris: Seuil, 2000), 459–70. See also Maurice Merleau-Ponty, *Phénoménologie de la perception* (Paris: Seuil, 1996), 469–95.

18 While the drawings span the years between 1811 and 1860, the discussion defies chronology to move forward and backward through Cockerell's Grand Tour (1810–17), his professorship at the Royal Academy of Arts (1839–56), moving from the expedition at Bassae (1811) to his final publication on the temple (1860), also dwelling on some of the projects he built between 1830 and 1855.

PART I
Historicism and the Experience of History

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1

The Professor's Dream: Architecture in Time

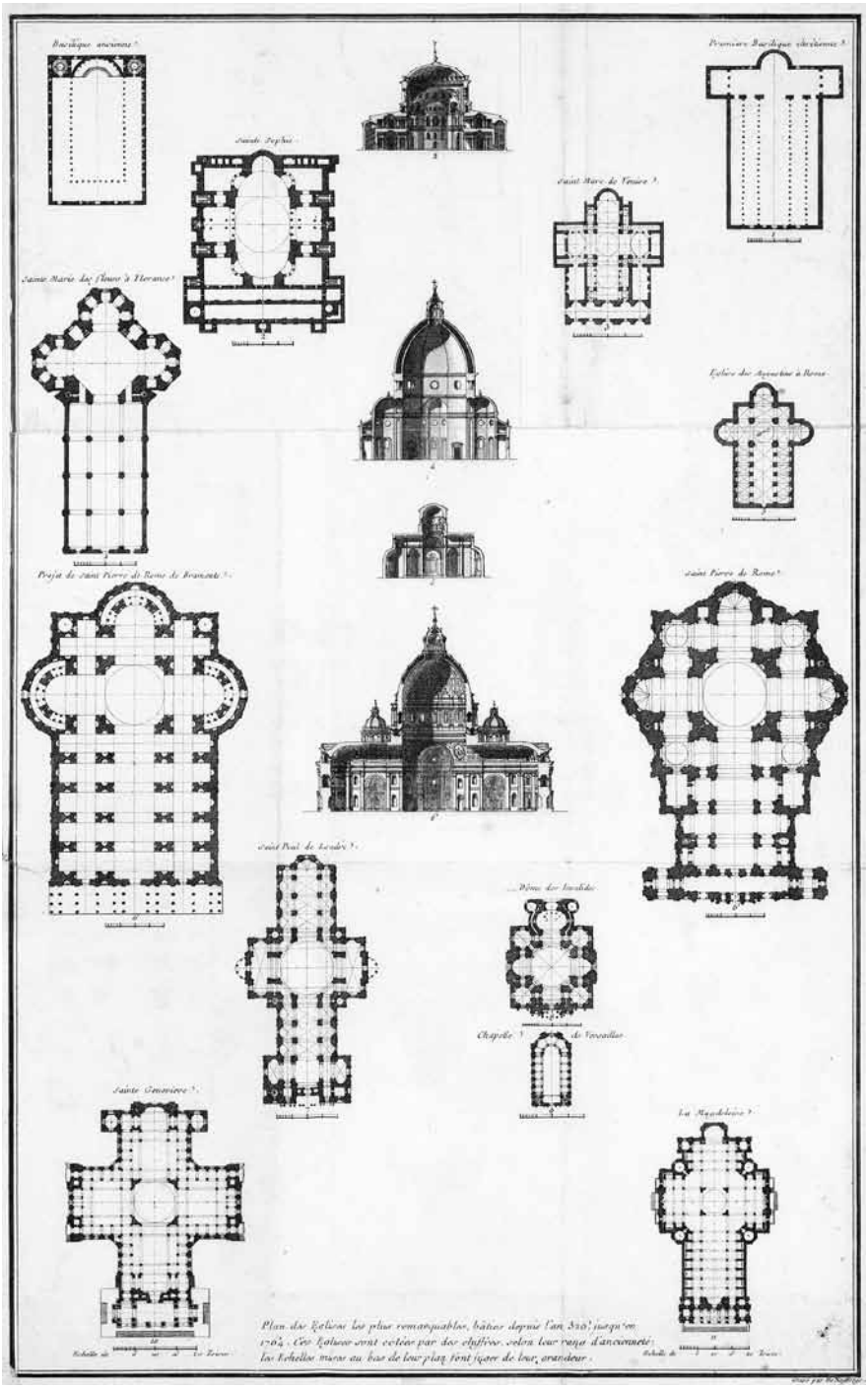
The Professor's Dream, Cockerell's best-known drawing (Plate 1), captures Cockerell's fundamental views on architecture in time. It is a 6 ft wide by 5 ft high synopsis of architectural history, assembling over one hundred buildings from past to present times and layering them upon four terraces rather than along a single ground line. Each building is drawn at the same scale, with the entire composition rendered in watercolour. In 1849, the drawing was exhibited at the Royal Academy of Arts, London, and Cockerell sought to have a smaller version of it engraved. Destined though it was for exhibition, Cockerell's drawing came after nearly a decade of teaching, and was undeniably imbued with pedagogical intentions.

The Professor's Dream may also be Cockerell's most widely reproduced drawing. Even those who know little about its creator will likely have encountered it, especially as the drawing has experienced a revival in the last decades. The ascent of postmodernism and that movement's foundations in historicism inspired the use of *The Professor's Dream* as a poster for the 1980 Venice Biennale.[1] Over a decade later, the drawing featured on the cover of the book *Architecture in the Age of Historicism*. But was Cockerell's 'dream' truly that of a historicist? The stylistic and temporal divisions within the drawing could lead to this interpretation. The temporal demarcation between the four horizontal layers, which designate stylistic breaks, could suggest a certain flattening of history. Yet the rich superimposition, the subtle perspectival effect, and the implied depth in the thickness of the paper intimate otherwise. If there is a parallel between nineteenth-century historicism and more recent postmodernism, the link between Cockerell's drawing and the flattening of history is weak at best. Notwithstanding the apparent espousal of stylistic categorization, *The Professor's Dream* implies a depth that challenges the premise of historicism. In this section we will consider the context within which the drawing was created to better comprehend some of the key aspects that characterized the professor's conception of the relation between architecture and time. Looking at Cockerell's drawing as a representation of architecture in history, we will cast it within a larger tradition of mapping not only architectural history, but also the history of the world and its geography.

NINETEENTH-CENTURY 'MUSEUMS' OF ARCHITECTURE

Bringing together numerous buildings from different times and places, Cockerell's drawing belongs to a larger tradition of effectively creating museums of architecture by collecting examples from past and current practices and presenting them in different forms (models, fragments, measured drawings, or restorations).[2] Ever since the eighteenth century, models and casts brought back from the Grand Tour had found their places in private galleries. Although some of these galleries were being quite easily transformed into public museums – notably, Sir John Soane's gift of his house museum to the nation in 1834 marks the creation of the first public architectural museums in Britain – the history of the formation of the first museums of architecture is otherwise tumultuous.[3] The difficult categorization of architecture as science or as art raised questions as to the epistemological limits and pedagogical uses of a museum of architecture. Describing the development of museums in eighteenth-century France, art historian Paula Young Lee discusses how the split between museums of art and museums of science was evident in the very naming of these places. The term 'muséum', a reference to the Musaeum of Alexandria, represented an idea about the production, accumulation and control of knowledge, and was used for museums of science. The term 'musée' was used for art museums, and linked back to a place dedicated to the Muses or more specifically to the Athenian hill, named after the poet Musée. While the former implied 'means of knowing', the latter was rather a 'place of showing', the difference expressive of a conflict 'between doctrine and doubt, historical legacy and analytical evidence, conservation and progress […]'.[4] From D'Agincourt to Banister Fletcher (1866–1953), curators of architectural history inevitably positioned themselves between these conflicting poles.

The Professor's Dream takes place within a specific historiographical practice that we will refer to as the composition of a graphic museum. Whereas the *recueil* brought the buildings together within the space of a book, the graphic museum ordered history within one single frame. According to the architectural historian Werner Szambien, it is the use of this comparative technique that led to the production of such synopsis. Johann Joachim Winckelmann (1717–68) was the first to apply the comparative technique to the study of architectural history, while the first graphic application of the technique is attributed to Jacques Tarade.[5] In 1713, Tarade produced a number of drawings in which he compared St Peter's Basilica in Rome with Notre-Dame de Paris and Strasbourg Cathedral, using half plans and sections.[6] The limited scope of these first comparisons was greatly extended in 1762 with the publication of a survey of the 'most considerable' buildings from Egypt to the present drawn by architect Juste-Aurèle Meissonnier (1695–1750).[7] In his graphic museum, Meissonnier used a uniform scale and drew all buildings in elevation, grouping them in the abstract space of the white page. A year later, Julien-David Le Roy published a plate drawn by architect Jean-François de Neufforge (1714–91), which displayed the plans of the most remarkable churches built over the course of 2,000 years (Figure 1.1).[8]



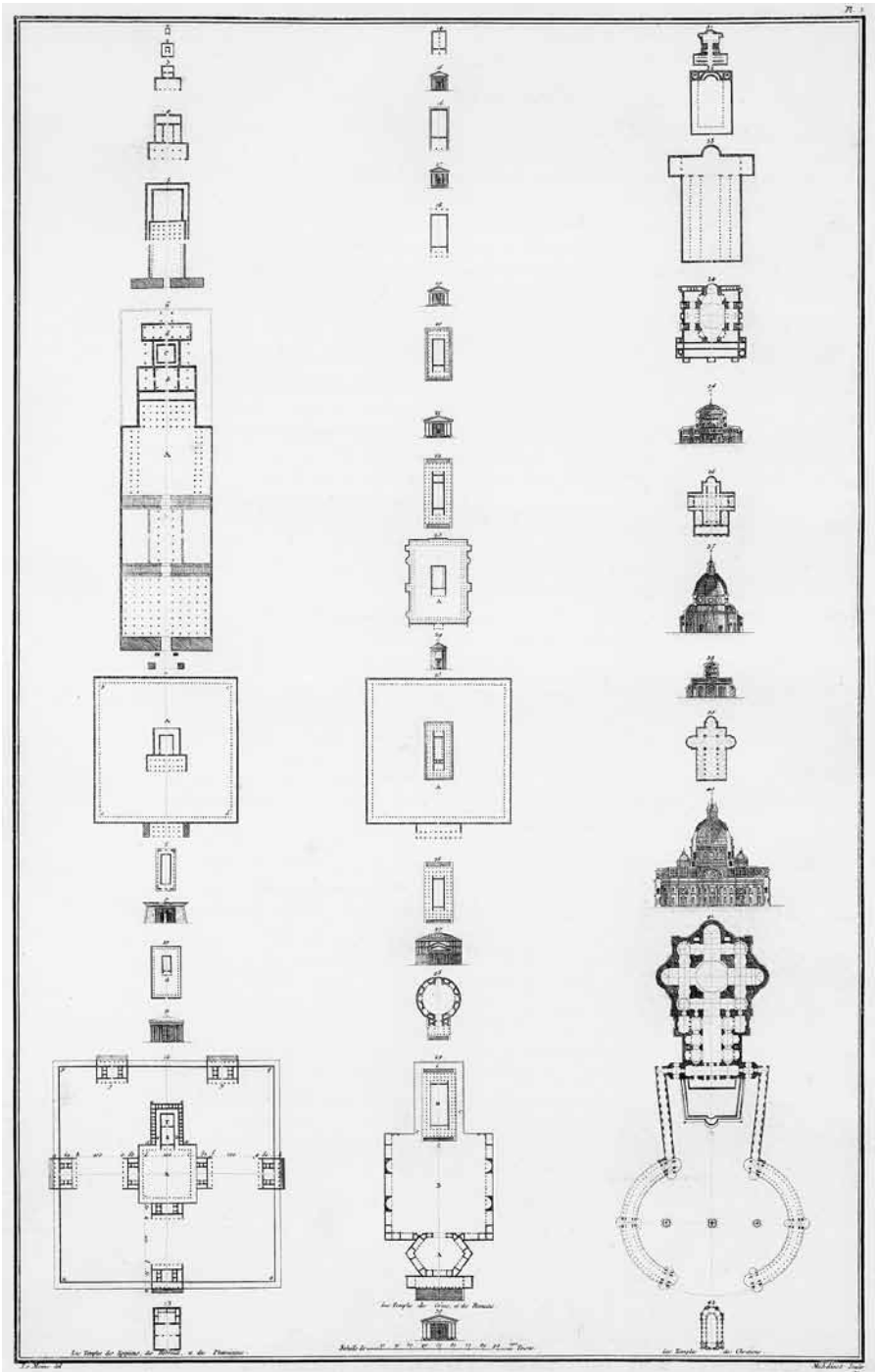
1.1 J.-F. Neufforge, *Plans des églises les plus remarquables*, in D. Le Roy, *Histoire des formes différentes que les Chrétiens ont données à leurs Temples depuis le Règne de Constantin le Grand, jusqu'à nous* (Paris: Desaint & Saillant, 1764), Collection Centre Canadien d'Architecture / Canadian Centre for Architecture, Montréal

Neufforge's plate was the sole illustration in Le Roy's publication on the history of Christian temples.[9] Using different scales, Neufforge arranged the buildings chronologically down the page. Because the two plans drawn to the largest scale are the most recent ones, the impression is that the author advocates a progression of architecture from ancient to modern times. This contrasts with Meissonnier's drawing, which instead reads as a random genealogy of form. Le Roy reaffirms his intention to present history as a progression with the publication of another plate six years later (Figure 1.2).

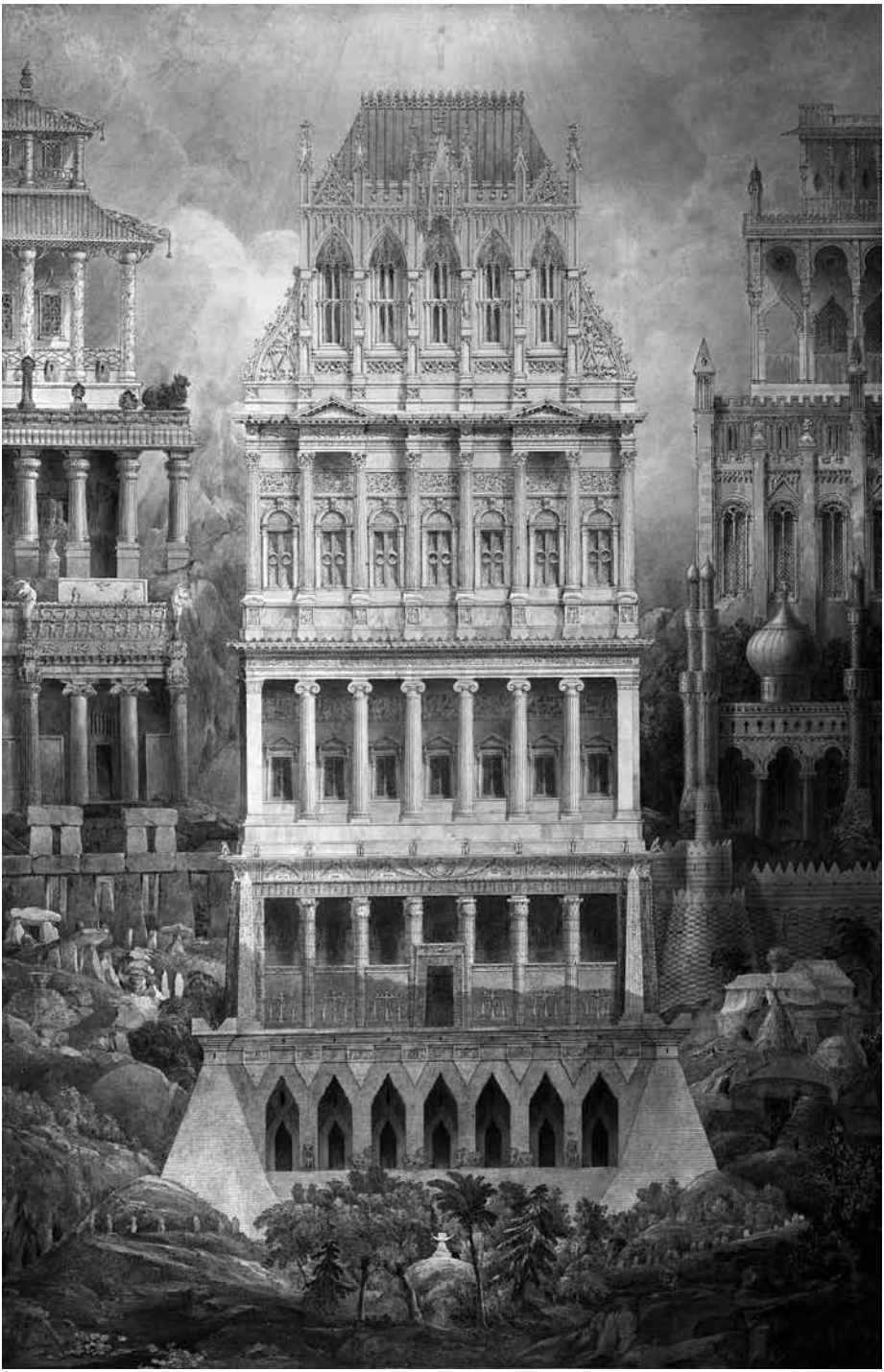
The plate that appeared in *Les ruines des plus beaux monuments de la Grèce* is divided into three columns. The temples of the Egyptians, Hebrews, and Phoenicians are arranged down the first column, those of the Greeks and Romans in the centre, and the Christian Temples appear on the right. The buildings in the right-hand column, the majority of which already appeared in the 1764 plate, are now reduced to the same scale and aligned symmetrically about their centres. Compared to the first plate, it is evident in this second plate that Le Roy espouses a comparative technique as a system for classifying the past.[10]

Many of these early French comparative drawings share the same characteristics: buildings are systematically selected, often symmetrically arranged, and then stretched as a series of line drawings on a white page so as to convey a sense of progress in time. The selected buildings suggest an all-inclusive approach, of all places and all times. The white background and the non-rendered plans, elevations or sections reflect the intended scientific objectivity. But across the Channel, another tradition existed. Unlike the French graphic *parallèle*, the English comparative drawings were rarely set in a neutral space. Almost always set within a larger atmospheric setting, the English drawings often presented their comparative studies as a great space to explore. In *Comparative Characteristics of Thirteen Selected Styles of Architecture* (Figure 1.3), English architect Joseph Michael Gandy approached the comparison of orders and the grouping of architecture from diverse origins in a manner very distinct from what has been described so far in the French tradition.[11]

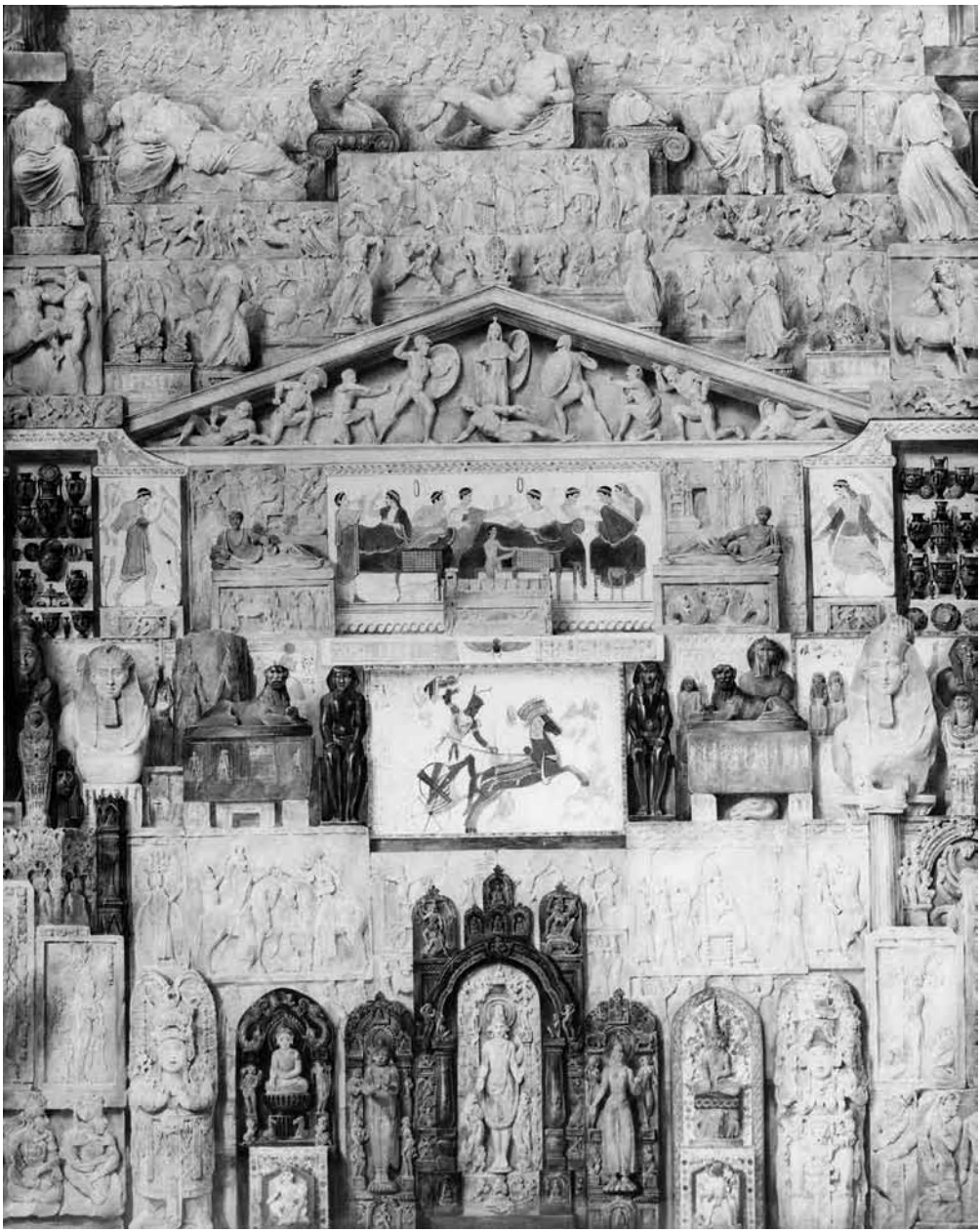
At the centre of Gandy's drawing rises a five-storey structure that leads from Babylonian pylons up to a Gothic roof, through Egyptian, Greek and Roman floors, as if the building was raised over 2,000 years. At either side of this central structure are two other tall buildings drawn in elevation, and which again display diverse architectures from remote times and regions shifting from floor to floor. A dramatic light hovers over a no less dramatic landscape in the background. Smaller primitive constructions – tumuli, tents, huts, and various druid monuments – are scattered in the foreground. While the layout suggests chronological progression and a potentially subtle judgment on the precedence of certain geographical origins, the emphasis is on the mythical, the symbolic, and the emblematic. The drawing's content, composition, and treatment all contribute to convey a mystical quality rather than a sense of scientific objectivity. At the British Museum, James Stephanoff (1788–1874) presented a similar eclectic collection, a kind of anachronistic mosaic of different sculptures and paintings spanning nearly 2,000 years. Like Gandy's comparative drawing, Stephanoff's *An Assemblage of Works of Art in Sculpture and Painting in the British Museum, From the Earliest Period to the Time of Phydias* (Figure 1.4) hardly constitutes an objective chart.[12] In both drawings, the sheer accumulation overshadows the potential rationalization.



1.2 D. Le Roy, Comparative table, *Les ruines des plus beaux monuments de la Grèce, considérées du côté de l'histoire et du côté de l'architecture,* vol. 1 (Paris: De L'Imprimerie de Louis-François Delatour, 1770), Collection Centre Canadien d'Architecture / Canadian Centre for Architecture, Montréal



1.3 J.M. Gandy, *Comparative Characteristics of Thirteen Selected Styles of Architecture*. c.1826, Sir John Soane's Museum, London. By courtesy of the Trustees of Sir John Soane's Museum



1.4 J. Stephanoff, *The Ascent of the Arts: An Assemblage of Works of Art in Sculpture and Painting in the British Museum, From the Earliest Period to the Time of Phydias*, 1845, British Museum, London, © The Trustees of the British Museum

The drawings of English compatriots Augustus Welby Northmore Pugin (1812–52) and John Soane (1753–1837), and particularly their selections of scenes and buildings, suggest different motivations. Comparing medieval and modern scenes, Pugin uses the comparative technique to convey a certain atmospheric quality that privileges medieval morality. For example, he contrasts views of medieval London with nineteenth-century London, foregrounding a panoptical residence for the poor in the latter, and replacing the church spires that dominate the first image with smoke stacks. The cohesive religious community and the visible signs of spiritual guidance give way to the productive concerns of the larger industrial machine. In the case of architect John Soane, a most startling use of the comparative technique is evident in his drawing of a man-of-war against Noah's Ark. Echoing the technique used by Tarade, Soane composed this image and a great number of other comparative illustrations by superimposing elevations and sections. The technique is similar to Tarade's, but the overall effect could not be more different. Using dramatic contrasts in scale, Soane brings Rome's St Peter's and the Pantheon together with the Radcliffe Library in Oxford and Soane's Rotunda at the Bank of England (Figure 1.5).

The sublime quality of Soane's drawing contrasts sharply with the apparent scientific objectivity of Tarade's comparative drawings. The intricate and dramatic spaces formed by Soane's juxtaposition differ from the stark presentations of other French drawings such as those by Meissonnier or Neufforge. Unlike their French counterparts, the English comparative drawings are usually rendered and the represented buildings are situated in an impossible but imaginable place where there is both depth and light.

Cockerell's *Dream* appears to straddle the French and English traditions: it is rendered yet ordered; it implies chronology even with its use of superimposition; it is comparative but also atmospheric. Upon its initial display at the Royal Academy's annual exhibition, the catalogue entry described *The Professor's Dream* as follows:

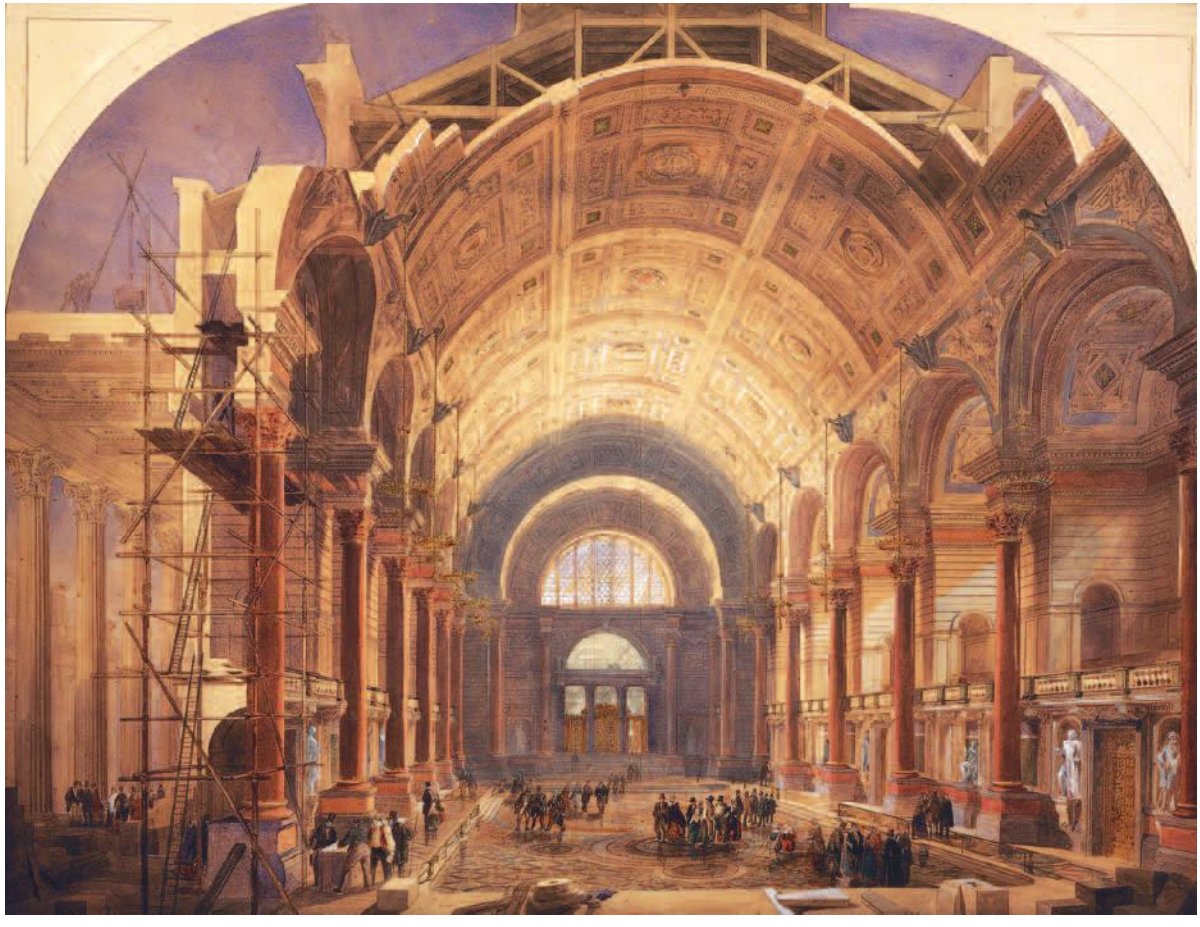
> *… a Synopsis of the principal architectural monuments of ancient and modern times, drawn to the same scale, in forms and dimensions ascertained from the best authorities, and arranged on four terraces – Egyptian, Grecian, Roman, and Mediaeval and Modern; the last of which shows more particularly the comparative heights: this synopsis being a development of that first published in the 'Useful Knowledge' Society's Life of Sir Christopher Wren.*[13]

The description refers to an earlier drawing by Cockerell published by the Society for Diffusion of Useful Knowledge (SDUK), a society that sought to make new knowledge available to society at large. Published in 1828, this earlier comparative drawing grouped 18 buildings from different times and cultures (Figure 1.6).

In the 1828 drawing, the stated intention was to compare the heights of St Paul's and St Peter's, and the text accompanying the drawing indicated that the vacant spaces had been 'filled up with the outline of some of the most remarkable buildings now existing'.[14] Due to an error in translating heights, the drawing did not make an accurate comparison possible. It was acknowledged in the accompanying text that a mistake had been made in the drawing, specifically that St Paul's was not properly to scale, and not drawn as tall as it should have been.

1 C.R. Cockerell, *The Professor's Dream* (prepared with G.E. Goodchild, 1849), Published with the permission of the Royal Academy of Arts, London

2 C.R. Cockerell, Plate X, in *The Temples of Jupiter Panhellenius at* Ægina*, and of Apollo Epicurius at Bassae near Phigaleia in Arcadia* (London: J. Weale, 1860), Musagetes Library, University of Waterloo



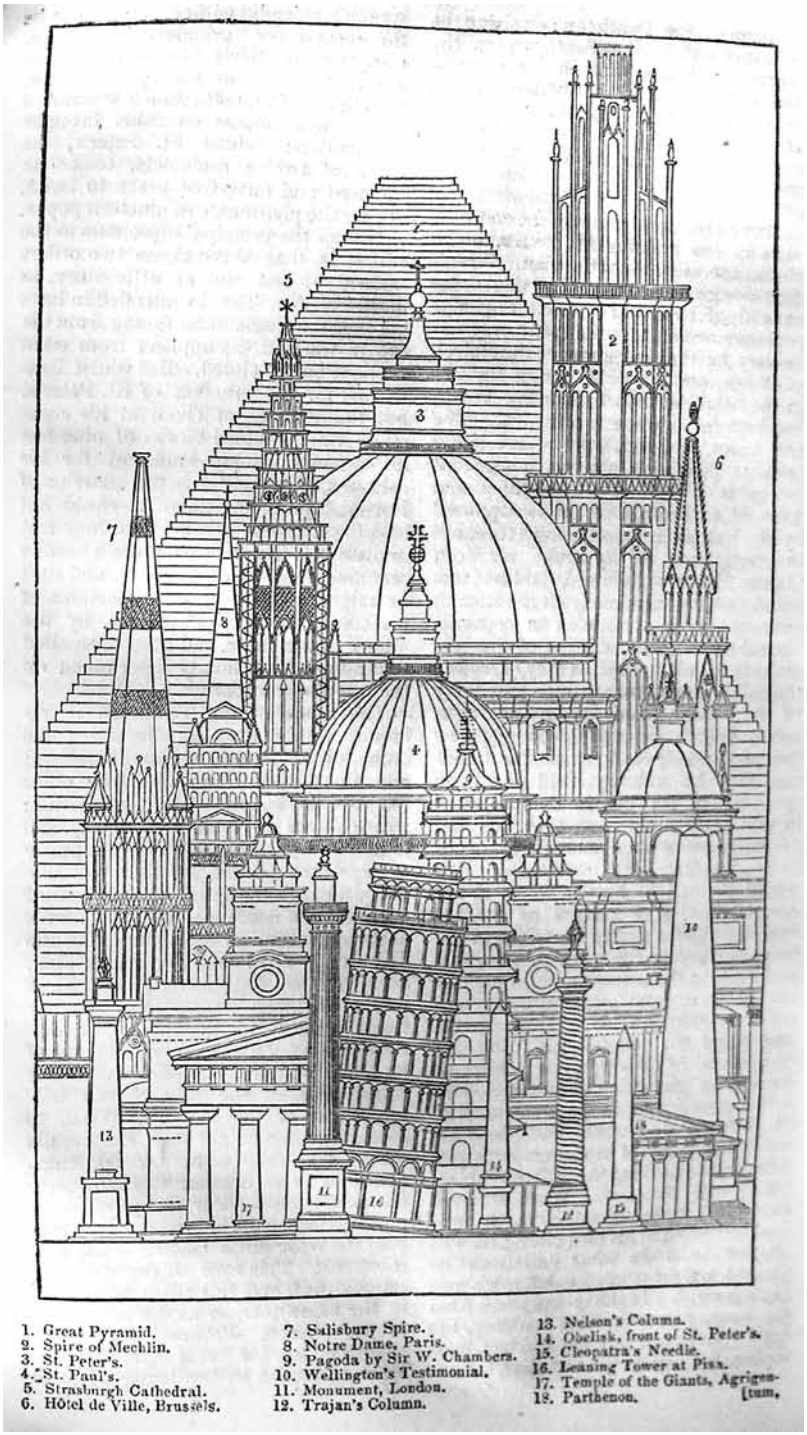
3 C.R. Cockerell (drawn by G.E. Goodchild, c.1854), *Fantasy of St George's Hall, Liverpool, under Construction*, Published with the permission of the National Museums Liverpool

4 C.R. Cockerell (drawn by G.E. Goodchild, c.1838), *Cambridge University Library under Construction,* location unknown

5 C.R. Cockerell, Bassae capital, in *The Temples of Jupiter Panhellenius at Ægina, and of Apollo Epicurius at Bassae near Phigaleia in Arcadia* (London: J. Weale, 1860), Musagetes Library, University of Waterloo

6 C.R. Cockerell, 'The architect's own hand is seen here', (c.1838). Cambridge University Library, MS.Add.9272/1/24. Reproduced by kind permission of the Syndics of Cambridge University Library

1.5 J. Soane, *Comparative Elevation of St Peter's, Rome & Sections of the Pantheon, Rome, the Radcliffe Library, Oxford & the Rotunda, Bank of England*, Sir John Soane's Museum, London. By courtesy of the Trustees of Sir John Soane's Museum



1.6 C.R. Cockerell, Comparative drawing, in H. Bellenden, *Sir Christopher Wren, With Some General Remarks on the Origins and Progress of Architecture* (London: Baldwin and Cradock, 1833), 20, Library of Congress

Nevertheless, the drawing was published, implying that perhaps comparison was not its sole raison d'être. Though the two cathedrals were placed symmetrically about the centre, they do not stand out from the other 16 buildings drawn to fill the 'vacant spaces'. The buildings are shown in outline, resulting in an eclectic and anachronistic group of pyramid, columns, obelisk, Greek temples, and medieval cathedrals: a strange gathering of structures held together by a thin ground line.

The drawing published by the SDUK was not the only precedent for *The Professor's Dream* in Cockerell's practice. In 1839, when Cockerell was appointed Royal Academy Professor, his first work was the preparation of a large paper museum, which he used as a backdrop to his Royal Academy lectures and henceforth referred to as his 'drop-scene'. Cockerell's most faithful pupil and draftsman, John Eastly Goodchild (d.1899), described its production:

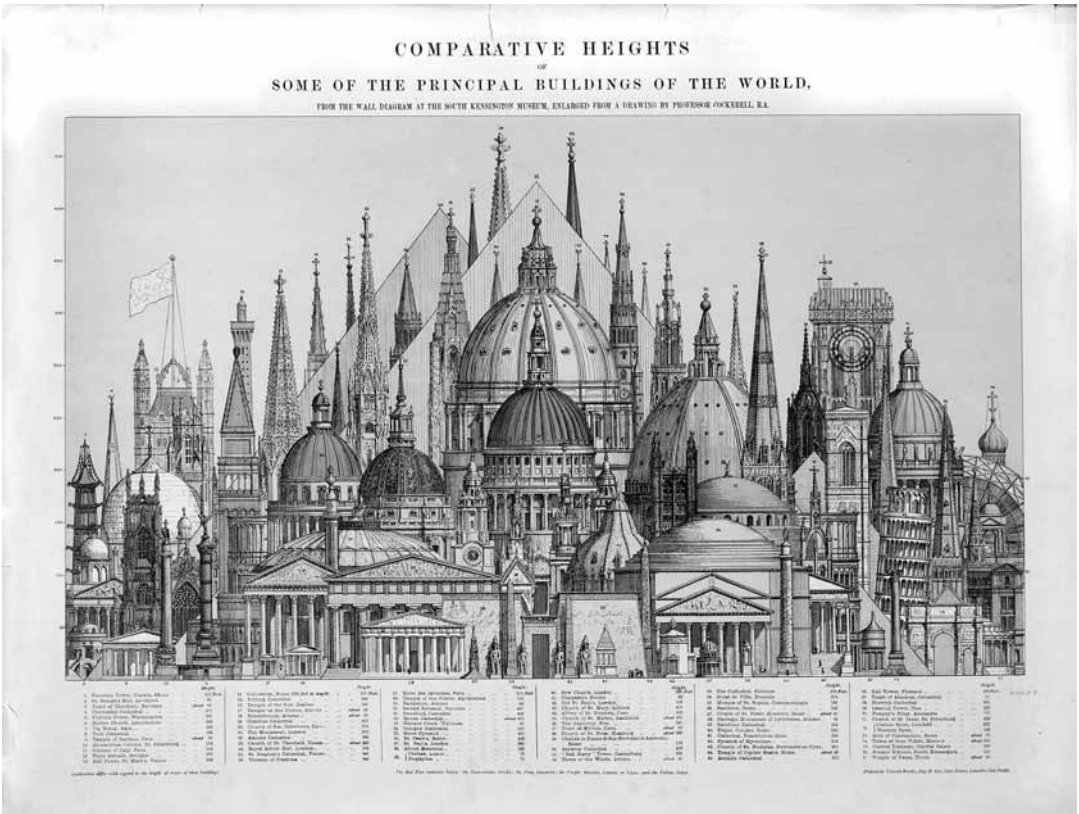
> *The first work in preparation for the Lectures was a large drawing showing a number of the most important buildings of different countries to a uniform scale, upon the model of a drawing made in 1826 [sic. 1828] for the Society for the diffusion of useful knowledge […]. The size of this [1839] drawing was 14ft by 10ft in height. […] At the same time I had upon my own board at home a similar drawing in double elephant size paper pretty much the same arrangement but with ten or eleven additional buildings […]. The large drawing was hung in the lecture rooms in all occasions of Mr C. lectures, and was called his 'drop-scene'. A vast amount of study and research was gone through for this and a great number, nearly 400 other drawings for his lectures, which extended to seventeen years.*[15]

As Goodchild explains, he had himself drawn a smaller version of the drop-scene, a version that comprised some additional buildings and was perhaps destined to be engraved.

Goodchild's version – a sort of smaller, colour-coded drop-scene (Figure 1.7) – conveys the same effect as the 1828 comparative drawing published by the SDUK. A number of buildings have been pulled out of their respective times and are assembled within a frame, where, once again, they are anchored in the thinness of a single ground line.

While the actual drop-scene hung during Cockerell's lectures at the Royal Academy has been lost, Goodchild's smaller version gives an idea of what it must have looked like: a compendium of 63 buildings from various times and places, set upon the same ground line within a single frame. If Goodchild's 'double elephant size paper' version, now part of the RIBA Drawing Collection, makes for a striking drawing, we must rely on second-hand reports to imagine the impressive nature of Cockerell's own drop-scene. In February 1843, it was praised in an article published by *The Builder*:

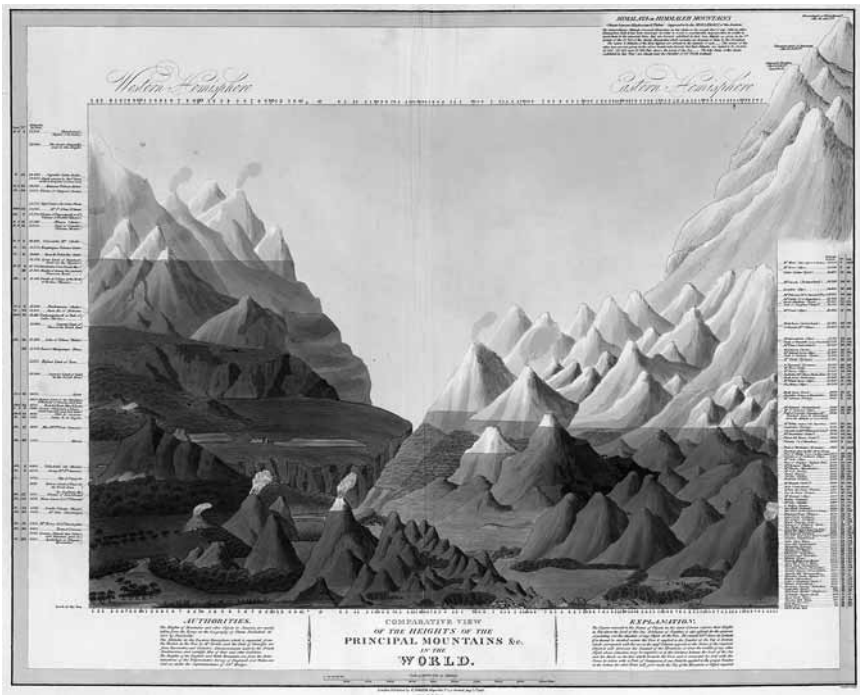
> *Two large sheets, or rather assemblage of sheets, were hung up, shewing in comparative juxta-position, most of the famous structures of antiquity, the one in elevation, the other in section, and over these the eye could wander and the*



1.7 C.R. Cockerell (drawn by J.E. Goodchild), *Comparative Heights of Some of the Principle Buildings of the World*, c.1842. Published with the permission of the RIBA Drawing Collection, London

> *mind could dwell with marvelling and delight that no words can express. How small appear those finished and exquisite gems of Grecian art, its temples, when compared with the developed boldness of the works of the successors to the Greek school, who have been charged with innovations and corruptions. These great sheets present to us a map or chart reduced, as it were, to a small scale, of the hitherto ascertained geography of building art, and suggest an endless train of reflection and inquiry.*[16]

This short account supported *The Builder*'s claim that reports of Cockerell's lectures as published in the *Athenaeum* were 'defective'. *The Builder* pointed out how the *Athenaeum* neglected to mention the 'display of illustrative drawings, so laboriously compiled, as were exhibited by the learned lecturer', and without which 'the spirit or essence of the lecture is greatly weakened, and in some instances lost'.[17] *The Builder* praised Cockerell's use of drawings and considered them a vital element of his lectures. Specifically mentioning the drop-scene, the reviewers recognized that the layout of the drawing made comparison easy, while allowing the eye to 'wander' and the mind to 'dwell'. Of particular interest however is their likening of the drawing to a map or 'chart' of the 'ascertained geography of building art', suggesting that the architecture was akin to a natural phenomenon whose traces could be recorded and analyzed.



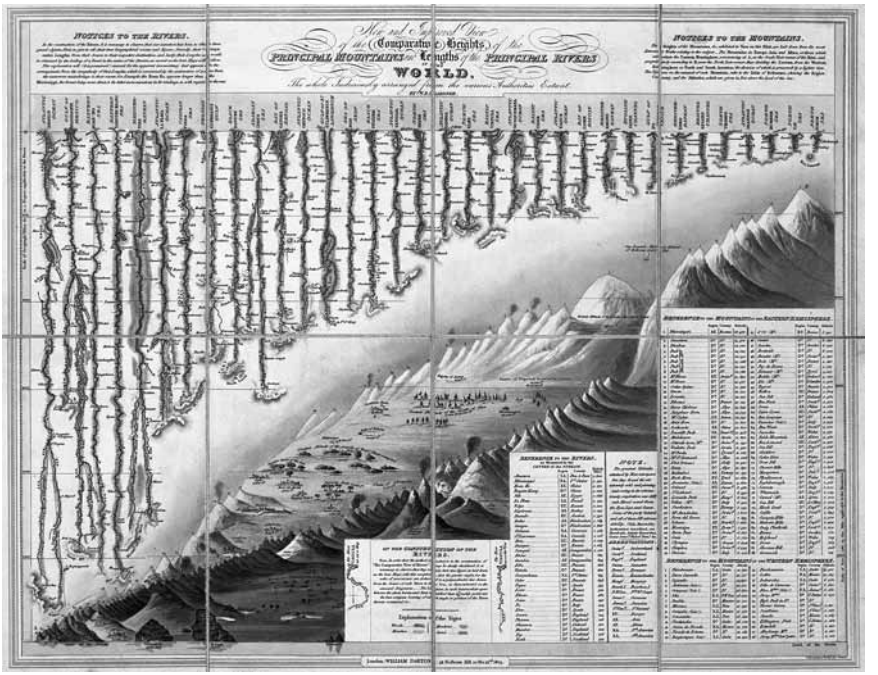
1.8 C. Smith, *Comparative View of the Heights of the Principal Mountains &c. in the World*, 1816, David Rumsey Map Collection, www.davidrumsey.com, Creative Commons License

THE 'GEOGRAPHY OF BUILDING ART'

Cockerell's drawing merits comparison with certain geographical charts developed at the beginning of the nineteenth century. Between 1815 and 1830, a number of geologists produced various maps in which mountain heights or the length of rivers were compared. In 1816, Charles Smith published the *Comparative View of the Heights of the Principal Mountains &c. in the World* (Figure 1.8).[18]

In 1817, John Thomson also produced a comparative drawing,[19] and different copies of these drawings and of other comparative compositions were published in 1822,[20] 1823[21] and 1831.[22] While the first comparative drawings only showed a composition of mountains, some later ones included the longest rivers of the world stretched out to compare their lengths. In 1823, William Darton published what is probably the earliest of these comparative drawings combining rivers and mountains (Figure 1.9), and different versions followed in 1825 and 1826.[23]

Shortly after the first publications of geographical comparative drawings, a number of architectural drawings were produced and described as showing comparative building heights. Among these were the drawings published by the SDUK in 1828 (some ten years after the first example of geographical comparative heights drawing), Cockerell's 1839 drop-scene, his 1848 *The Professor's Dream*, as well as a comparative drawing printed in 1833 in London.[24] As late as 1881, a drawing printed in Germany assembled 53 buildings so as to show their comparative heights.[25] These architectural comparative drawings shifted the object of comparison from the slow mutations of nature (the formation of mountains) to more ephemeral human creations (architecture). Still, they were made under the assumption that height, which was used to measure the greatness of nature,



1.9 W. Darton, *New and Improved View of the Comparative Heights of the Principal Mountains and Lengths of the Principal Rivers in the World*, 1823, David Rumsey Map Collection, www.davidrumsey.com, Creative Commons License

was also an appropriate scale to measure human accomplishments. The great distinction lay in the secularization of time implied by the move from nature to architecture. Charting architecture against a historical timeframe that involved human influence and activity, architects and historians were moving away from the notion of biblical time. As such, they were engaging the possibility of periodization, a characteristic of historicist attitudes to time.

Cockerell designed the drop-scene in 1839 in order to hang it during his lectures. He used it as a rational pedagogical tool in the lecture room, as he lectured for an audience of Royal Academy architecture students, interested architects and critics. Unlike the drop-scene, *The Professor's Dream* was designed to be exhibited at an annual Royal Academy exhibition, and in 1849, it was hung alongside architectural drawings, paintings, and sculptures for a group of critics, collectors, and the general public. This time, around 100 buildings were brought within the frame and set upon four different levels. Goodchild describes the making of this later drawing:

> *… The Academy Lectures occupied a considerable amount of time and study in the months of Nov^r Dec^r Jan^y and Feb^y and in -/48 a fresh subject was upon the boards in a large drawing to be called 'The Professor's Dream', 'A synopsis of the principal architectural monuments of Ancient and Modern Times', some 100 of the most renowned and interesting buildings to a uniform scale, after the model of the one before mentioned on page 74 [the drop-scene], but instead of all standing upon on a ground line, the building are here ranged upon four terraces 30 feet above each other, and in a sort of semi perspective, the more clearly to disengage the several structures, the lowest terrace is occupied by the most Ancient; the Egyptian monuments, the next by the Greek, the third by the Roman, and the fourth by the Medieval and Modern; the two larger pyramids*

> *forming the background. These however are placed for the better comparisons with the modern, upon the higher line. In the study for this drawing most of the larger buildings were shown more or less in detail upon separate sheets and cut out to the outline for the greater facility of grouping by laying them over each other. As I have before stated the study for these works brought us onto the acquaintance of a good many books, prints, and many of which probably we should otherwise have never seen with the same interest. The size of this drawing something over six feet wide by nearly five feet high […] the drawing was in the Academy Exhibition of 1849. In -/52 I had a reduced copy of the drawing made for engraving, which however never got beyond the outline, altho' Mr C was very desirous of having it engraved, the expense was too great it could not be done as he would wish to see it for less than £500. …* [26]

Though the textual descriptions of the drop-scene and *The Professor's Dream* are similar, a single glance from one drawing to the other quickly sets them apart. The drop-scene, notwithstanding its impressive composition, suggests a didactic and comparative use, something acknowledged by *The Builder* and evident in its reviewers' commentary. In the drop-scene, the buildings of past times and remote places were all brought together and could be observed against a common denominator, a single ground line. However, the intention behind the preparation of *The Professor's Dream* seems to have been different. Two significant changes are observed: firstly, Cockerell is presenting history to a more varied audience, not one limited to students of architecture. Secondly, he uses a different representational approach: the drawing is now rendered and the buildings are arranged on four different levels, and no longer appear along a single ground line.

If we consider all of Cockerell's comparative drawings, from the first drawing published by the SDUK to the drop-scene used in the classroom, and finally the painting exhibited at the Royal Academy, their differences may be partially explained by the fact that Cockerell must have had different audiences in mind. The first drawing had a specific purpose. The SDUK was responsible for a number of different publications: *Library of Useful Knowledge*, *Library of Entertaining Knowledge*, *The Quarterly Journal of Education*, as well as *The Penny Magazine*. In the context of the sweep of reforms taking place in Britain in the 1830s, the SDUK, founded in 1826, was concerned with the education of the working classes.[27] The founder of the society, Whig reformer Henry Brougham, was interested in making science available to the uneducated. Brougham conceived of science as 'knowledge reduced to a system'.[28] Because maps could reduce topography to such a system, they were prioritized as vehicles for the transmission of knowledge. But maps could also be useful to the study of history, which is certainly what one of the SDUK committee members thought when he wrote: 'Maps appear to me necessary to the student of history as diagrams to the students of mathematics'.[29] While the scope of Cockerell's 1828 synoptic drawing is considerably humbler than that of the subsequent drop-scene and *The Professor's Dream*, the faith SDUK members placed in maps to communicate knowledge and to study history seemed to resonate with Cockerell.[30] After producing a composite map of Athens for the SDUK in 1832, Cockerell undertook the mapping of the 'most remarkable buildings now existing', tracing their outlines as a cartographer would the boundaries between territories.

Over the years, Cockerell's 'mapping' techniques became more refined to adjust to more specialized audiences, and to the temporal complexity that the mapping of architecture in history entailed. In the context of his Royal Academy lectures, the attendees were a diverse group made up not only of students of architecture, but interested members of the educated population.[31] The Royal Academy, founded in London in 1768, was an establishment under crown protection that supported the arts and offered artists of all means an opportunity to attend lectures, participate in workshops, and exhibit their works.[32] To be admitted, prospective students, most around 20 years old, had to submit to a set process of selection. To address this more cohesive audience, Cockerell reverted to a chart, scaling up the size of the 1828 drawing and including additional buildings. On Goodchild's reduced version, a caption identifies all the buildings represented. During lectures, a large table was presented together with the map. This table displayed four columns listing dates with (1) significant patrons and events, (2) architectural writers, (3) eminent architects, and (4) buildings. The buildings listed ranged from the Tower of Babel to Somerset House; the architects, from Bez'alel, architect of the Tabernacle, to William Chambers. The year 0 vertically cut in half the table that ran from 2200 BCE to 1800 CE In *The Builder,* the table is interpreted as a 'skeleton of a system that the hand of small contributors may fill up', a valuable beginning for a chronology of architecture. Only the chronology is not apparent in the drop-scene itself. At this point, the drawing unsystematically assembles buildings from remote times and places, and if the drawing makes their relative heights apparent, it is left to the table to locate them temporally. In other words, Cockerell's drop-scene was to be read in conjunction with a comprehensive table, and under the professor's guidance.

The first comparative drawing published by the SDUK was accompanied by a text (Figure 1.6). The drop-scene was referenced over the course of Cockerell's lectures and related back to a comprehensive table, but the *Dream* neither relied on Cockerell's explanations, nor could it benefit from a long accompanying text. At the 1849 Royal Academy Exhibition, Cockerell's *Dream* was one of 105 architectural drawings exhibited in a room together with about the same number of oil paintings. In a review by *The Builder,* only half a dozen architects are discussed, and Cockerell's drawing definitely wins the show. *The Professor's Dream* is introduced as a remarkable drawing, described thoroughly, and praised as an extraordinary work. The main impression is that of the wonders of the past left for the future – from the Egyptian foreground, the reviewer mentions the Athenian wonders, the representation of medieval constructions, the ensemble crowned by St Peter's and backed by the pyramids which 'have outlived their makers' names'.[33] This strange stratigraphic map effectively communicates its temporal complexity. Within the space of the frame and the catalogue entry, all the necessary information is conveyed. The catalogue description takes care of the scientific reliability of the synopsis, pointing out that the buildings are drawn at the same scale according to the most reliable sources for dimensions. The text acknowledges the SDUK drawing as a precedent, but a further step has been taken: the mapping technique is refined so that the map effectively becomes a means to gain knowledge of history. The buildings are layered on different levels according to their time of construction in a historical chronological frame.

At a representational level, the fact that *The Professor's Dream* is rendered and drawn upon four different ground lines distinguishes it from the SDUK version as well as from the drop-scene. Its rendering gives the drawing a free and atmospheric quality that sets it apart from the French ordered *parallèles*, contrasting the impression of analytical order as much as Soane's sublime comparative drawings did. Unlike Soane's comparisons however, the content of Cockerell's drawing does not differ from that of a drawing such as Le Roy's second *parallèle*. And yet, *The Professor's Dream* does not strike as a systematic chart of historical progression. Like the drop-scene, Cockerell's *Dream* recalls the assemblages of buildings or mountains discussed earlier, only it layers history on four different levels rather than taking form upon a single ground line.

In the mount of Cockerell's drawing, the annotations identifying each distinct terrace ('Egyptian', 'Greek', 'Roman', 'Medieval/Modern') suggest that Cockerell approached the layers of architectural history like a geologist analyzing rock formation. In geology, means had been developed to represent the layering of different rock strata, and the mode in which Cockerell layers the buildings brings to mind the stratigraphic map. The layering of the periods, as identified on the mount, accentuated an effect that had already been noticed in the drop-scene. Indeed, just as *The Builder* described the drop-scene earlier, *The Professor's Dream* presents itself as 'a map or chart reduced […] of the hitherto ascertained geography of building art'.[34]

It is likely that studies in the new science of geology directly influenced Cockerell's illustration technique. At the turn of the nineteenth century, time was a hotly-debated topic among geologists. Two schools were in opposition: those who believed that geological changes were brought about by fire, and those who sustained that it was caused by water. The two sides, led respectively by geologists James Hutton (1726–97) and Abraham Gottlob Werner (1749–1817), were also referred to as the Plutonists and Neptunists. The Plutonian theory defied the idea that the earth had a definite beginning or end, thereby suggesting that the earth's timescale was inconceivable to the human mind. Leaving aside mere hypotheses of past cataclysms, Hutton believed that all geological phenomena could be explained through the studies of processes that were still active in the eighteenth century.[35] His motto was that 'the present is key to the past'.

Hutton's view contained the seeds of a theory of uniformitarianism that would be more thoroughly developed by the nineteenth-century geologist Charles Lyell (1797–1875). It is perhaps this conception of the slow and gradual processes of sedimentation that Cockerell's sedimentary lines of architecture strive to echo. Although Cockerell never directly referred to Lyell's theories, he was aware of recent advances in geology. In a manner that was not uncommon in the nineteenth century, Cockerell's interests were extremely varied: they included meteorology, literature, history, archaeology, and some branches of philosophy – aesthetics, to name the most important one.[36] Cockerell was also interested in geological debates. In his 1823 diary, under the title 'GEOLOGY', he noted the following: 'A great confusion reigned about the Flood, Buckland appeared! & all was clear as mud!'[37] The mention of William Buckland (1784–1856) was immediately followed by Cockerell's account of his own visit to another geologist, George Bellas Greenough (1778–1855). In 1816, Greenough and Buckland had in fact been on an expedition together, but the conclusion that the two

geologists derived from their findings differed. Buckland's subsequent publications supported the cataclysmic flood theory. In 1823, Buckland wrote *Reliquiae Diluvianae*, where he exposed the idea that new geological evidences supported the religious belief in the great flood.[38] What Cockerell is sarcastically commenting on in his diary is that Buckland, who acknowledged the presence of antediluvian bones, argued that they had been preserved in the mud during the flood. Buckland's clinging to the flood theory places him in a current against uniformitarianism, and Cockerell's mocking comment suggests that he was not drawn to Buckland's catastrophism theory. Greenough, on the other hand, undertook work towards the publication of one of the first stratigraphic maps of England. The decision to map the successive layers of rocks suggests that Greenough was more interested in gradualism than he was in catastrophism.

With the publication of this map in 1819, Greenough was entering a race with another geographer, William Smith (1769–1839), also engaged in the production of a stratigraphic map of England at the time (Figure 1.10).[39] Smith's map marked some significant advances in the field of geographical mapping. It is not certain whether Smith understood the historiographical implications of his geological mapping, but some elements of his maps had important repercussions on the understanding of time.[40] For example, that Smith's legend was positioned in such a way as to describe the appropriate chronology[41] may suggest that Smith at least instinctively acknowledged the parallel between the march of time and rock formations (Figure 1.11).[42]

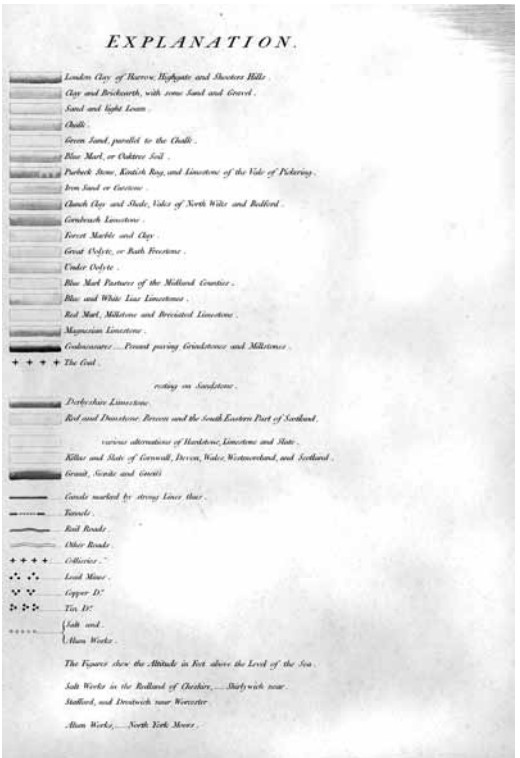
At a representational level, Smith used colours to map depth onto an otherwise two-dimensional medium.[43] And if indeed he understood the historical implication of this depth, then the map represents an instance in which time is mapped out in the depth of the paper, and not strictly in strata represented cumulatively as one moves vertically up the page. At the very least, Smith's interest in stratigraphy is in line with the search for a geological chronology, a *metastoria* built through the 'association of particular kinds of rocks with specified periods of time'.[44]

While Cockerell does not comment on Smith's map, he does write his impressions on Greenough's 1819 map, which was largely inspired by Smith's work, in his 7 December 1823 entry:

> *Mr Greenough composed an historical map – for illustration of history by two principles, one of which can never vary – 1 geographical circumstance of mountains, lakes & rivers [;] the other varying but in a small degree 2 – languages – he coloured his map by languages. [S]uch a map explained obviously & palpably circumstances of history which otherwise long details would hardly suffice for. He calls those circumstantial evidence of history –*[45]

The 'languages' that Cockerell refers to are a method of using colours adopted by geographers to portray the assumed continuation of different rock formations, even in areas where no empirical evidence was yet available. Cockerell recognized the effectiveness of this way of mapping the 'varying' or lesser-known circumstances of history. His description of the map confirms that he understood the third and temporal dimension the use of colours built into the surface of the paper. Describing the map further, Cockerell writes:

1.10 W. Smith, *A Delineation of the Strata of England and Wales, with Parts of Scotland*, 1815–17, (Cardiff: Grugos Press, 1975). With permission of the Royal Ontario Museum © ROM


EXPLANATION.

London Clay of Harrow, Highgate and Shooters Hills.
Clay and Brickearth, with some Sand and Gravel.
Sand and light Loam.
Chalk.
Green Sand, parallel to the Chalk.
Blue Marl, or Oolitick Soil.
Purbeck Stone, Kimbich Rag, and Limestone of the Vale of Pickering.
Iron Sand or Gravel.
Chumb Clay and Shale, Vales of North Wilts and Bedford.
Cornbrash Limestone.
Forest Marble and Clay.
Great Oolyte, or Bath Freestone.
Under Oolyte.
Blue Marl Pastures of the Midland Counties.
Blue and White Lias Limestones.
Red Marl, Millstone and Brecciated Limestone.
Magnesian Limestone.
Coalmeasures ... Present paving Grindstones and Millstones.
The Coal.
resting on Sandstone.
Derbyshire Limestone.
Red and Dunstone Breccia and the South Eastern Part of Scotland.
various alternations of Hardstone, Limestone and Slate.
Killas and Slate of Cornwall, Devon, Wales, Westmoreland, and Scotland.
Granit, Sienite and Gneiss
Canals marked by strong Lines thus.
Tunnels.
Rail Roads.
Other Roads.
Collieries.
Lead Mines.
Copper D°
Tin D°
Salt and
Alum Works.
The Figures shew the Altitude in Feet above the Level of the Sea.
Salt Works in the Redland of Cheshire, ... Shirly with near
Stafford, and Droitwich near Worcester.
Alum Works, ... North York Moors.

1.11 Legend to W. Smith's *A Delineation of the Strata of England and Wales, with Parts of Scotland*, 1815–17, (Cardiff: Grugos Press, 1975). With permission of the Royal Ontario Museum © ROM

the rivers are laid down in their real scale of proportion – the mountain chains are for the first time correctly shewn & the height of every hill above level of sea marked upon it. […]. This map is affecting from its wonderful accuracy volumnousness & matter of information – it is the sublime of diligence & positive science. …[46]

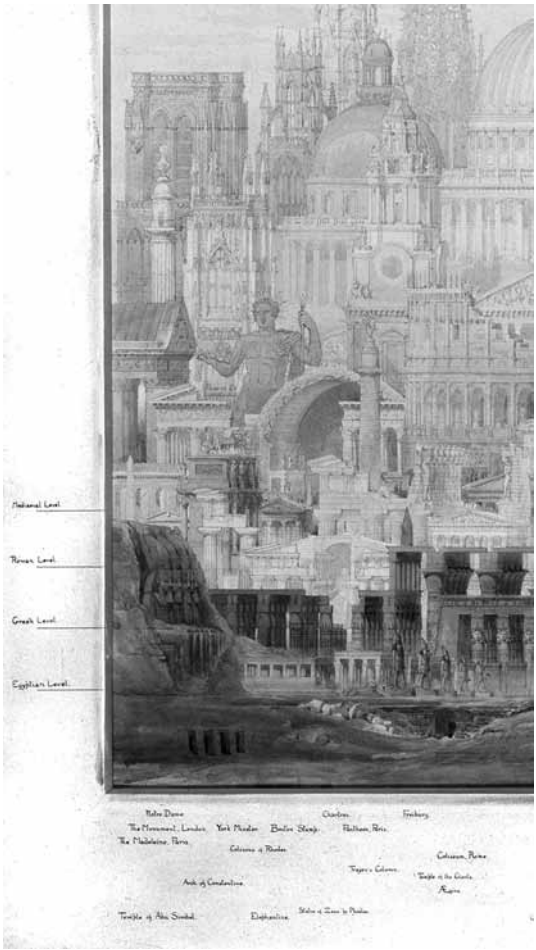
Noting all the positive qualities of the map (accuracy, true to life scale, and correctness), Cockerell also uses a wonderful expression when he refers to the 'sublime' of positive science. The awe-inspiring image produced by the diligent scientist may have inspired the erudite professor. The stratification of different periods and the distinct graduation in the rendering of the intermediate zones suggest that *The Professor's Dream* is also an example of this 'sublime of positive science', whose object has shifted from God's production (nature) to human creation. The four levels of Cockerell's drawing recall geographical strata, hinting at the slow and continual march of time, in which 'nothing comes from nothing',[47] and all arise from what came before. The depth revealed in the quality of the rendering adds another dimension to the vertical accumulation of history summarily identified as 'Egyptian', 'Roman', 'Greek' and 'Medieval/Modern' (Figure 1.12). Like in Smith's map, and unlike the strict use of colour to identify different materials (like Goodchild's colour-coded version of the drop-scene), Cockerell's use of colour was hinting at how time could be read in the depth of the paper. The quality of Cockerell's rendering lets the materiality of some buildings in the forefront dissolve so as to reveal other buildings behind them. The solidity of a building becomes transparent so that the observer may see through to other constructions underneath it.

MAPPING ARCHITECTURE IN TIME

The catalogue description of *The Professor's Dream* refers to the deliberate intention to compare heights, but the staggering of the buildings on four different platforms limits the scope of these comparisons. The overall composition also contrasts with the usual triangular arrangement of such drawings. By scattering the tallest buildings across the page and on different platforms, Cockerell's composition works against the creation of a single climax. Far from being led in a straightforward manner to the tallest and most recent buildings, those who dwell in the *Dream* are encircled. In effect, it is as though this drawing is only a part of a panoramic view that has been flattened on paper, with the lateral edges of the paper about to fold around the viewers' backs and embrace them panoramically. The depth, height,

and breadth of the drawing all appear endless – uniformitarianism has been translated in all axes. As time continues its course, more strata will cover the existing ones; as one explores the depth of the drawing, more buildings can be revealed; as the viewers let their mind wander off the edges, more buildings can be imagined.

The circling effect of Cockerell's *Dream* may have been inspired by another form of representation that became popular in the first half of the nineteenth century. The panorama, a representation of a 360-degree view of the interior of a cylinder, was used to recreate an exotic landscape, a historical battle, or even a cityscape. One of the first panoramas was Robert Barker's circular representation of London, exhibited in 1792.[48] In a short study of the panorama, Stephan Parcell discusses how, unlike the perspective, the panorama tries to erase the boundary between the space being represented and the space itself. One of the techniques used is to attenuate the boundaries: the canvas is circular, its top edge often domed, and sometimes, a *faux terrain* (a false ground or stage set which includes some three-dimensional elements) contributes to make the transition between the ground on which the observer is standing and that of the panorama. Another important distinction that Parcell observes between the two techniques is that the panorama sustains the illusion even as the observer moves, whereas the perspective works from a static viewpoint. In order to experience the panorama fully, one *has* to move around the space or at the very least, rotate in place. Whereas the perspective can be grasped in one single look, only a portion of the panorama can ever be experienced in one given position.



1.12 C.R. Cockerell, *The Professor's Dream*, c.1849, detail of the annotated mount, published with the permission of the Royal Academy of Arts, London

Goodchild mentions that the buildings in the *Dream* were drawn 'in a sort of semi perspective'.[49] In effect, the buildings on either side of the drawing turn slightly towards the viewers, seemingly encircling them. This is particularly evident in the case of the Temple at Abu Simbel, the Arch of Constantine, and the Madeleine on the left, or in the case of the Ramesseum, the Temple of Vespasian, the Tabularium, and the Arch of Septimius Severus on the right. Having himself visited a number of panoramas, perhaps Cockerell derived this way of drawing after realizing that the coherence of a panorama was achieved by skewing the perspective. Geologists also sometimes reverted to the use of panoramic drawings to map mountains in their excursions. For example, the Swiss Alpine traveller Horace-Bénédict de Saussure (1740–99), choosing to map the view from the Buet in the form of a panorama,

explained that his intention was to better convey the feeling of standing at the mountain top to the observers, so that those who were presented with the map also experienced that dizzying feeling of being at an impressive height surrounded by a vast landscape. The geological panoramas were found to be easier to read and more precise that maps. But even when maps gained in precision, towards the end of the nineteenth century, the panoramas were still preferred, no doubt because of 'the possibility they offered to relive the experience of the view from a summit'.[50] Perhaps inspired by these 360-degree representations of space, whether of Pompeii, London or a great view from a summit, Cockerell invited his audience to enter the panorama of a stratified history.

Except for the purely chronological demarcation between the four platforms, Cockerell presents history rather indiscriminately. Framed by Egyptian buildings at the top and bottom as well as in the foreground and background, the drawing appears fairly conservative. Cockerell's graphic synopsis does not read as an open progressive classification of history: it does not favour a particular time or nation, nor does it suggest the superiority of one style over another. What Cockerell's representation of history evokes however is a displacement, a willingness to stand in another place, in another time. Indeed, Cockerell entitles the drawing a 'dream', a name reminiscent of psychological wanderings rather than scientific comparisons. This evocative title is the other significant change that distinguishes *The Professor's Dream* from the earlier comparative drawings produced in Cockerell's practice.

The use of dreams as artistic devices was not uncommon, whether by painters, poets or architects.[51] The allusion to the dream suggests that the observer is invited to step into a parallel reality, not an erudite consideration of history. Cockerell's decision to call his drawing a dream brings to mind Thomas Cole's painting, *The Architect's Dream*. Completed in 1840, Cole's painting had been commissioned by his compatriot, the American architect Ithiel Town (1784–1844).[52] This painting was described as 'an assemblage of structures, Egyptian, Gothic, Grecian, Moorish, such as might present itself to the imagination of one who had fallen asleep after reading a work on the different styles of architecture'.[53] There are significant differences between the 'dreams' of Cockerell and Cole. First, a theatrical setting tightly frames Cole's picture, while one could imagine Cockerell's dream continuing beyond the borders. Also, while the generous perspective in Cole's piece gives the picture an air of tranquillity and quietness, Cockerell's tight assemblage provokes a sense of feverishness. Additionally, there seem to be indications of a stylistic predilection in Cole's image. Art historian Randall C. Griffin argues that the trees and darkness shielding the Gothic church on the left, contrasting highly with the stark, bare whiteness of the buildings on the left, perhaps imply 'Cole's own hope for a future American society in harmony with God and nature'.[54] In Cockerell's piece, despite Cockerell being commonly categorized as a neo-classical or neo-Greek architect, there are no such qualifying demarcations implied between the various assembled styles. But the most striking difference lies elsewhere. In Cole's painting, the solitary architect, contemplatively reclining on the column in the foreground, leads Griffin to speak of the 'genius', 'the solitary figure in reverie', or the 'Promethean figure who emulates God as creator'.[55] In Cockerell's picture, we see not the glorified architect but the humbled student of history.

The Professor's Dream presents itself as a projection of a parallel world that the professor himself wishes to inhabit. In this world, the professor is not presented as one who has privileged access to all this knowledge, but may be more likened to the man leading the group of minuscule figures through the central gate. From *The Architect's Dream* to *The Professor's Dream*, the emphasis shifts from the act of creation to the communication of the significance of architecture. From the sole-point perspectival diorama-like approach of Cole, to Cockerell's semi-perspectival panoramic approach, the means through which architectural history is represented disclose different ambitions. Cole emphasizes the power of the architect's mind and gaze, whereas Cockerell invites others to walk the landscape of history.

A DREAM OR *HYPNEROTOMACHIA* (A STRIFE OF LOVE IN A DREAM)?

If the professor was indeed projecting his dream for everyone to access it, it would not be the first time that Cockerell considered the dream as a medium through which one could appreciate architecture. In 1821, noting specific examples of how one should see architecture, Cockerell referred to the dream of Poliphilo.[56] Poliphilo was the main character in Colonna's *Hypnerotomachia Poliphili*, the dreaming lover who walked through a variety of architectural wonders in search of his Polia.[57] In 1823, two years after his first reference to the dream of Poliphilo, Cockerell inserted a page in his diary entitled '*SOGNO D'Un ARCHITETTO*' (dream of an architect), detailing a succinct plot for this dream. Cockerell was already familiar with Colonna's work and there are evident similarities between the 1499 dream and Cockerell's 'sogno'. In Colonna's work, Poliphilo's mind, before he at last falls asleep, is restless with his desire to find his love, Polia. Similarly, Cockerell describes how he was 'for a long time sleepless', 'irritated & occupied' with a subject related to his 'plan of viewing all the works of the great masters of arche in this country'. 'Exhausted', Cockerell finally falls asleep, and as Colonna is led to Polia in his dream, Cockerell is in 'awe' and full of respect as he finds himself in a room with some of the best English architects, such as Inigo Jones (1573–1652), John Vanbrugh (1664–1726), and John Thorpe (1565–1655).[58] In his dream, Cockerell is able to displace himself into a space that defies the linearity of time, and because dreams allow anything, he can engage directly with that space.

Twenty years later, Cockerell continued to refer to Poliphilo's dream in the course of his Royal Academy lectures. At least twice in 1842 and again in 1846, Cockerell mentioned Colonna who, in the form of a parable, 'composed his celebrated book, which had become a magazine of art, so much so that designs were carried out from the description'.[59] More directly, Cockerell expressed his belief that fiction, through its power of drawing the reader into the story, could be a great source of knowledge. Still referring to Colonna's work, he wrote:

> *Collonna [sic] then is the Walter Scott of architecture making a pleasant novel to be the vehicle of vast learning, a splendid fertility of images, illustrated too by the most interesting & valuable wood cuts that can be found in any time.*[60]

In an 1846 lecture, Cockerell also remarked how, 'asked to recommend a style […] [Colonna] would offer a parable'.[61] In part, Cockerell's references to Poliphilo's dream were motivated by its narrative quality. When mentioning the author of *Hypnerotomachia Poliphili* in his lectures, he never referred to specific aspects of his text but rather to the general attitude the author adopted throughout the work. Cockerell was fascinated by Colonna's peculiar narration of architectural history, as well as by the level of reader involvement it stimulated. In 1842, in a long comment on Colonna's work, Cockerell discussed the ways in which the reader was asked to participate in the narrative. At a deeper level, Cockerell was also aware of the temporal complexity that underlies Poliphilo's dream. For instance, the professor noted that some of the works were 'derived from ancient art', and could be 'quickly adopted by succeeding artists'. He also wondered whether the work was 'calculated most to satisfy the love of antiquity or to promote it', and spoke equally of the 'beautiful images of ancient art' presented, and of those of 'inquiry and of invention' suggested. Through all these remarks, the professor was acknowledging the precarious positioning of the past, present, and future respective to one another.

In *The Dream of Language,* contemporary philosopher Giorgio Agamben highlights a similar temporal play in his analysis of *Hypnerotomachia Poliphili.* Agamben considers that the dream itself was fundamentally a dream *of* language, with his study focusing on the fundamental relationship between dead and living languages. Addressing the very complex language used by Colonna in his work, a complexity that has puzzled many scholars for the past 500 years, including Cockerell,[62] Agamben argues that Polia herself is language, dead language:

> *Polia, we may now advance as our first hypothesis, is old (language), dead (language), that is, the same Latin that Poliphilo's novel text, in its archaic lexical rigidity, reflects into vernacular discourse in a reciprocal and dreamy mirroring. And Poliphilo – he who loves Polia – is a figure for love of Latin: an impossible or dreamy love, since it is the love of a dead language, a love that seeks to reanimate the desiccated flower by transplanting it into the living members of the vernacular. […] The reflection of one language into another does not remain inert; it is not only the mirroring of two separate realities. Instead, here, as in every human discourse, something lives and something dies.*[63]

While Latin was traditionally considered the living and loved language, the vernacular was increasingly emerging as a living language in its own right, and not solely as the 'known' language. [64] Celebrating a complex co-existence of the two languages – past and present, dead and alive, loved and known – Agamben refers to a rich conception of bilingualism:

> *Drastically reducing all these different levels of bilingualism into one single plane, Hypnerotomachia presents language as a battlefield between irreconcilable demands. […] Hypnerotomachia is a dispute of the most novel kind, in which different languages are penetrated by each other, thus revealing every language's intimate discord with itself, the bilingualism implicit in all human speech.*[65]

Agamben's study of Colonna's work brings to the fore a temporal bilingualism which essentially defines the historicity of human beings. The struggle Agamben

identifies at the centre of Colonna's dream is not so foreign from what may be perceived in Cockerell's 'dream'. Like Colonna's languages, Cockerell's different architectures interpenetrate themselves through the dense juxtaposition, the translucency, the fragmentation, and ruination. Which of these architectures is the living architecture? In the context of the raging battle of the styles, the question was posing itself in a number of different ways. How does one turn to the past, how does one style rise against another, how is a style translated in a new time, how is a new style born out of contemporary conditions?

According to Cockerell, architecture was nurtured by history. The professor repeatedly insisted on the close tie between architecture and history, writing, for example, 'It must be highly satisfactory & interesting to every thinking man to have in the History of arch.[e] its perfect coincidence with the prosaic History […]'.[66] Cockerell described how architecture was identified with time: 'I know nothing more calculated to confer dignity on our art than the reflection we are identified with Time; that we ourselves become a part of history, & that the works we perform are by the consent or language termed monuments. […]'[67]

In these words, and in a number of different forms as the years went by, Cockerell stressed the coincidence of architecture and history, and accordingly reinforced the need to be acquainted with history.[68]

> *Thus we are carried back into remote ages of which history takes no note & the imagination is left to enlarge upon uncertainties. & the might of Time. & we are left in the persuasion which Horace indicated where he says: Before agamemnon there were many agamemnons. […] It is by […] reflections arising out of the contemplation of History that the architect will enlarge his mind & his conceptions of his art. identifying himself with Time the great Element of his art, he will assume in his studies all that gravity & care in his lucubration which become the high charge, the honor use & advantage of nations which are confided to his Trust.*[69]

Cockerell described time as part and parcel of architecture. The 'great Element' of the architect's art was not part of the traditional fourfold of earth, water, air, and fire; it was 'Time'. Cockerell considered time as the fundamental matter that impressed the form of architecture. Referring to the work of the architect as 'lucubration', a term alluding to a nocturnal study or meditation, Cockerell hinted at the necessity to let the mind dwell in a space akin to that depicted in *The Professor's Dream*, an illusory space which architects must carry everywhere, and which becomes the quasi-unconscious material space (and not merely backdrop) from which they build architecture.

Perhaps the drawing could have acted as some kind of a memory theatre.[70] But the conception of this memory theatre clearly needs to be one where there is an active act of recollection, where the mnemonic space is travelled and experienced. In this sense, and as Cockerell had described earlier, the students could fill their 'mind & memories' not merely with examples from the past, but more appropriately, 'with materials for thinking'.[71] Playing between time past and time future, the professor constructed an imaginative 'timescape' so that, drawing on memories and associations, the students could successfully practice

('realize to [their] own minds the ultimate effort of [their] designs'), and out of the given ground of history, understand the work of the present for the future. Perhaps 'another dream at another time might just as well summon up a completely different set of buildings, so rich is the stock of what the past can offer'.[72] However, what is of primary importance here is not what the unknown whole of history might have consisted of, but how Cockerell suggested one might discover it. While actual architectural museums were still in a jumbled state, Cockerell's dream was putting forth architecture as a meaningful narrative. Just as Poliphilo occupied readers 'with himself in reconstructing the fallen parts & restablishing the whole', stimulated their 'taste & invention', and necessitated their 'assistance' with exercises of their 'own ingenuity', so Cockerell the professor asked his students of architecture to enter through the lower central gate of the drawing. They were required to be engaged and walk the space of the 'timescape' of architecture, which was also a 'timescape' of history, so as to reconstruct the narrative, enlarge the mind, and thus learn and work from history.

To reveal how time is the great element of the art of architecture is perhaps not enough to explain Cockerell's vision of architecture. So that a living architecture could rise from 'dead' architecture, Cockerell had to successfully translate his love for the architecture of the past into the living knowledge of vernacular and contemporary realities. According to Agamben, this dream, 'which is fully contemporary today, is in fact dreamt again every time a text, restoring the bilingualism and discord implicit in every language, seeks to evoke the pure language that, while absent in every instrumental language, makes human speech possible'.[73] This is how Cockerell's drawing becomes critical: positioned between doctrine and doubt, the dream reveals the implicit contradiction in two temporal references, between a personal experience of time and the larger temporal frame we call the past, or history. Cockerell's *The Professor's Dream* – like Agamben's interpretation of the dream – throws the question back to the origins of architecture, to what not only makes architecture possible but meaningful: the temporal ambiguities posed by the dream are not settled once and for all, they need to be recurrently addressed by every translator, by every architect.

NOTES

1 Mentioned in Sabiha Göluglu, 'Analyzing the Mimarlik Journal, Post-Modern Theory and Practice in Turkey', *Proceedings of the Society of Architectural Historians* (Australia and New Zealand), 30 (2013): 20. The drawing was also used as the cover for the *Mimarlik* in 1981.

2 This term is inspired by Jean-Baptiste Louis-Georges Séroux D'Agincourt who specifically compared his publication to an immense museum, 'where the principal productions of the three arts, over the course of a long succession of centuries, offer themselves to classification and description in an order which is both systematic and chronological'. In *Histoire de l'art par les Monumens, depuis sa décadence au IVième Siècle jusqu'à son renouvellement au XVIième Siècle* (Paris: Treuttel et Wurtz, 1823), Preface.

3 Fiona Leslie, 'Inside Outside: Changing Attitudes Towards Architectural Models in the Museums at South Kensington', *Architectural History*, 47 (2004): 159–82.

4 Paula Young Lee, 'The Musaeum of Alexandria and the Formation or the Museum in Eighteenth-Century France', *The Art Bulletin,* 79:4 (1997): 411.

5 Werner Szambien, *Le Musée d'architecture* (Paris: Picard, 1988), 112–14. J. Maurdant Crook also points to its similarities with the methodologies used by scientists such as Linnaeus, Cuvier and Darwin in J. Maurdant Crook, 'Architecture and History', *Architectural History*, 27 (1984): 566.

6 Published in Jacques Tarade, *Desseins de toutes les parties de l'église de Saint Pierre de Rome* (Paris: n.p., 1713). See Robin Middleton's introduction to Julien-David Le Roy, *The Ruins of the Most Beautiful Monuments of Greece* (Los Angeles: Getty Research Institute, 2004), 90ff.

7 The survey was entitled: 'Parallèle Général des Edifices les plus considérables depuis les Egyptiens, les Grecs jusqu'à nos derniers Modernes. Dessinés sur la même Echelle par J.A. Meifsonnier', ('General comparison of the most considerable buildings since the Egyptians, the Greeks up to our latest Moderns. Drawn to the same scale by J.A. Meissonnier').

8 This plate was drawn by Neufforge and published in Julien-David Le Roy's *Histoire de la disposition et des formes différentes que les chrétiens ont donné à leur temples* (Paris: Desaint et Saillant, 1764). According to Szambien, it constituted the first 'graphic parallel produced'. He compares it to the literary parallel that can be traced back, in architecture, to Perrault and Fréart de Chambray. See Werner Szambien, *Jean-Nicolas-Louis Durand 1760–1834* (Paris: Picard, 1984), 27–8.

9 Le Roy, *Histoire de la disposition et des formes* … In a similar spirit to the comparative and encyclopaedic endeavours, Neufforge would go on to publish a *Recueil élémentaire d'architecture* (1757–68, 1772–80), which comprised some 900 engravings of his architectural designs, ranging from the aristocrat's house to the lighthouse.

10 Other comparative drawings followed. Victor Louis (1731–1800) assembled a collection of modern and ancient theatres in 1782 and Marie-Joseph Peyre (1730–1785) published a *Parallèle des temples des anciens avec les églises modernes* (1785), for which his son provided a graphic *parallèle*. See Jeanne Kisacky, 'History and Science: Julien-David Leroy's dualist method of architectural history', *Journal of the Society of Architectural Historians,* 60:3 (2001): 260–89. Further discussions of paper museums in Szambien's work on architectural museums, Robin Middleton's introduction to Le Roy's *Ruins* and Anthony Vidler, *The Writing of the Walls: Architectural Theory in the Late Enlightenment* (Princeton, NJ: Princeton Architectural Press, 1987).

11 Gandy's drawing is discussed in Brian Lukacher, 'Joseph Gandy and the Mythography of Architecture', *Journal of the Society of Architectural Historians*, 53 (1994): 280–99.

12 See Ian Jenkins, 'James Stephanoff and the British Museum', *Apollo*, 131 (1985): 174–81.

13 Quoted in Obituary, 'The Late Mr. Charles Robert Cockerell, R.A. Architect', *The Builder*, 21 (1863): 685.

14 The description of this earlier drawing read as follows: 'To form a just idea of the relative sizes of the two buildings, we have added an outline, showing the comparative size of St Peter's and St Paul's, and the vacant spaces have been filled up with the outline of some of the most remarkable buildings now existing, all on the same base and all drawn to the same scale, but unfortunately, owing to an error, the height of St Paul's in the figure is a little less than it should have been. The buildings have principally been taken from the work of Mons. Durand, the Parallel of Architecture, by far the most important production of the kind which has yet been published, and affording great facility for the consideration of the general principles of architecture'. In *Sir Christopher Wren, With Some General Remarks on the Origins and Progress of Architecture* (London: Baldwin and Cradock, 1833), 22.

15 Goodchild, RIBA Archives, Goodchild Album, vol. 8, 72.

16 'Professor Cockerell's Lectures on Architecture at the Royal Academy', *The Builder*, 1 (1843): 27.

17 Ibid. While the *Athenaeum* had been the first to announce its intention to give full reports of Cockerell's lectures in its pages, *The Builder* made it known that it would have happily performed the task. Hence, despite the existence of comprehensive reports in the *Athenaeum*, *The Builder* still undertook the publication of some of Cockerell's lectures.

18 The 1816 map was a wall map, measuring 49 cm × 64 cm. Charles Smith, *Comparative View of the Heights of the Principal Mountains &c. in the World*, (London, 1816).

19 John Thomson, *Heights of Mountains*, (Dublin, 1817). Atlas map, 51 cm × 64 cm.

20 John Thomson, *Principal Mountains, &c. Throughout The World*, (Philadelphia, 1822). Atlas map, 42 cm × 53 cm.

21 This was mostly copied from Thomson's 1817 comparative drawing. Fielding Jr. Lucas, *Comparative Heights of the Principal Mountains … in the World*, (Baltimore, 1823). Atlas map, 39 cm × 32 cm.

22 John Thomson, Table of the Comparative Heights of the Principal Mountains &c in the World, (Philadelphia, 1831). Atlas map, 29 cm × 22 cm.

23 I thank Nick Savage, from the Royal Academy in London, for drawing my attention to two other geographical maps: Gardner's map (1825) and another by Frederick Wood and William Moffat (1828). This type of drawing continued to proliferate well into the nineteenth century. See David Rumsey Map Collection, http://www.davidrumsey.com.

24 T.H. Clarke Architect (Drawn and Etched by), *Geometrical Elevations of the West Front of the Cathedrals of St Paul's London (Before the Fire) St Stephen's, Vienna; Strasburg; Cologne; the Tower of Mechlin & the Great Pyramid of Egypt to One Scale* (London: Priestley & Weale, 1833). This drawing also listed the heights of these buildings at the bottom.

25 *Die Hoechsten Bauwerke und Denkmaeler* (Berlin: Robert Prager, 1881). In a similar manner, W.E. Hodgkins also drew a series of plates in which he assembled various churches of London (see V&A Prints and Drawings Collection).

26 Goodchild, RIBA Archives, Goodchild Album, vol. 8, 80.

27 On the SDUK, see Ian J. Barrow, 'India for the Working Classes: The Maps of the Society for the Diffusion of Useful Knowledge', *Modern Asian Studies*, 38:3 (2004): 677–702.

28 Henry Brougham, 'Objects, Advantages, and Pleasures of Science', in *The American Library of Useful Knowledge* (Boston: Stimpson & Clapp, 1831), 139–40. Quoted in Barrow, 680.

29 G.B. Greenough to Coates, 1843. Quoted in Barrow, 683.

30 In an album recording thoughts and works produced in his years working for Cockerell, Goodchild mentions that Cockerell's comparative drawings were made 'upon the model of a drawing made in 1828 for the Society for the diffusion of useful knowledge'. (Goodchild, RIBA Archives, Goodchild Album, vol. 3, 72.) The SDUK was partly recognized for making inexpensive maps available for distribution at large. Cockerell also published actual maps for the SDUK. His map of Athens, 'from the authorities of Colonel Leake and C. R. Cockerell Esqr'., was published by Society for the Diffusion of Useful Knowledge, *Athens, Acropolis* (London, 1832).

31 'From the numbers and character of the auditory', wrote *The Builder,* they found that 'the study of the art is being regarded with interest by many out of the pale of the profession'. *The Builder*, 1 (1843): 27.

32 The history of the Royal Academy in its first 200 years is well documented by Sidney C. Hutchison, *The History of the Royal Academy, 1768–1968* (London: Chapman & Hall, 1968).

33 *The Builder*, 7 (1849): 217.

34 *The Builder,* 1 (1843): 27.

35 See David Dineley, *Earth's Voyage Through Time* (London: Hart-Davis and MacGibbon, 1973), 13–40. For a discussion of cataclysmic conceptions of history versus gradual interpretations, see John Burrow, 'Images of Time: from Carlylean Vulcanism to sedimentary gradualism', in Stefan Collini et al., ed., *History, Religion and Culture, British Intellectual History, 1750–1950*(Cambridge: Cambridge University Press, 2000), 198–223.

36 For instance, one heading in the 1823 diary is 'GEOLOGY', while there is a passage on meteorology, and a reference to Botany. In subsequent years, there are also headings such as 'FINE ARTS', 'PICTURES', as well as 'HISTORY' under which Cockerell criticizes two different historians on the history of England. RIBA Archives, COC 9/4 and COC 9/5.

37 Cockerell, RIBA Archives, COC 9/4, 1823. Cockerell also refers in that occasion to Mr Strangway (on Russian geology) and to papers in geological transactions.

38 Buckland was still trying to present recent findings in geology so that they agreed with the conception of a Divine hand in the creation of the world. He was one of the Scientifics who was commissioned to write what is known as the 'Bridgewater Treatises'. These treatises, published in 1836, were a result of the Earl of Bridgewater's will (d. 1829) who instructed his successors to oversee the publication of works that resolved the advances in science with the idea of an intelligent creator.

39 This situation is acknowledged in Greenough's own introduction to his 1819 map. See George Bellas Greenough, *Memoirs of a Geological Map of England, to Which are Added an Alphabetical Index to the Hills, and a List of the Hills Arranged According to Counties* (London: Published under the direction of the Geologocial Society by Longman, Hurst, Rees, Orme & Brown, 1819–1820).

40 See David. R. Oldroyd, *Thinking About the Earth, a History of Ideas in Geology* (Cambridge, MA: Harvard Univeristy Press, 1996), 113.

41 As opposed to Cuvier and Brongniart's 1808 and 1811 maps of the Paris basin, in which the legend was reversed, showing the deepest strata on top and the most superficial one at the bottom.

42 The scale was finally reversed in Cuvier and Brongniart new publication of the map in 1822. My contextualization of Smith's work is based on Cecil J. Schneer, 'Introduction', (1–18) and Joan M. Eyles, 'William Smith: Some Aspects of His Life and Work', (142–158), both in Cecil J. Schneer, ed., *Toward a History of Geology* (Cambridge, MA: MIT Press, 1969).

43 Smith understood geology as a science that required observations in three dimensions. When he undertook work on the first true geological map, his prime motivation to use colour was to be able to reveal depth – and ultimately time – through the surface of the paper. See Simon Winchester, *The Map that Changed the World, William Smith and the Birth of Modern Geology* (New York: Harper Perennial, 2001).

44 Schneer, 'Introduction', in *Toward a History of Geology*, 8. This concern with the history of the earth effectively started with Robert Hooke in the last quarter of the seventeenth century and continued with Georges Louis Leclerc and Marquis de Buffon,

amongst others, throughout the eighteenth century. For a consideration of how three pioneers of geology understood the relation between their science and history, see Stephen Jay Gould, *Time's Arrow Time's Cycle, Myth and Metaphor in the Discovery of Geological Time* (Cambridge, MA: Harvard University Press, 1987).

45 Cockerell, RIBA Archives, COC 9/4, 1823.

46 Ibid.

47 Cockerell used this expression, which he attributed to Joshua Reynolds, in one of his Royal Academy Lectures: "Nothing can come of nothing' says Sir Joshua Reynolds, & if he recommends an enlarged view of all the productions of the art of Painting, in order to acquire a thoro' knowledge of it, how much more strongly does the argument apply to architecture'. RA Archives, mis/co 1, First Lecture 1842.

48 See Stephan Oettermann, *The Panorama, History of a Mass Medium* (New York: Zone Books, 1997) and Stephan Parcell, 'The Momentary Modern Magic of the Panorama', in *Chora 1, Intervals in the Philosophy of Architecture* (Montreal: McGill-Queen's University Press, 1994), 167–88.

49 Goodchild, RIBA Archives, Goodchild Album, vol. 8, p. 80.

50 Oettermann, *The Panorama*, 37.

51 For example, Joseph Michael Gandy also drew from the idea of the dream. In a tribute to Soane's achievements entitled *Architectural Visions of Early Fancy and Dreams in the Evening of Life*, Gandy grouped some of Soane's early projects, such as his Gold Medal design for a Triumphal Bridge, with some of his executed as well as unexecuted later works. It was a 'dreamy' landscape in the sense of an impossible landscape, one in which all of Soane's imagined or built work could be admired and experienced. In this case however, the title did not indicate so much a dream as a representation of dreams and, consequently, Gandy's intention was different to Cockerell's. Other examples of dreams are from the British painter Charles Eastlake, *Lord Byron's Dream* (1828) and the American Emanuel Leutze's *The Poet's Dream* some years later.

52 Town, however, rejected the painting as completed. See Randall C. Griffin, 'The Untrammeled Vision: Thomas Cole and the Dream of the Artist', *Art Journal*, 52:2 (1993): 66.

53 William Cullen Bryant, *A Funeral Oration, Occasioned by the Death of Thomas Cole* (New York, 1848), 27–8. Quoted in Ellwood C. Parry III, 'Thomas Cole's Imagination at work in *The Architect's Dream*', *The American Art Journal*, 12:1 (1980): 41–59.

54 Griffin, 'The Untrammelled Vision', 67–8.

55 Griffin, 'The Untrammelled Vision', 68. Parry also alludes to the figure of the genius and to platonic conceptions of *Idea*. See Parry, 'Thomas Cole's Imagination', 56.

56 Cockerell: 'I should give as example of the mode of seeing arche : the essays of Wren on the T^{le} of mars & of Peace in Parentalia. – some passages in Spectator[;] Wren's lecture on Salisbury – & some passages quoted by (Whitrrington?) also the dreams of Poliphile. – many passages of Forsyth's Italy'. RIBA Archives, COC 9/2, 1821. Noting that Soane and Cockerell both referred to the *Hypnerotomachia Poliphili*, architectural historian David Watkin suggests that Cockerell's Dream was his response to Colonna's dream, 'an image of the collective memory of an architect', and a 'parallel to the character and function of Sir John Soane's Museum'. David Watkin, *Sir John Soane, The Royal Academy Lectures* (Cambridge: Cambridge University Press, 2000), 446. Similarly, Peter Kohane links the *Hypnerotomachia Poliphili* with *The Professor's Dream*, writing that Cockerell's 'illustration was an unsystematic, dream-like representation of the architect's collective memory. Its physical presence at the Royal Academy encouraged

students to reflect on their place within a privileged tradition, inducing a pleasurable state of reverie as a stimulus to design. […] New buildings were conceived in a dream state as the distillation and synthesis of past achievements. […] Poetic and personal reminiscences and scholarly pursuits were indistinguishable in his illustration, a compendium of exemplary works from different times and places, juxtaposed to form a surreal compression of time'. Further, Kohane suggests, 'Cockerell praised the book because the account of Poliphilo's dream was the setting for a display of substantial scholarly research. It introduced architects to exemplary past works, engaging their imagination and memory, faculties that linked architecture to its 'sister arts', and to the liberal arts in general'. Like Watkin, he compares this drawing to Soane's museum. See Peter Kohane, *Architecture, Labour and the Human Body: Fergusson, Cockerell and Ruskin,* (PhD diss., University of Pennsylvania, 1993), 385–94. Expanding from these observations, the present discussion recasts Cockerell's references to Colonna's work against a larger discussion of his comprehension of history.

57 In an 1843 lecture, Cockerell summarized the plot of Colonna's work: ' … he called his work Hypnerotomachia which means the sufferings strife of Love in a Dream. – the story of its creation is altogether romantic – […] It was to employ & to console his imagination that he wrote his Hypnerotomachia in which all human things[,] says he[,] are shown to be a dream – while examining some antique ruins he describes himself as terrified by the sudden appearance of a serpent & taking refuge in a cave whence thro[ugh] many intricate winding he is lead into a beautiful garden where he meets five nymphs who conduct him to a Palace the Princess of which appoints one of these to accompany him thro[ugh] the wonders of the neighbouring scenery. [L]ike the Beatrice of Dante or the Laura of Petrarca Polia becomes the objects of his passion & in her description he embodies all the perfections of Ippolita Lillia. which he desires with the utmost fervour & (coot?) always with becoming delicacy'. RA mis/co 5, 5th lecture 1842.

58 Continuing his dream, Cockerell noted how this displacement in time could offer a critical standpoint from which to observe the present: 'Subject: The advantage proposed by the new arch[itectur]e adopted form the greek [,] critical examination of its system. – critical view of all the modern buildings[;] the prevailing taste – analysis of taste in arch[itectur]e – honorable mention of all those who have written on taste in arch[itectur]e – criticism of the new churches & the proceeding of the commissioners'. Cockerell then went on to describe how various architects spoke: Wren 'modestly', Jones 'as an artist', Vanbrugh who 'loses his temper at altercation of Castle Howards, of Hall at Kings Weston', John Thorpe who quoted Shuller and Bacon and (Wick of Wickham?) who 'sets forth the advantages of Gothick'. RIBA Archives, COC 9/4, 23 June 1823.

59 Reported in the publication of the lectures that were carried out by students in *The Builder*, 4 (1846): 98.

60 RA mis/co 5, Fifth Lecture 1842.

61 *The Builder*, 4 (1846): 98.

62 On the language, Cockerell commented: 'his work contains all the mistical [sic] notions of the day conveyed in a jargon language often obscure mixed with terms of Greek, Hebrew, Arab, & it must be confessed that much leisure is necessary both to understand & enjoy the substance of his work'. RA mis/co 5, Fifth Lecture 1842.

63 Giorgio Agamben, 'The Dream of Language', in *The End of the Poem,* trans. Daniel Heller-Roazen (Stanford: Stanford University Press, 1999), 49.

64 Agamben positions Dante at this turning point. For Dante, the vernacular was the language known, which allowed the true love of language in which Latin 'lived'. In this

understanding, the vernacular was inert, a conception that was later reversed – Latin became the dead language and vernacular the living one. Agamben, 'The Dream of Language', 58.

65 Agamben, 'The Dream of Language', 59.

66 Cockerell, RA archives, mis/co 2, Second Lecture, 1842.

67 Cockerell, RA Archives, mis/co 9, Third Lecture, 1843.

68 For example, Cockerell also asserted that the study of history resulted in 'the great enlargement of the invention faculty, the (just?) choice and power of application which the knowledge of all that has been done will communicate to us'. RA archives, mis/co 1, First Lecture, 1842.

69 Cockerell, RA Archives, mis/co 9, Third Lecture, 1843.

70 Watkin and Kohane both suggest that *The Professor's Dream* could be understood as a memory theatre.

71 Cockerell, RA Archives, mis/co 6, Sixth Lecture, 1842: '[…] in these lectures, of the present & the past year, I have endeavoured to offer you the best materials for thinking, which my experience & my present pains have been able to devise'. It is significant that Cockerell's aim was to portray the history of architecture as a whole, and this was the source for these 'materials for thinking'.

72 Nick Savage, Head of Collections at the Royal Academy of Arts in London, expressed this view in his introduction to a 2005 Royal Academy display themed around Cockerell's *The Professor's Dream*. 'An Introduction and Guide to the Display' was published in conjunction with the exhibition shown between 2 April and 25 September 2005 in The John Madejski Fine Rooms at the Royal Academy, London.

73 Agamben, 'The Dream of Language', 60.

2

Plate X: Living History

Like many of his contemporaries, Cockerell's early architectural education included a Grand Tour (1810–17). On these long journeys, travelling architects were documenting both the sites they were seeing, and their personal engagement in 'site' seeing. They executed different kinds of drawings: quick sketches or measured drawings, precise records of fragments as well as imaginary reconstructions. In some cases, the drawings would later be used as the basis for a publication. Part-sketch, part-measured drawing, part-reality, part-imaginary, Cockerell's *Plate X* was based on a drawing done at the Temple of Apollo Epicurius at Bassae in 1811 (Plate 2).[1]

Published in 1860, *Plate X* can be measured against a longer tradition of Grand Tour publications, a context that we will consider in this section. Against this background, we will reveal how *Plate X* celebrates the conflation of time and the complex juxtaposition of what was, what is, and what may have been. In this plate, Cockerell consciously shows signs of his presence on site in the process of working on this very picture. He assembles architectural fragments inside the temple, but also includes his drawing materials, a dog, and a rifle. In the accompanying text, Cockerell draws attention to these traces and the presence they signify: 'The faithful dog, the rifle, and the portfolio, announce the artists at no great distance'.[2] Bringing to life these fragments from the past, Cockerell simultaneously confronts the viewer with the ruins, the eternal landscape, and the passage of the architect, all elements occupying the same pictorial space.

This chapter investigates how representations can convey some of the stories embedded in a site's different temporal scales – whether historical, natural or phenomenological. Through a survey of reconstruction drawings produced by Cockerell's contemporaries, and by contrasting *Plate X* to other drawings in similar publications, this section will explore how an architect's approach to history and stories can inform their conception of architecture and its sites.

PUBLISHING THE PAST

The Grand Tour tradition among English travellers began in the seventeenth century and intensified during the eighteenth.[3] During the first half of the eighteenth century, 20 to 50 English visitors were in Paris, Florence or Turin at any one time. This number doubled in the latter half of the century, and continued to increase into the nineteenth century. Limited travelling during wars was typically followed by periods of revival. In February 1794, for example, the number of English travellers in Naples was estimated at 130.[4]

The Grand Tour had a great influence on those undertaking it, both during their time abroad and upon their return to England. Most of the architects who dominated the scene in Britain at the turn of the eighteenth century had themselves been on a Grand Tour, or at the very least sent a pupil or two to undertake such a Tour.[5] Cockerell's father, the architect Samuel Peppys Cockerell, had not himself benefited from such a formative trip, but strongly encouraged his son to do so. When Cockerell departed in 1810, the standard itinerary was already well established. In visiting Paris, Florence, Rome, and beyond, Cockerell followed in the footsteps of numerous English architects before him: William Chambers, Robert Adam, George Dance the Younger, John Soane, William Wilkins, and Robert Smirke, to name but a few.

Publications about the ruins of antiquity evolved alongside the Grand Tour tradition, particularly as more daring travellers began making their way to Greece and Turkey. The scope and topics of these publications reflected the broadening interest in first-hand accounts of historical sources and sites, as well as the search for exact measures. The tools that architects carried, from paintbrushes to optical devices, reflected their artistic intentions and informed the publication format of their studies. From Antoine Desgodetz's *Les édifices antiques de Rome,* published in 1682, to Francis C. Penrose's work 150 years later, architects, architectural historians, and theoreticians had varying motives and goals in presenting the buildings of Greece, Turkey, and Italy. If the first publications were evocative renderings of a lost grandeur one could still learn from, later works like Penrose's focused on the accuracy of measurements. Explorers moved away from attempting to express the weight of time experienced during their visits to antiquity's ruins, and became increasingly interested in recovering rules and modules from previous traditions that could be applied to future constructions. The shift from more romantic renderings of lost ruins to a more systematic documentation of their fragments occurred roughly around the mid-eighteenth century, when the Society of Dilettanti agreed to fund the enterprise of two British travellers, James Stuart and Nicholas Revett, in bringing back precise measurements of buildings in the Levant.

The Society of Dilettanti is an interesting lens through which to consider the Grand Tour and the various publications that its experience fostered.[6] As the group's name implies, the Society of Dilettanti celebrated the amateurship of those who wanted to indulge in good things, including good architecture, good wine, or good company. Founded in 1734, the group's framework borrowed both from the Freemasons and the 'Hell Fire' Club, two pre-existing societies in Britain, adopting ceremonials from the former, and embracing somewhat morally deviant behaviour

like the latter. Mostly, however, the Dilettanti brought together a group of men who were genuinely interested in the architecture of the Levant, and sought to promote '*at home*, a taste for those objects which had contributed so much to their entertainment *abroad*'.[7]

Following the Dilettanti's publication of works such as *The Ruins of Palmyra* (1753) and *The Ruins of Balbec* (1757) by Robert Wood, as well as Desgodetz's *Les édifices antiques de Rome* (1682), Stuart and Revett's three volumes represented a renewed attempt to offer accurate depictions and measurements of ancient architecture. Other than studies by Richard Pococke (1704–65)[8] and Giuseppe M. Pancrazi's *Antichità Siciliane Spiegate …* (1751–2), very few works on ancient Greek architecture were being published at that time. Stuart and Revett aligned their work to Desgodetz, who had sought to draw and measure the antiquities of Rome '*très exactement*'. Under Wood's guidance, the two men focused on providing examples of the three orders: Doric, Ionic, and Corinthian. Stuart and Revett's efforts competed with a contemporary French venture led by Julien-David Le Roy, who sought to accurately represent buildings from antiquity. Le Roy's publication, *Les ruines des plus beaux monuments de la Grèce* (1758), appeared just four years before Stuart and Revett's first volume of *The Antiquities of Athens* (1762). Although Stuart and Revett did not succeed in being the first to publish a reliable document of the wonders of Greek architecture, they claimed to offer the most accurate one. This claim was effectively lost less than 100 years later with the publication of Francis Cranmer Penrose's *Investigation of the Principles of Athenian Architecture* (1851).[9] As with Stuart and Revett before him, Penrose's trips, research, and publications were funded by the Society of Dilettanti.

Like the composite drawings discussed in Chapter 1, publications on antiquities at the time typically ranged from earlier atmospheric renderings, to the empirical and more precise records of architectural fragments still in place. The views of Jean-Honoré Fragonard (1732–1806) and Giovanni Paolo Panini (1691–1765) slowly gave way to the first measured drawings, notably by Desgodetz. Very quickly however, tension arose between this new scientific approach, one that aimed for accuracy and which privileged the production of measured drawings and orthographic views, and the existing tradition motivated by the desire to project viewers into the scenes being depicted. Indeed, following the publication of Wood's works on the ruins of Balbec and Palmyra, Robert Adam collaborated with Charles-Louis Clérisseau to publish the *Ruins of the Palace of the Emperor Diocletian at Spalatro in Dalmatia* (1764). Although Adam's introduction included praise for the work of his predecessors (namely Dawkings and Bouverie who had collaborated on Wood's work on Palmyra), it is also known that Adam considered this approach to be generally inaccurate and overly formal. Unlike *The Ruins of Palmyra* which mainly included orthogonal views and drawings against white backgrounds, Adam and Clérisseau's publication offered a rich assemblage of contemporary perspectival views and orthographic drawings, juxtaposing on some pages renderings of the ruins as found, imagined reconstructions, and detailed measured drawings as well as close studies of ornamentation.

If Adam and Clérisseau sought to embrace a wide spectrum of representational approaches, subsequent publications increasingly focused on drafted plans,

sections, and elevations. Scaled and filled with measurements, these drawings reflected the growing desire for increased precision. Architecture, a universal rule of order and proportion in which the ancient Greeks were considered masters, was preserved in fine line drawings and accurate measurements, often to the negligence of sight lines, evidence of past rituals, actual site experiences, and spatial orientation. The relationship between text and image shifted, with the growing quantity of measurements on the drawings tending to be inversely proportional to the amount of text. In earlier publications, the plates had been included typically to illustrate passages found in the writings of Pausanias or Pliny the Elder, with their primary purpose being to depict actual sites where mythical history had unfolded. In later publications, the text was minimal, particularly information on the site and its history, with the focus being on the measured building as a model to be copied.

The efforts of the Society of Dilettanti illustrated this shift from the sensed to the measured. Brought together by a common desire to share the delights they had experienced abroad, the Dilettanti sought to acquire more prestige by the level of precision its members were seen to promote. The venture with Stuart and Revett was a conscious move towards a more rigorous approach. The Dilettanti's endorsement of Stuart and Revett's work for the publication of the *Antiquities of Athens* is reflected in the very first line beneath the heading 'The Dilettanti's Contributions to Arts' in the society's books in 1757: 'To subscription to Mssrs Stuart and Revett's work on the Antiquity of Attica. 2100.'[10] Their venture was meant to reflect positively on the Society of Dilettanti, of which Horace Walpole had commented: 'The nominal qualification [for membership] is having been in Italy, and the real one, being drunk'.[11] From the middle of the nineteenth century onwards, the society accepted members that would add to its credibility: earls, dukes, archbishops, reverends, and architects like Penrose (1852) and Cockerell himself (1847), were all admitted to lend weight to their efforts, and to demonstrate the society's shift away from its previous ludic and frivolous associations. By the end of the nineteenth century, the society could count within its ranks members from the Royal Academy, the British Museum, and other well-respected institutions that promoted the arts.

Stuart and Revett's publication was thus presented as having a more rigorous approach to the past. But in the shift from 'subjective evocation' to 'accurate documentation', what was gained in accuracy may have been lost in translation.[12] When Desgodetz first proposed to complement existing treatises on ancient architecture, he specifically pointed to important works by Palladio and Serlio as indicators of how precision and exactitude were lacking in description and drawings of his time, finding errors in the works of these highly praised predecessors.[13] In doing so, he also overlooked some of the greater qualities of the work that could apply to the move from one time to another, from a theoretical ideal to its practical implementation, or from a mild climate to a harsher one. Like Desgodetz, Stuart and Revett sought exactitude. Though precision and historical awareness are certainly not mutually exclusive, their interest in exact measurements may have overshadowed the equally important venture of uncovering how previous architectural principles could be translated to present times, and to different places.

COCKERELL, GRAND TOURIST

While it was at the suggestion of his father, and as a follower of many previous British travellers, that Cockerell embarked on his Grand Tour, it was also as a young man still debating whether to pursue the path of the artist or the architect. Cockerell travelled extensively through Italy, Greece, and Turkey, spending time in Constantinople and in the Peloponnese, visiting sites in Sparta, Naples, and Athens as well as in more remote regions. Travelling from 1810 to 1817, he recorded his trip and some of his sketches in a journal, which was later edited by his son and published as *Travels in Southern Europe and the Levant* (1903). The young architect gained a fair amount of notoriety during his years abroad, marking significant advances, for example, on the existence of *enthasis*, on the reconstruction of the Niobe group and the Temple of Giants, and also developing friendships with foreign artists and architects including Jean-Auguste-Dominique Ingres (1780–1867) and Luigi Canina (1795–1856).

Along his travels, Cockerell developed a particular way of recording his kinetic approach to the sites he visited. When mapping his approach to a city, his drawings would reflect progression and connections, insisting on movement towards or between different sites. He supplemented these maps with views that continued to focus on the relation between buildings – revealing here the whole building, there only one of its turrets – so that travelling between the various drawings could provide a fairly comprehensive understanding of the place. Recording the town of Satalia, Cockerell made a series of what can almost be called cinematic drawings: from a city that one initially makes out at a distance as a strong bar between water and sky, to an extremely lively town where the boundaries between water and city, city and sky, merge into one another. Finally, on a drawing rendered with a slight wash, Cockerell put down what he called an 'idea from the entrance of Satalia:'[14] the architect and time-traveller now faces the former gate to the city. In this drawing that is literally at the threshold of a town but symbolically at the boundary between different times, Cockerell's reconstruction of Hadrian's gate at Satalia prefigures the gate leading into *The Professor's Dream*.

When focusing on the movements he witnessed in cities or temples, Cockerell would typically populate his drawings with signs of inhabitation. In this, he did not differ from his contemporaries: Stuart and Revett, Thomas Leverston Donaldson (1797–1885) and Guillaume-Abel Blouet (1795–1853) all depicted their contemporary versions of similarly inhabited scenes of ruined buildings. But when it came to drawing isolated temples, it was as though Cockerell saw their inhabitation as being performed by something more inanimate. Cockerell's drawings continually testify to his attempt at capturing the life of the sculptures and fragments on these sites. He would invariably focus on a capital or a pediment and attempt to depict its position, its relation to another element or fragment, and the movement suggested by this other piece. As with cities, Cockerell's drawings are cinematic records of his approach to temples. Typically, Cockerell first includes views from afar depicting the temples in relation to their landscapes. He then gradually zooms in on paths, offering closer views of the temple before moving to thresholds and finally depicting specific fragments.

2.1 C.R. Cockerell, *Topographical Sketch of the Forum Romanum*, c.1816, Department of Greek and Roman Antiquities, British Museum, London, © The Trustees of the British Museum

If in some instances Cockerell attempted to capture his physical approach to archaeological sites as it unfolded in time, in other instances the temporal movement was not related to the actual phenomenological experience of the site but rather involved the projection of the site visited across centuries. Both approaches to archaeological sites can be traced through the sketches, writings and publications Cockerell left behind. In the case of the Roman Forum, there is a series of drawing that marks the steps towards a reconstruction of the site as it might have appeared in the first century. Cockerell executed these drawings at the end of his Grand Tour, as Italy became accessible again after the abdication of Napoleon in 1814. The first drawing, probably made around 1816, is a topographical sketch most likely drawn on site (Figure 2.1).[15]

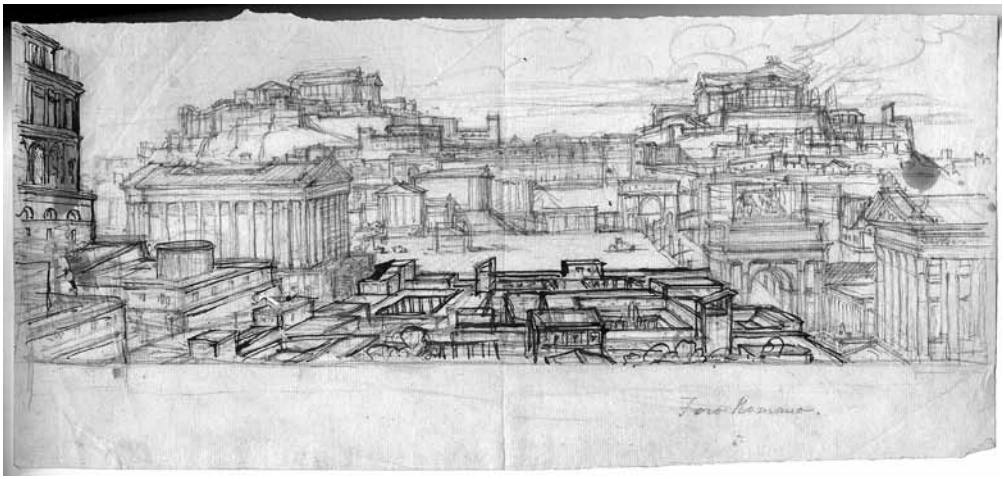
Here, Cockerell faithfully illustrated the forum at it appeared at the time. Probably the first of a series of sketches made in preparation for an engraving by Giacomo Rocruè around 1818, this illustration may have been achieved with a *camera lucida*.[16] A *camera lucida* is an optical device that allows the artist to view simultaneously the tip of his drawing tool and the reflected view of what is being depicted. William H. Wollaston patented the instrument in 1806, and there is evidence that it was used by a number of British Grand Tour travellers, such as Sir William Gell (1777–1836) and possibly James Pennethorne (1801–71).[17] The use of the instrument was symptomatic of an increasing 'objectification of external reality', one in which the world was considered geometrically *a priori*, and where the human was just a passive observer.[18] While it is not certain that Cockerell used the *camera lucida* here, the distance the viewer experiences while observing the isolated ruins of the *Forum Romanum* in this first sketch is reminiscent of the device's effects.

Cockerell went on to produce an elaborate pencil reconstruction of the Roman Forum, one that was engraved by Giacomo Rocruè around 1818, and finally prepared a large watercolour following the same composition for exhibition at the Royal Academy in 1819.[19] Through the progress from sketch to pencil reconstruction, engraving and watercolour version, the distance in the scene and embrace of the horizon increased, while both the foreground and background maintained a similar value. Despite the tangible distance between the author of the drawing and the view being depicted – a distance that necessarily carried over to the relation between viewer and the scene being presented – this series of drawings offers great insight into the necessary leaps between actual moment and the 'idea of a reconstruction'.

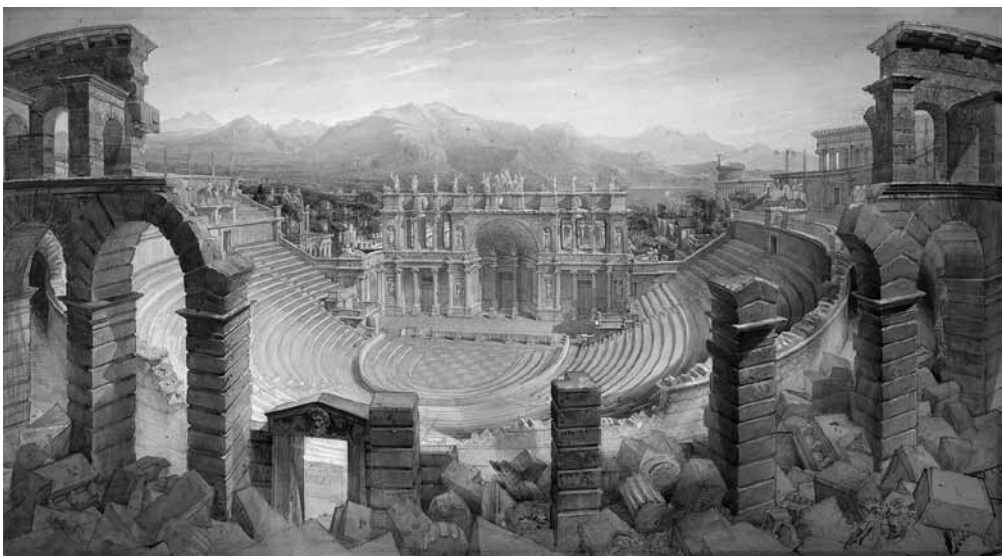
2.2 C.R. Cockerell, *Reconstruction of the Capital and Forum of Rome*, c.1816–17, Department of Greek and Roman Antiquities, British Museum, London, © The Trustees of the British Museum

Perhaps it is somewhat due to this leap that the drawing's viewer is pushed back at each step, from the first sketch to the watercolour finally exhibited at the Royal Academy in 1819. In the initial sketch (Figure 2.1), the drawing's viewer position is low but separated from the sparse ruins by a long and rather bare foreground. In the second drawing, the viewer is pushed farther out and slightly raised, as Cockerell tracks back in time and reconstructs buildings from the past (Figure 2.2). In the engraving, as well as in a later preparatory drawing (Figure 2.3), it is as though the viewer has been actively pushed out of the frame. This frame includes a larger expanse of the forum and depicts a greater number of buildings in the final rendering, but the haziness makes it clear that this approach is nothing more and nothing less, than an 'idea'. In this reconstruction completed before 1818, there is yet a timid attempt to reveal the conflicting temporalities that ground any reconstruction.

In Cockerell's watercolour of Pompeii's Great Theatre, exhibited at the Royal Academy in 1832, he adopted a different approach to the complexity of time (Figure 2.4). The composition's title, *Theatre at Pompeii as it Might Have Appeared in the Interval Between the Earthquake of A.D. 68 and the Final Catastrophe of A.D. 79*, suggests that some of the represented fragments may have been products of Cockerell's imagination. The Pompeian fragments immediately confront the viewer, provoking a direct engagement that is in stark contrast to the distance one experiences in front of Cockerell's reconstructed Roman Forum. Facing the Great Theatre scene – parts of which are imagined, other parts perhaps accurately recorded – the viewer is no longer remote and outside the frame as with the Roman Forum. Instead, the viewer is invited to peek through the fragments, climb into the image and descend into the restored theatre.



2.3 C.R. Cockerell, *Reconstruction of the Capital and Forum of Rome*, c.1816–17, Department of Greek and Roman Antiquities, British Museum, London, © The Trustees of the British Museum



2.4 C.R. Cockerell, *Theatre at Pompeii as it Might Have Appeared in the Interval Between the Earthquake of A.D. 68 and the Final Catastrophe of A.D. 79*, 1832. Published with the permission of the RIBA Drawing Collection, London

The image's structure is striking: the actual reconstruction lies almost entirely below the horizon line, the ruins straddle the horizon, and the landscape in the background rises above the line. Here, the actual, the imagined and the perpetual are graphically layered. Additionally, a clear demarcation exists between what appears to be real in the foreground (the fragments), and what is obviously imagined (the reconstructed temple) in the background. The layering of these elements occurs in the depth of the imagined space, almost along an implied Cartesian Z axis. In the plane defined by the axes X and Y, the horizon line creates an imaginary temporal boundary between what is past, what remains, and what will forever remain (the reconstructed theatre, the ruins, and the eternal landscape). Along the projected Z axis, the foregrounding of the fragments and the imagined reconstruction in the background invite not only a willingness to step into different times, it also raises questions on reality versus imaginary. Cockerell's drawing calls attention to the ambiguous spatio-temporal positions of both the drawing's author and its potential viewers. From the surface of the paper and their present reality, viewers can move forward into the depth of the reconstructed theatre in the spaces of the past and of their imagination. The drawing refers to a multiplicity of eras, and while viewers may engage with this present space filled with ruins, they are equally pressed upon to project themselves into the reconstructed space of this theatre whose representation belongs to an indeterminate past.

An acknowledgment of the complexity of time lies at the heart of all these drawings, whether Cockerell is tracking his own movements about the temple, representing current inhabitants, envisioning past rituals, or layering different times within a single image such as the coexistence of presently fragmented ruins to a fully reconstructed past in his representation of the Theatre of Pompeii. What is more, the drawings themselves would become sites touched by their own history, as Cockerell returned to former sketches and reworked these over the course of 10, 20, and even 50 years. If a few years mark the development of the sketch of the Roman Forum to its engraving, some 20 years separate the actual drawing of the theatre of Pompeii from Cockerell's initial visit. Similarly, a span of over 50 years occurs between the original sketch done at the Temple of Bassae and the drawing's publication in 1860.

THE TEMPLE OF APOLLO EPICURIUS AT BASSAE

Cockerell's *Plate X* of the Temple of Apollo Epicurius at Bassae brings viewers a step closer, immediately confronting them with the ruins, the eternal landscape, and evidence of the architect's presence, all of which occupy the same pictorial space. In the forefront of the engraving are a dog, a gun, and drawing materials. These are rendered in detail and high contrast, which draws the viewer's attention to both the fragmentary quality of the stones evidently marked by time and the incongruity of the dog. The foreground elements are drawn with a freer hand compared to elements of the temple in the background, which appear rigidly framed by the light lines structuring the perspective.

Geographically, the Temple of Apollo Epicurius in Arcadia stands above the valley of the River Neda alongside Mount Cotylion. According to Pausanias' classic text on Greece, the Apollo Epicurius temple was believed to have been built by Ictinos, architect of the Parthenon, around 430 BC[20] The temple in Arcadia was renowned for its beauty. Pausanias considered it second only to the Tégée temple, especially in terms of the precision of its stonework.[21] Pausanius noted that even its roof was made of stone, and that the light grey limestone used to build the temple came from the surrounding mountains, along with the marble from which the various internal sculptures and capitals were made. Its sanctuary, or *naos*, once held a statue of Apollo, which was later given by the Phigaleian to the nearby city of Megolopolis.

The temple's form is amphiprostyle peripteral hexastyle,[22] meaning the temple has two porticos (amphiprostyle), six freestanding columns at the front and back (peripteral hexastyle), and 15 at the sides (inclusive of the corner columns). The porticos have two central columns and two corner pilasters on each side. Unlike most temples, the Temple of Apollo at Bassae is oriented north–south. Archaeological research has revealed that this might only be true for the second iteration of the temple. An earlier temple on the same site was probably oriented east–west, and traces of this earlier building are embedded in the current orthography of the temple. The singular side door that leads to the most sacred area of the *cella*, bringing the first rays of sunlight on the summer solstice, may in fact be a remnant of the previous temple.[23] Remarkably, the temple also contains the three different orders – Doric on the outside, Ionic in the cella, as well as a single Corinthian capital – bringing together different generations of columns in a single space:

> *The pronaos and opisthodomos were each bounded by two Doric columns between antae, surmounted by metopes. The cella contained ten Ionic columns engaged in buttresses which connected them with the side walls. Towards the south end of the cella was a single Corinthian column, of remarkable form, which is now lost. Beyond it was the temple image, which by a peculiar arrangement is thought to have looked to the east, towards the side door, the orientation of the temple being nearly north and south. Up until the nineteenth century, it had been thought, though never proven, that this arrangement may show that an ancient shrine was embodied in the later temple. The frieze was internal, and passed round the cella, with the exception of that portion which is south of the Corinthian column.*[24]

This temple was not the product of a single era. It was built upon earlier iterations, carried their traces and thus was rich with other times. But it also provoked references to other places, whether through the absent statue of Apollo that pointed to the city of Megolopolis where it was taken, or to Athens via Ictinos, who was presumably the architect of both the Temple at Bassae and of the Parthenon.

First noticed in a 1765 expedition by the French architect Bocher, the temple appeared in the Dilettanti's publication of Chandler's *Travels in Greece*.[25] However, it was only with Cockerell's expedition that real advances were made in the understanding of this site, with his discovery of the buried fragments, the frieze, and the Corinthian capital. Cockerell made two trips to this temple, the first in 1811

and a second the following year.[26] The frieze was the subject of a publication as early as 1814, and the temple and its frieze continued to be featured in publications thereafter, namely by Donaldson and Blouet.

Based on original sketches made in 1811 and 1812, Cockerell's publication, *The Temples of Jupiter Panhellenius at Ægina, and of Apollo Epicurius at Bassae near Phigaleia in Arcadia,* grouped together drawings and texts describing two temples he had contributed to unearthing and piecing together newly discovered fragments during his Grand Tour. The texts give a broad historical survey and discuss and complement the drawings, including plans, sections, elevations, details, and a few perspectives. In his introduction, Cockerell remarks that although two previous publications exist regarding these same sites – specifically by Donaldson and Blouet – he stresses that a publication by a first-hand observer to the original expedition is what deems his necessary.

Cockerell's publication on the temple at Bassae also refers to sketches by Baron Haller von Hallerstein (1774–1817). A friend and fellow Grand Tourist, Carl Haller von Hallerstein died in 1817, without ever having the opportunity to publish his studies. Both he and Cockerell were first-hand observers to the temple's initial excavation expedition and produced extensive records on site. Joining Cockerell and Hallerstein on their first trip to Bassae were Jakob Linckh (1786–1841) and John Foster (1787–1846). All were interested in exploring what had been described in Pausanius as a most remarkable temple, one that had been little studied given the difficulty of accessing the site. When it became clear that the group was about to uncover fragments that had until then remained buried and unknown, the excavation was obliged to pause until permission was granted from the country officials to continue the archaeological dig. By the time the right to continue excavation was secured in 1812, Cockerell was himself professionally engaged in Sicily. In his publication, Cockerell mentions that the members of the first expedition were joined by others the following year, returning with Leigh, an English traveller and Gropius, the Austrian Consul at Athens, along with Otto Magnus von Stackelberg (1787–1837) and Peter Oluf Bröndsted (1780–1842). Only further down the text does he note that he himself was only part of the first expedition, and thus relied on documents provided by Hallerstein for the final examination and presentation of the temple.

Cockerell and Hallerstein became very close friends in the course of their travels. When Cockerell fell so ill he was practically considered dead and left untreated by a doctor who feared the plague, Hallerstein tended to his friend, and essentially saved him through his care and ability to secure the help of another doctor. Hallerstein was a German architect who, though from humble means, had succeeded in studying under the English architect David Gilly in Berlin in the 1790s. From there he went to Rome, where he encountered the Dilettanti members residing near the Villa Medici: Cockerell, Linckh, Ingres, Georg Koës (1782–1811), and the Danish sculptor Bertel Thorwaldsen (1770–1844). These, together with Stackelberg, Foster, Bröndsted and Douglas, founded L'Hospitalière or *Xeineion*, a society celebrating transnational friendship and, certainly also a common passion for discovery. Cockerell and Hallerstein shared a sensibility to the wonders of the past and occasionally worked in tandem. In fact, after nearly losing his precious notebook

to the sea in 1812, Hallerstein decided to recopy his sketchbook. He made a clean copy for himself, and another, annotated in French, for Cockerell. Hallerstein's sketchbook is rich with carefully measured details, and includes a particularly beautiful record of the Ionic order that informed some of Cockerell's plates in his eventual publication on the temple. The on-site records of the excavation work covered in Hallerstein's sketchbook were no doubt a great resource for Cockerell as he prepared his publication.

In 1976, Georges Roux published Hallerstein's drawings together with a short biography of the author, which serves to illuminate our understanding of the group's approach to the archaeological site.[27] Hallerstein's sketches, which Cockerell had evidently worked from, enable us to identify further similarities and differences between the two architects' approaches. The plates clearly show that Hallerstein was interested in a methodical and meticulous survey of the temple and its details. There are a number of measured drawings, capturing both the scale of the temple's paving and roofing stones, and the more detailed scale of the turned volutes of the peculiar Ionic capital the group studied. The clean transcription Hallerstein gave Cockerell of his site sketches is now at the British Museum. We know some of these drawings formed the basis of Cockerell's published plates, as Cockerell recognized his friend's work in his introduction. Yet Cockerell's 1860 publication does not rest entirely on Hallerstein's drawings. In some cases, Cockerell made adjustments to the drawings with accompanying explanations as he prepared them to be engraved. More generally though, Cockerell's hand is clearly evident in the staging of the descriptions, in the text, and in the organization of the publication as a whole, that is, in the sequence of the drawings and the relation between the illustrations and their textual descriptions.

LIVING HISTORY

In *The Temple of Jupiter Panhellenius at Ægina, and of Apollo Epicurius at Bassae near Phigaleia*, Cockerell describes the travelling architects at work, both textually and graphically. While most authors stepped out of the scene they represented, Cockerell's text and drawings seek to convey his movements around the fragments and the temple, a movement of inquiry and discovery that was essential to his imagined and reconstructed representations. The temporal complexity in evidence throughout Cockerell's volume is in stark contrast to most publications.

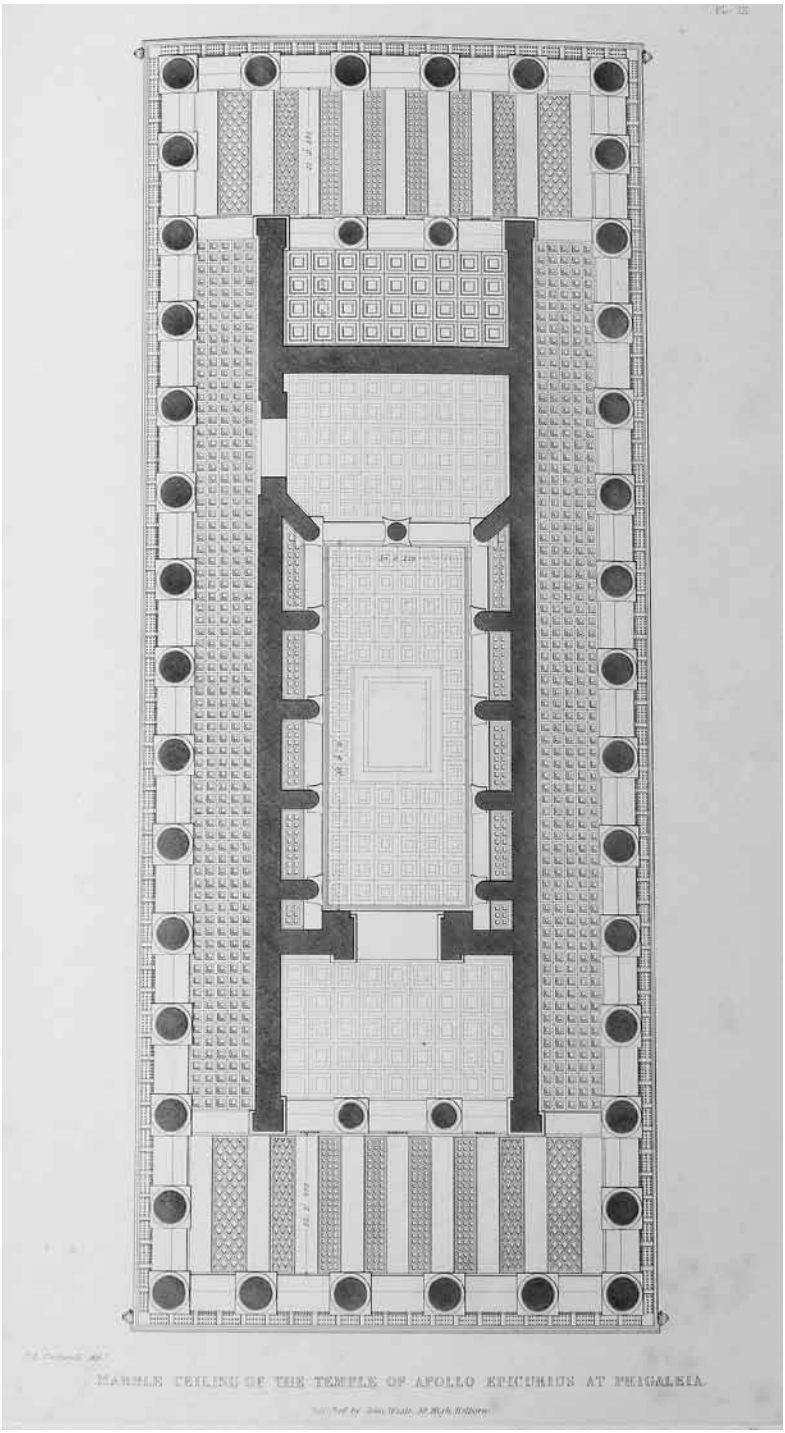
In Stuart and Revett's *Antiquities of Athens*, the plates introducing each new section began with contemporary views of the ruins as they appeared at the time of Stuart and Revett's visit, and invariably featured the two explorers. The more recent view of the buildings, along with the representation of the authors as protagonists in their story, allowed the reader to situate the scenes in chronological time. For example, the plate introducing the *incantada* (Chapter XI, Plate XLV) portrays the architects in the background, while the Consul Paradise negotiates their right to access with a Jewish merchant and his family living on the site.[28] However, illustrations following these initial images lacked this temporal localization. The temples and their fragments were inevitably drawn as though they stood out

of time, framed by a seemingly eternal landscape. Stuart and Revett's approach to introducing each temple with these imaginary illustrations of the buildings at the time of their visits has the powerful effect of extending a hand to the reader, in order to ease the crossing over the threshold between time and the atemporal.[29] In Cockerell's case, however, there are many more temporalities at stake.

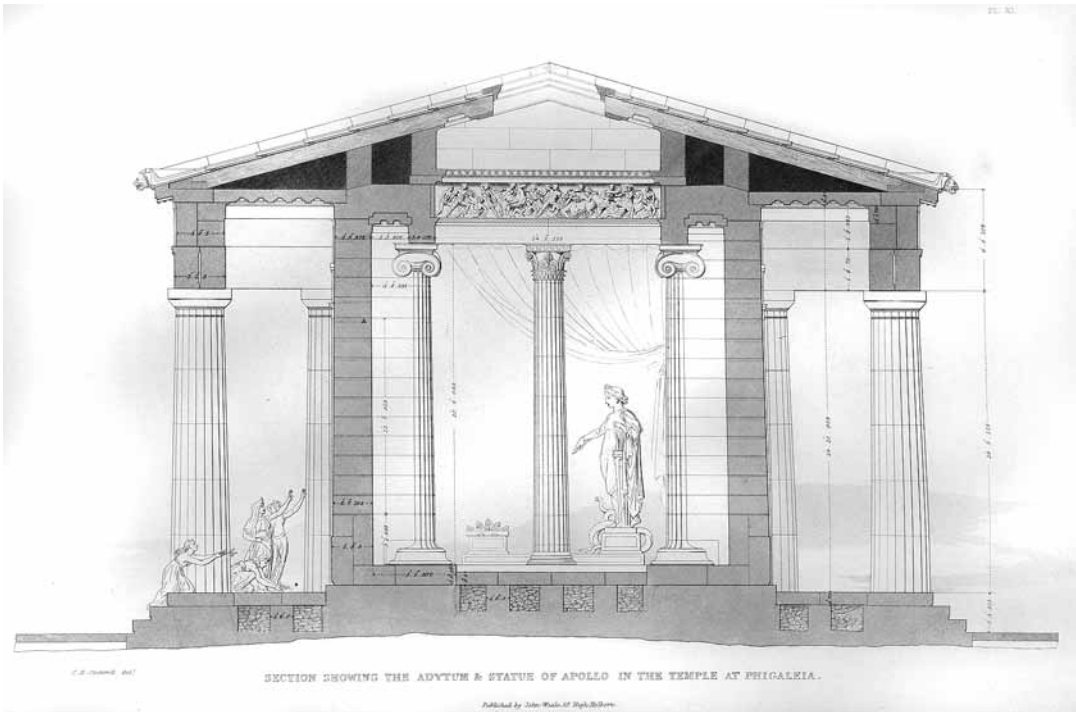
Recent reviewers of Stuart's work, namely architectural historians David Watkin and Frank Salmon, concur in their appreciation of Stuart's commitment to his work and the sites he studied. Stuart's dedication and presence is apparent both in the text that appeared alongside the images of his 1762 publication as well as in some of the plates. According to Salmon, Revett was the empiricist of the two, the mathematician who carefully measured and recorded his studies. Meanwhile, Stuart was the one who depicted the sites as they found them, capturing the context but keeping the text to a precise minimum.[30] As described before, Stuart and Revett's publication was marked by a desire to adopt a more scientific approach to the study of ancient architecture. Stuart always claimed that he was absolutely faithful to what he saw, that he took no liberties in his preface images, but Salmon warns the reader that this was not always the case. Indeed, Stuart's images were transformed along their process of creation from pen and ink sketches, to gouache pictures to be exhibited, and finally, engravings to be published. Along the way, some elements were added, others removed, others yet emphasized.[31]

After the publication in 1762 of Stuart and Revett's series of volumes on the *Antiquities of Athens*, Stuart and subsequent editors continued to publish studies and measured drawings until 1830, when a fifth volume assembled drawings on Athenian sites by new contributors, including Cockerell.[32] Already in his contribution to Stuart and Revett's fifth volume, it is clear that Cockerell's approach was different from what had been adopted by other contributors. In his first plate for the Temple of Agrigentum, Cockerell emphasizes the actual act of recording, calling for the involvement of both the architect and the reader in bringing these ruins back to life. Cockerell's dismissal of his compatriot William Wilkins' drawings, which were done prior to the 1804 excavation, point repeatedly to the importance of experience, indicating once again that Cockerell sought to convey the encounter and experience of the site above and beyond the temple's precise measurements. The same desire marked his work on the temple in Arcadia, which he published even after Penrose's *Investigation* of Athenian antiquities appeared (and Cockerell's help and availability for consultation is acknowledged in Penrose's introduction).

Inevitably, questions of order, presentation, and classification arise any time an architect or archaeologist set out to present their findings. Although it was initially planned to divide the *Antiquities of Athens* according to types of drawing, the practicality and clarity of division according to buildings prevailed. Hence, a layout featuring general views followed by geometrical or measured drawings, and finally by renditions of Greek architectural sculptures, was abandoned in favour of presenting one building after another, with a contemporary view first, then surveys and reconstructions, and concluding with its sculptural details. When preparing his own manuscript in 1860, Cockerell was less categorical in the sequence of his drawings. In his presentation of the two temples, Cockerell elected to follow a different approach to the layout scheme in *Antiquities of Athens*.



2.5 C.R. Cockerell, Plate IX, in *The Temples of Jupiter Panhellenius at Ægina, and of Apollo Epicurius at Bassae near Phigaleia in Arcadia* (London: J. Weale, 1860), Musagetes Library, University of Waterloo



2.6 C.R. Cockerell, Plate XI, in *The Temples of Jupiter Panhellenius at Ægina, and of Apollo Epicurius at Bassae near Phigaleia in Arcadia* (London: J. Weale, 1860), Musagetes Library, University of Waterloo

Plate X is perhaps the most explicit example of his conscious attempt to deliberately position his publication between the scientific and the experiential. Framed by two measured drawings (Figures 2.5 and 2.6), the sketch reminds the reader of the spirit of discovery on the one hand, and the role of imagination on the other.

The order in which the published plates appear in Cockerell's volume on the two temples provides a first frame against which to consider the significance of *Plate X*. In the final publication, *Plate X* is positioned between a very complete restoration of the marble ceiling – *Plate IX*, which is filled with geometrical shapes (Figure 2.5) – and a cross-section of the temple, *Plate XI* (Figure 2.6), where a statue, flowing drapes, offerings, and devotees appear. What reasons did Cockerell have for placing *Plate X*, with its dog and rifle, between these two other representations – one depicting a restored temple that has returned to its imagined original use, and the other a restored geometrical ceiling? Could the construction of a scene of fragments in *Plate X* perhaps be a necessary medium between geometry and ritual? *Plate X* was never numbered, and was only identified by deduction from its position in the book and the omission of a label expressly saying 'Plate X'. This plate was also never signed nor was it credited to any draftsman, engraver, or printer. Nonetheless, Cockerell referenced it specifically in the accompanying text:

> *This Plate exhibit [sic] a view of the interior of the Temple, after the excavation and the fallen fragments from the superstructure had been removed from the cella, and portions of the frieze temporarily placed there. The combat of a Greek and a Centaur opposite was the first to reveal the series of remarkable sculpture which made the principle glory and reward of this fortunate labour.*

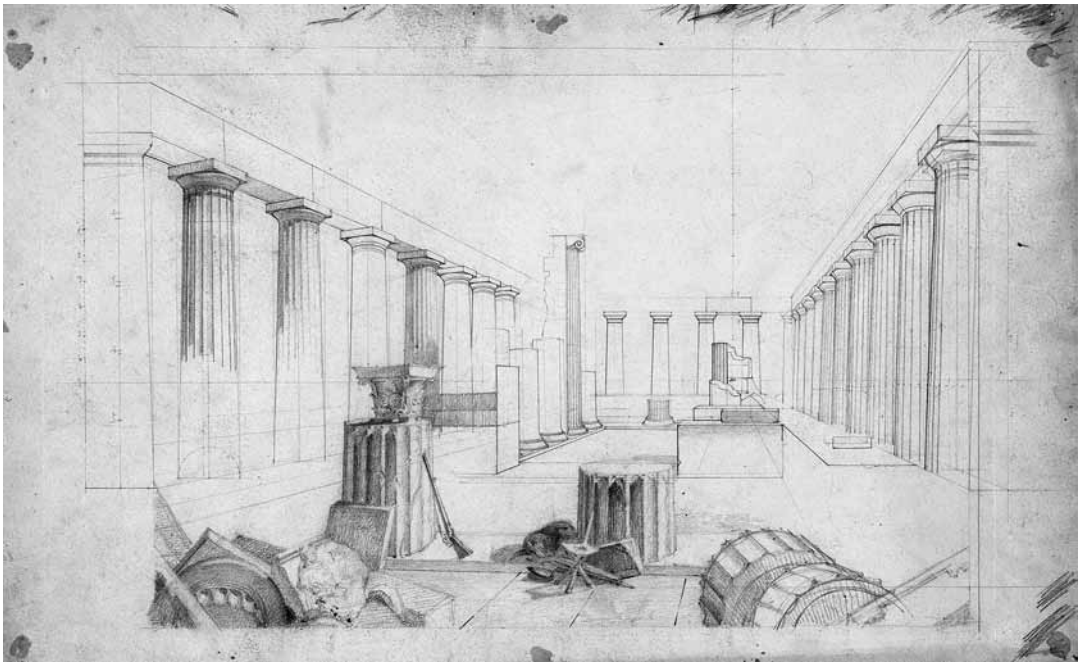
> *During our first visit of 1811, one of the travellers observed amongst the fallen ruins of massive stones occupying the cella, a narrow and tortuous descent sufficiently large to admit his head and shoulders, without however, room to turn round. Into this he descended head foremost, while his companions held him by the legs, and secured his return, which might not otherwise have been easy. At the bottom he discovered a fox's nest – happily not then occupied – and on removing this the Greek and the Centaur appeared in all their energy. Portions of the three orders employed in the interior of the metopes, the artefixes and the ceiling; are displayed, as also are the attached columns of the cella. The position of the single column, the base of which was still in its place, the sacrarium, the posticum the southern portico, and the landscape to the south, are seen beyond. The faithful dog, the rifle, and the portfolio, announce the artists at no great distance.*[33]

Between the text, the sketches, the discovery of the temple and its representation, there is an interesting conflation of subjects. The 'he' Cockerell refers to in the text is himself, who was lowered into the fox's nest, but it is unclear whether he would have been one of the 'artists' that would have physically been 'at no great distance' while the drawing was made. Whether only graphically proximate and working through Hallerstein's sketch or whether this had indeed been a view first sketched by him upon first visiting the site, he is working now with both the drawing and the accompanying text to entice viewers to the temple ruins through the discovery of the surrounding fragments. Instead of finding themselves in a distant position to the Roman Forum (1816–18), or on the ruined edge of the Pompeii theatre (1816–32), here observers immediately enter a temple in ruins (1811–62). And though this illustration is graphically articulated to a much lower level of completion, it communicates much more powerfully as a restorative drawing. Can viewers re-roof the temple, lift the fragmented entablature, replace the single Corinthian capital on the column rising between the two rows of Ionic order? This seems to be what Cockerell intended in the accompanying text, as he drew his reader's attention to the possible position of this single column, 'the base of which', Cockerell writes, is 'still in place'. So the observer's eye moves from the capital in the middle left foreground, to its base in the centre of the middle ground. Cockerell deliberately worked to bring these various elements to life – restoring movement to the frieze, highlighting the Ionic capital that he considered so particularly fascinating, and fixing attention on the single Corinthian sample.

Writing about the single Corinthian capital, Cockerell adds yet new references:

> *In the centrality of the isolated column, we recognise the architect of the cella of the Parthenon. With Ictinus this feature may have been a doctrine, thought common perhaps to others also in Greece at that period; at all events, it appears to have been derived from very ancient, and possibly from Hebrew authority. The Tabernacle of Moses, the great Temple of Jupiter at Agrigentum, the temples at Paestum and at Pompeii, and the choragic monument of Thrasyllus, all exhibit this centrality.*[34]

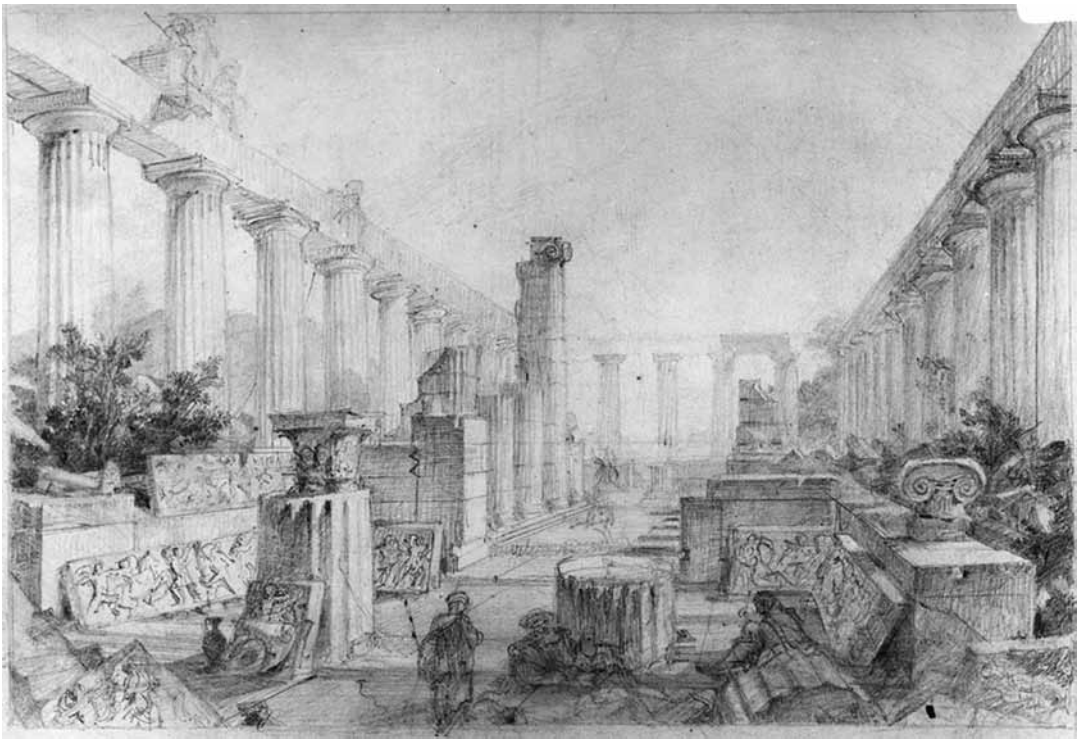
In relating the site at Bassae to other specific places and eras, not only does Cockerell interweave references, but his approach suggests complex ramifications. Likewise, the order in which drawings are presented makes space for the mind to follow different connections. More generally, the text encourages the reader's



2.7 C.R. Cockerell, *The Temple of Apollo Epikourios, View of the Interior*, undated, Yale Centre for British Art, Paul Mellon Collection, New Haven

mind to dwell. For example, Cockerell's concluding sentence points back to the beginning of the publication: 'The vignette on the title page describes the scene of the excavation during the progress of these discoveries'.[35] Cockerell's remark reframes the illustration that originally served to introduce the temple, reminding the reader that a number of fragments from different pasts or futures can and should be imagined. This opening role could well have been played by *Plate X* – images depicting temples 'as found' typically did serve that role – but here it acts as a hinge between the geometry of the reflected ceiling plan of *Plate IX* and the reconstructed interior view of the temple in *Plate XI*.

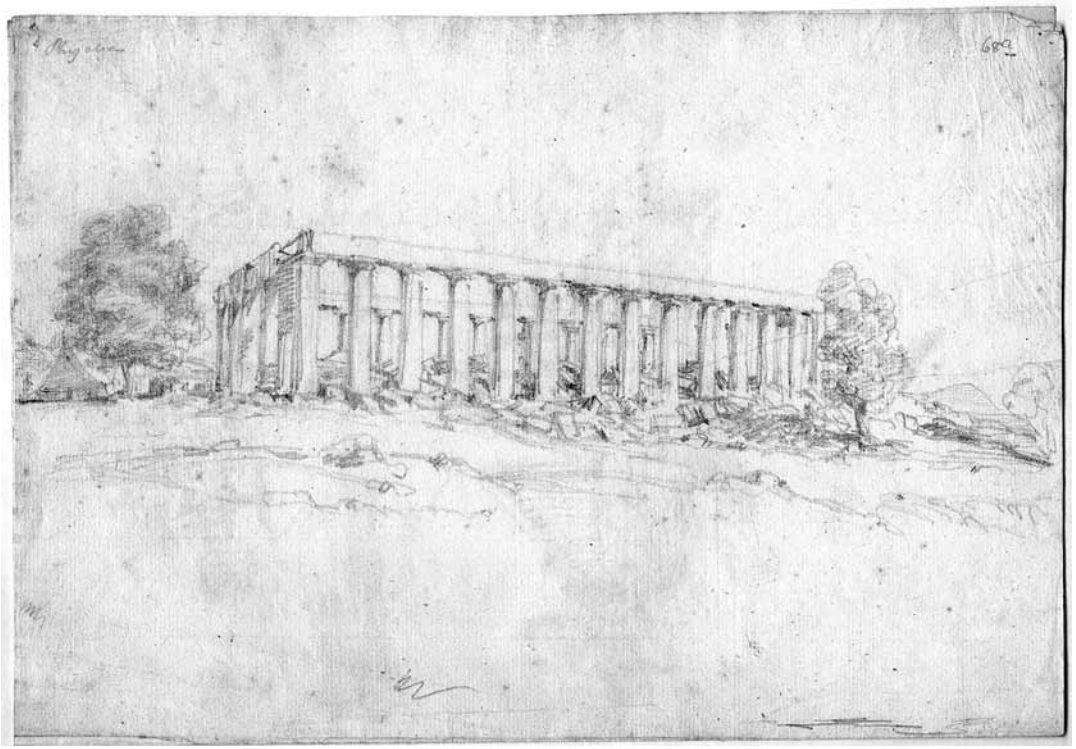
Beyond its peculiar position within the publication, *Plate X*, depicting the ruined temples with its fragments, the dog, and the gun, stands out as particularly unusual in itself. A series of drawings were made in preparation for the *Plate X* engraving. A similar print, which we will designate by *X'* (Figure 2.7), probably predates this final one published in 1860. A starker contrast is apparent between foreground and background in this earlier version, presumably made from a drawing produced on site. Freehand drawn fragments, as well as the dog, the sketchbook, and the gun, occupy the entire forefront of the drawing. These foreground elements are rendered in great detail and with strong contrasts. They are framed by a lightly drawn perspective of the surrounding columns, while the interior columns remain half-sketched, fallen or obviously missing, or else depicted in their fragmentary condition. In this earlier unpublished print *X'*, the bases of the surrounding columns are not drawn. In the published version, *Plate X*, a series of the pediment's fragments, which do not appear in *X'*, are drawn with precision as these edge over the periphery. Similarly, the landscape and sky make an appearance in the final plate, as do the bushes growing between the columns.



2.8 C.R. Cockerell, *Sketch of Temple at Bassae*, c.1811, British Museum, London (Cockerell-Bassae-Agragas), © The Trustees of the British Museum

In yet another version of the view in *Plate X*, a version now held in the archives of the British Museum, the scene at Bassae is actually populated (Figure 2.8). In this version, which we will refer to as *X″*, there are at least two and possibly three people on the entablature on the left, and an additional three people in the forefront. A line, which has likely been used as a measure, has been left hanging. A slice of the foreground has been taken away and only one fragment of a column appears on the left, while another column that makes an appearance in a later version of the drawing, has been presently left out. The dog and the rifle are not here, but the architectural fragments, though fewer than in the later versions, are in similar positions. In this pencil drawing *X″*, the construction lines are barely visible and the illustration has a freer quality than in *Plate X*. As in the later prints *X* and *X′*, illustration *X″* mostly emphasizes the foreground activity – the fragments, the vegetation, and the people. The top half of the drawing is much less cluttered and more faintly drawn than Plate X. The characters in this area seem quickly sketched. The Ionic capital, always in its original position, is the one element that stands out in the version of this drawing. Incidentally, this is the same peculiar order that Cockerell studied at Bassae that left an indelible impression on him, and which he continued to integrate into several of his subsequent buildings and designs, such as at the Cambridge University Library and at the Ashmolean and Taylorian Institute in Oxford.

In this particular sketch then, one that appears to have been executed on site, Cockerell's attention seemed especially directed to the life – the people, the vegetation, the fragments of the temple's ornaments – presently inhabiting the temple.



2.9 C.R. Cockerell, *Sketch of Temple at Bassae*, c.1811, British Museum, London (Cockerell-Bassae-Agragas), © The Trustees of the British Museum

Cockerell gave these elements more depth in his drawing through his use of starker contrasts and careful lines. In sketch *X″*, the human figures provide a much better sense of the scale of the temple. Additionally, the slight compositional differences enhance the sense of movement up towards the cella. Yet another version of this same scene exists. Drawn in pencil, this next sketch by Cockerell (Figure 2.9) of the same temple at Bassae with its interior cluttered with piles of fragments, is presumably his first impression of the temple.

The various pencil sketches and prints depicting the temple at Bassae in fragments hint as to how Cockerell developed his final published version, *Plate X*. In *X″*, the vertical line that appears on the right, a quarter of the way across the page, may have been one of the first lines Cockerell drew. Light as it is, the line initiates both the perspective and the reconstruction of the temple. The fragments emerge between this pencil sketch of the temple's structural layout, and Cockerell's imagined, and later published reconstruction. In fact, it seems possible that the fast geometrical reconstruction of the temple is primarily to provide a frame within which to gather and reveal the fragments themselves. While more finished restorations often depict these seemingly essential fragments in shadow, Cockerell's views on the temple at Bassae repeatedly focused on the fragments in order to affirm the pivotal point from which the restoration can be envisioned.

What transpires from considering these various versions of the *Plate X* drawing is that this reconstruction underwent an additional translation in its passage from site sketch to published engraving: the space of present time was merged with that of the reconstructed – or restored – past. The restoration, however,

was never directed at envisioning the complete building, but rather at the fragments themselves that Cockerell continually attempted to bring to life.

The final version of the drawing features more vegetation intermixed with the fragments in the foreground. The vegetation, yet another trace of time's passage, bears testimony to the architect's temporal position. It also seems to authenticate Cockerell's representation, suggesting that the architect was truly presenting the scene 'as it was' when he drew it. Yet, moving between the different variations that exist of this drawing, what emerges is precisely the impossibility of distinguishing clearly what was indeed 'found' at the site, and how much was reconstructed by the architect. Perhaps this impossibility, one of the drawing's beautiful ambiguities, is its true subject. In effect, when considering this series of drawings, it is difficult to establish how much of the sketching was done on site, and how much was enlivened by the artist's imagination on paper. Were the fragments of the pediments really found along the external colonnade, where Cockerell could stand and draw them from one single point? Or was it rather that Cockerell moved the temple's various fragments around, laying them against the colonnade in order for these to constitute a natural internal frame in his drawing? Was Cockerell even there at the time, or is he remembering and reconstructing the view via one of Hallerstein's sketches? Whatever the answer to these questions, it is clear that *Plate X* exemplifies one of the ways in which Cockerell recorded his movement around the fragments. Rather than a direct representation of a static scene, the drawing became a device for Cockerell to record his movements around and between the temple's fragments. The notion of a validating technique, what Salmon describes as an 'attestation of presence' when referring to some of Stuart's plates, may be at play in Cockerell's *Plate X*. In Cockerell's case however, this could even be seen as an attestation of *presences*: the presence of the architects at work, the presence of nature at work, the presence of the remaining sculpture, and remnants of the structure's former splendour. Bringing to life all these elements is what marked the enterprise for Cockerell.

TEMPORAL COMPLEXITY

How Cockerell chose to present the temples in his 1860 publication is reminiscent of a daydream he once described. In February 1825, Cockerell writes about a 'day dream' in which he imagined how the Aegina casts ought to be experienced.[36] Imagining the sequence of events leading up to the casts becoming available, or indeed discoverable, in London, Cockerell describes not a direct, spontaneous uncovering, but a carefully staged approach:

> *greatly struck with the sight of my Agina [sic] Casts, consider them calculated greatly to enflame an artists imagination – where else can be seen such a groupe of living statues. – their vigour energy & beautiful drawing – I enjoyed a day dream illustrative of this beauty […]. in a lecture room sufficiently large to receive the groupe & pediments (?) at abo' 7 f. from floor. Above the spectators a kind of moveable gas light moving by clock work casting a strong light & revolving as to give all the variety of light & shade & views of the figures. in the*

> *first instance all these covered with a curtain – the lecturer with his back to curtain would describe Agina […] – something of its history – if our curiosity objects – history of excavation – exhibit drawing of the island – view of the Temple first distant, then nearer, elevation of Temple restored. Then the curtain would rise & exhibit the statues. light would revolve & then a critical dissertation on the style composition &c would be read. […]*[37]

The active verbs and nouns in this short description depict a living group of statues with energy and vigour, the artist's enflamed imagination, and the moveable gaslight that revolves and takes the viewers away from a fixed picture to engage them in an unfolding discovery. In this instance, Cockerell's daydream allowed him to recreate and translate the experience of the discovery in a different space and time. Not only did Cockerell describe how the ruins of the temple would be first revealed – first from afar, then closer – he also considered how the restored temple would appear. What is more, Cockerell did not imagine that the discovery of the restored temple would constitute the climax of the exhibition. The centrepiece would be the casts, the closest approximation of the fragments, shown under a revolving light, raised to the height at which they would have been located in the temple, exhibited in a room at least as large as the temple was or had previously been. In this careful staging, the temple was to be slowly discovered, with time, movement, and light. Nothing would be grasped at a glance. The epic of the discovery and restoration of the Temple of Jupiter Panhellenius would unfold – as an epic would – for the observer to truly understand the beauty and meaning of the Aeginan casts. Through spatial narration, the visitor's experience of the casts would unfold in time.

Cockerell's description of the daydream – the staged approach, the precise positioning of the casts, and the revolving light – is reminiscent of the revolving panorama, a type of public show popular at the time for which a fee was usually paid at the door. Indeed, Cockerell ends his description by noting, 'I can not doubt such an exhibition in London would produce money & fame if I had time to attend to it'. Even though Cockerell never succeeded in staging such a revolving panorama, his vision may have informed the British Museum's presentation of the Bassae casts, as the museum settings frame the many histories around the discovery of these casts. Today, the Bassae marbles are still part of the permanent exhibition at the British Museum. In a somewhat isolated room that is not always open (a member of the security staff must be present), the marbles are laid around a room with dimensions matching those of the interior of the original temple. Painstakingly acquired by Britain, the frieze is raised to the level at which it would have appeared to a person standing in the actual temple, in order that it may be admired from positions approximating the in situ experience. There is no revolving light and little explanation on the temple, but making one's way up the staircase to access this room, one is reminded of Cockerell's initial expedition, as his group unearthed the temple fragments and brought them to light.

In Cockerell's daydream, he imagined a slow approach to the Aegian temple framed by a critical and historical essay that described both the temple and the story of its excavation. Similarly, the texts and drawings included in his publication on the Temple of Apollo Epicurius at Bassae constitute a carefully staged approach to the temple's fragments. But it is in the atypical perspective that Cockerell

revealed most about what it meant to try to restore this temple at Bassae. In Cockerell's *Plate X* and, to a different extent, in his restoration drawing of Pompeii and in numerous sketches of the Temple of Aegina, there is a definitive sense of his place, spatially and temporally, in relation to the subject being depicted. There is also an underlying desire to communicate the complexity of this position to the observer.

If in Rome the observers were left on the periphery, at Pompei they were invited to step over the fragments and descend into the theatre. Finally, in *Plate X*, observers are not only presented with a rich temporal and spatial composition, they are themselves confronted by the power of the fragments. Echoing his description of Poliphilo's tale, it is tempting to say that Cockerell 'makes you wander with him into the solitudes of wasted cities[,] he describes to you the scattered fragments of by-gone glories[,] he occupies you with himself in reconstructing the *fallen* parts & restablishing [sic] the whole'.[38] Cockerell wanted to draw in the observer and bring the fragments to life. The discovery of the temple, specifically the process of digging and the laying out and re-assembling of the scattered fragments, becomes the main subject of the drawing.

NOTES

1 While it is unclear whether Cockerell is indeed the author of the original sketch drawn on site, he certainly did all the work on the drawings leading up to the plate included in the 1860 publication.

2 C.R. Cockerell, *The Temples of Jupiter Panhellenius at Ægina, and of Apollo Epicurius at Bassae near Phigaleia in Arcadia* (London: J. Weale, 1860), 55.

3 Jeremy Black, *The British and the Grand Tour* (Worchester: Billing & Sons Ltd, 1985).

4 Black, 4.

5 Frank Salmon, *Building on Ruins: The Rediscovery of Rome and English Architecture* (Aldershot: Ashgate, 2000).

6 Bruce Redford, *Dilettanti, The Antic and the Antique in Eighteenth-Century England* (Los Angeles: Getty Research Institute, 2008).

7 Robert Wood, Preface to *Inonian Antiquities,* quoted in Redford, *Dillettanti*, 1.

8 Richard Pococke, *A Description of the East, and Some Other Countries,* 2 vols (London: W. Bowyer, 1743–5).

9 Much of this information is from Frank Salmon's Introduction in *The Antiquities of Athens* (New York: Princeton Architectural Press, 2008).

10 Lionel Cust and Sydney Colvin, *History of the Society of Dilettanti* (London: MacMillan, 1898), 248. In 1860, the Society paid 367 pounds for 71 copies of Cockerell's work on Aegina (252).

11 Horace Walpole, in a letter to Horace Mann, 14 April 1743. Quoted in Cust and Colvin, 2.

12 Redford, 53.

13 Desgodetz, *Les édifices antiques de Rome dessinés et mesurés exactement* (Paris, 1682).

14 Cockerell, British Museum, Department of Greek and Roman Antiquities, AM 37.

15 Salmon describes in detail the context in which Cockerell worked on this series of representations of the *Forum Romanum*. Salmon, *Building on Ruins,* 99–102.

16 These drawings are also discussed in the context of the British architects's rediscovery of Rome in Frank Salmon's article, '"Storming the Campo Vaccino": British Architects and the Antique Buildings of Rome after Waterloo', 146–75.

17 Salmon, *Building on Ruins,* 72, 78, 118 (ill. 86).

18 Louise Pelletier and Alberto Pérez-Gómez, *Architectural Representation and the Perspective Hinge* (Cambridge, MA: MIT Press, 1997), 287.

19 All of these versions are illustrated in Salmon, *Building on Ruins* (Figures 73, 74, 75 and Plate XI).

20 Pausanius (SEE PAUS' VIII 41, 5).

21 Pausanius (VIII, 41,8).

22 A.H. Smith, *The Catalogue of Greek Sculptures, vol. 1*. 'The Temple at Phigaleia' (London: William Clowes and Sons, 1892), 271.

23 Frederick A. Cooper, 'The Temple of Apollo at Bassae: New Observations on its Plan and Orientation', *Amercian Journal of Archaeology,* 72:2 (1968): 106.

24 Smith, *The Catalogue of Greek Sculptures*, 271–2. He quotes Curtius, *Pelop.,* i. 329; Michaelis, *Arch Zeit,* 1876, 161.

25 Richard Chandler, *Travels in Greece* (Oxford, 1776), 295 and footnote, 272.

26 It is not entirely clear whether Cockerell was part of the second expidition or not, as he was certainly engaged in Italy for part of 1812.

27 Karl Haller von Hallerstein, in Georges Roux, ed., *Le Temple de Bassae* (Strasbourg: La Bibliothèque, 1976).

28 James Stuart and Nicholas Revett, *Antiquities of Athens*, vol 3 (London: Priestly and Weale, 1828), 122.

29 For example, the comparison of *Plate X* to 'View of the Arch of the Sergii at Pola, Istria, Croatia' establishes the distance between the projection in a conflation of times and the rendered threshold (between contemporary view and atemporal representation). The gouache held at the RIBA drawing collection (SD 146/8) was reproduced in the exhibition *Gallery Guide* for 'James "Athenian" Stuart 1713–1788: The Rediscovery of Antiquity' (New York: Bard Graduate Center for Studies in the Decorative Arts, Design, and Culture, 2006).

30 Salmon, Introduction to *Antiquitites of Athens*, viii.

31 Salmon, *Antiquities of Athens,* ix.

32 From a collaboration that began in 1751, a first volume was published in 1762, and two subsequent ones in 1787 and 1794 (these latter two were published after the untimely death of Stuart, respectively by William Newton and Willey Revely). After a fourth volume published by Joseph Woods from drawings by Stuart that he could still gather (1816), a fifth volume, published in 1830, assembled drawings by new contributors, Cockerell being one of them (volume edited by William Kinnard). Susan Spence, 'James 'Athenian' Stuart and the Greek Revival', *Eighteenth-Century Life*, 33:3 (2009): 127–41.

33 Cockerell, *The Temples of Jupiter Panhellenius*, 55.

34 Cockerell, *The Temples of Jupiter Panhellenius*, 48.

35 Cockerell, *The Temples of Jupiter Panhellenius*, 59.

36 Cockerell, RIBA Archives, COC 9/6, 18–19 (inserted page, dated 9 February 1825).

37 Cockerell, RIBA Archives, COC 9/6 (inserted page, dated 9 February 1825).

38 Cockerell, Lecture notes, TCL Archives, R. 2.1.

PART II
Drawing and Building in Time

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3

Fantasy of St George's Hall, Liverpool, under Construction: Between Pasts and Futures

In his 1857 publication on Michelangelo, Cockerell suggested that only when the architect and the archaeologist worked together could mute monuments reveal the traces of their origins, and point to the potential of further elaboration:

> *It is certain that architectural operations […] imply a world of unrecorded learning, invention, and responsibility of design and execution, which we seek in vain in the scanty memorials of History. To trace and to develop those precious instructions, the Architect and the Archaeologist should unite, and, surrounding themselves with all the ideas and circumstances of the period, reproduce the grace and learned considerations which seem to have influenced those mute but mighty Works; and thus by explanations and descriptions to satisfy those inquiries upon them which they are so calculated to suggest, and which must otherwise remain insolvable.*[1]

The representation of St George's Hall conveys this ideal union between the archaeologist and the architect. Executed by Goodchild in 1854, *Fantasy of St George's Hall, Liverpool, under Construction* compositionally resembles some of Cockerell's restoration drawings (Plate 3).[2] Similarly to Cockerell's efforts at Pompeii or in Rome, Goodchild's drawing features fragments in the foreground, a cut-away interior perspective in the middle ground, and in the background, an occupied interior, as though the building is fully complete and already in functional use. The distinct crowds in the picture represent shifts in stages of construction and seem to belong to an array of different times. Goodchild's imaginings of a space to be constructed appear to be moulded on Cockerell's techniques in the reconstructions of ruins: the same fragments that at Pompeii and Bassae were constructed back into the past here propose a future. And yet, the drawing is not a reconstruction of a ruins, but a design for a city hall and law court planned for the city of Liverpool.

The drawing focuses essentially on an interior. This, along with the decision to represent the building as though partway through being restored, may be connected to the specific events that led to Cockerell's involvement in the project.

St George's Hall was left unfinished at the untimely death of its young architect, Harvey Lonsdale Elmes (1814–47). In 1851, Cockerell was asked to take charge of the building's completion. Given these circumstances, the drawing likely constitutes an appropriate depiction of Cockerell's site: much of the exterior shell had already been executed by the time Cockerell was on board, and it was predominantly the interior spaces that demanded his attention. In this regard, a 'restoration' was not such a far leap. If Cockerell previously sought to restore the Greek temples he studied *back* in time, he may have sought to project the shell of St George's Hall *forward* in time, tracing and developing Elmes's intention as conveyed in the drawings the architect had left behind. As seen in some of Cockerell's restoration drawings, this 'fantasy' displays Cockerell's ability to move between a multiplicity of possible spaces, and his openness to many potential times.

If Cockerell's archaeological drawings embody his sensitivity to the fragmentary condition of archaeological sites, this sensitivity is equally evident in his conception of architectural projects. Moving from Cockerell's earlier archaeological investigations to his architectural drawings and buildings, this section brings to light both the spatial complexities and temporal intricacies of architecture's fragmentary condition.

THE ARCHAEOLOGY OF ST GEORGE'S HALL

> *After my return to Grigenti, I remained there till the 14th of November, applying myself with close attention and infinite pleasure to attempting to reconstruct the Temple of Jupiter Olympius. The examination of the stones and the continual exercise of ingenuity kept me very busy, and at the end the successful restoration of the temple gave me a pleasure which was only to be surpassed by that of originally conceiving the design.*[3]

Cockerell's description of his reconstruction of the Temple of the Giants at Agrigento suggests that he considered the distance between a restoration and a construction as slim. In the nineteenth century, the term 'restoration' referred to an image in which the author reconstructed a building or a set of buildings to their 'original' state.[4] In drawing these, architects relied on a variety of sources – written accounts, fragments found on site, knowledge of other and better preserved temples – but were unavoidably expected to fill in the remaining gaps. The nature of these gaps changed significantly according to what architects sought in the ruins (see Chapter 2). Architects concerned with obtaining better models for neo-classical architecture sought to imagine exact building proportions from the most accurate measures of fragments either still standing or scattered around a site.[5] Restorations by other architects focused on putting forward ideas about architectural and cultural history. For example, French architect Henri Labrouste shocked many academicians when he reversed the accepted chronology of the three temples at Paestum, implying that architecture progressed as it reflected changes in society.[6]

How architects represented and restored architecture of the past was invariably linked to how they imagined architecture to evolve and relate to time. In their willingness to learn solely from the classical models or to be open to medieval,

Baroque or modern architectures, nineteenth-century architects positioned themselves in the ongoing debate on style. All architectural projects, not just restorations, had a multivalent relation to different eras. The strict election of a style, whether classical, neo-Italianate, neo-Gothic, or modern, signified not only the architect's preference for one style over another. Raising the question of architecture's relation to time brought with it issues of style as it pertained to the spirit of the age, of the differences between dress and essence, of the polarity between the universal and the particular, or even between progress or stability.

Cockerell was primarily interested in how architecture was experienced and shaped through its use, and so elaborated on written accounts and the story that could be revealed by a temple's frieze or sculptures. He was particularly keen on populating his restorations, as is evident in his reconstruction of Athens 'at the time of the Antonines', or in his representation of the Temple of Nerva.[7] Cockerell was inherently curious about the life of a building as well as the life around it; this focus on vitality marks his reading of existing buildings and fragments, along with his approach to new architectural projects.

While the drawing of St George's Hall is not a restoration in the traditional sense, it bears some parallels. Like most restoration drawings, it displays an anachronic quality with, for example, the fragments and construction activity at the front being wholly out of place with the crowd strolling in the completed hall in the background. Anachronic suggests that elements appear out of their time period. Restoration drawings can be anachronic when they indiscriminately include references to different times. The draughtsman can display a similar attitude to space, conflating spatial elements in an *anatopic* manner: the building is at once being constructed and complete, supported with scaffolds but furnished with fixtures and sculptures. In this sense, anatopic refers to the graphic representation of spaces that could not possibly exist at the same time. This anatopic impossibility is akin to Freud's imaginings of Rome in his introduction to *Civilization and Its Discontents*:

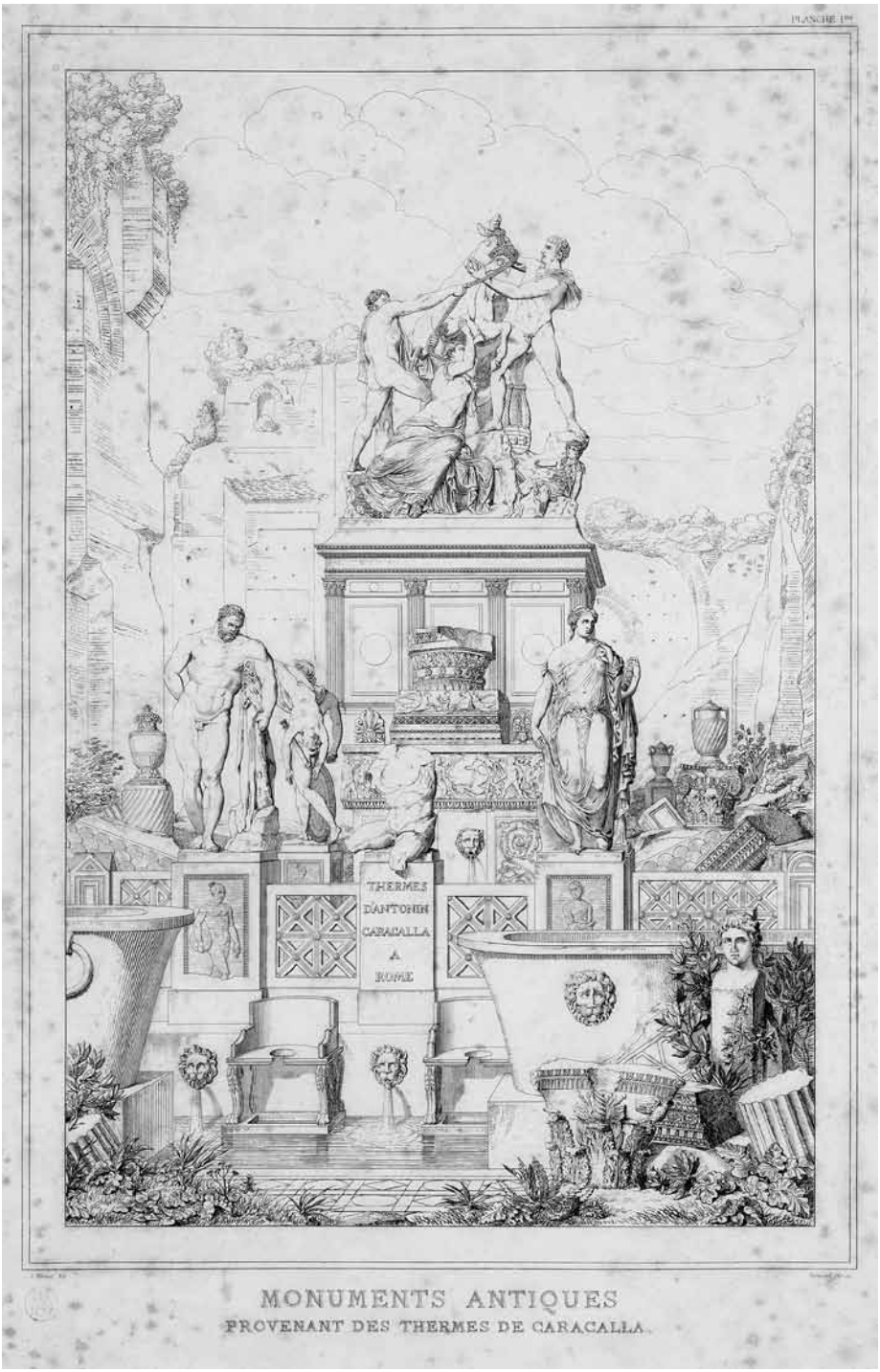
> *Now let us make the fantastic supposition that Rome were not a human dwelling-place, but a mental entity with just as long and varied a past history: that is, in which nothing once constructed had perished, and all the earlier stages of development had survived alongside the latest. This would mean that in Rome the palaces of the Caesars were still standing on the Palatine and the Septizonium of Septimius Severus was still towering to its old height; that the beautiful statues were still standing in the colonnade of the Castle of St. Angelo, as they were up to its siege by the Goths, and so on. But more still: where the Palazzo Caffarelli stands there would also be, without this being removed, the Temple of Jupiter Capitolinus, not merely in its latest form, moreover, as the Romans of the Caesars saw it, but also in its earliest shape, when it still wore an Etruscan design and was adorned with terra-cotta antifixae … . There is clearly no object in spinning this fantasy further; it leads to the inconceivable, or even to absurdities. If we try to represent historical sequence in spatial terms, it can only be done by juxtaposition in space; the same space will not hold two contents.*[8]

While Freud concludes on the impossibility of a single space holding two contents, this is precisely the approach one sees in Cockerell's drawings, those he himself

executed while travelling or working on projects, or in drawings by Goodchild, developed under his guidance.

In the case of St George's Hall, the drawing's anachronic and anatopic originality is further enriched by the genealogy of the project's references. The interior space stages activities that belong to different times, but also points to important architectural precedents and their interpretation in time. Namely, the space is reminiscent of the Baths of Caracalla, and more specifically, of a restoration by Guillaume-Abel Blouet (1795–1853) that Elmes may have used as a source in developing his project for Liverpool.[9] While Cockerell's project interprets and builds upon Elmes's vision for the Hall, Elmes's design in turn interprets and builds upon the baths as envisioned by Blouet. Both buildings are mediated by their representation. Cockerell's designs for St George's Hall are developed from Elmes' drawings which in turn are based on graphic restorations of the Baths of Caracalla. These representations involve a cultural interpretation of the building's destination, a historical appreciation of its importance in relation to its precedents, and an evaluation of its structural, ornamental, and material character. Finally, the three architects (Cockerell, Elmes, and Blouet) are all drawing from the existence of various fragments. Blouet's work is anchored in what he could garner from the pieces of the Baths of Caracalla, the fragments still on site and those displaced, such as the baths at the Piazza Farnese or urns or sculptures elsewhere. For Elmes, the fragments are scattered, but temporally rather than spatially. As was common in the early nineteenth century, his design is inspired by different classical buildings, fragments of which architects would have seen either on tour in Greece, Italy or Turkey, or in works by those who travelled there. These precedents are compounded for Cockerell, who, in addition, also works from the contemporary fragments of Elmes' project.

The idea that a reconstruction drawing hinges on fragments found scattered in space is reinforced in a composite plate by Blouet (Figure 3.1). In his publication on the Baths of Caracalla, Blouet features a slightly incongruous first plate displaying an assembly of different pieces of the baths, brought together in the space of one drawing. Much like Stephanoff's *Assemblage* (Figure 1.4), a representation of pieces from the British Museum's collection, Blouet's image artificially groups, or perhaps more accurately reassembles pieces that once belonged to the same place, if not necessarily to the same time. These illustrated pieces include the displaced basins that, to this day, still stand in Piazza Farnese, an antique torso, the Hercules of Glycon, the Farnese bull, the Flora, two gladiators, two urns now in the Vatican museum (as they were when Blouet conducted his study in 1825 and published the work in 1828), as well as a granite column taken by Cosimo de' Medici in 1564 that now stands in the Piazza Santa Trinita in Florence.[10] Blouet's first plate and Stephanoff's *Assemblage* are reciprocal. The former works from the idea of something that was once whole (the Baths of Caracalla) to its dissemination as fragments in space and time. The latter works from the creation of a new whole through a series of building fragments belonging to different spaces in time. Stephanoff's reassembly occurs in the museum, wherein the British Museum acts as a double frame: a frame for the actual objects, and a frame for their assembly in the space of the representation.



3.1 G.-A. Blouet, Plate 1, in *Restauration des thermes d'Antonin Caracalla à Rome* (Paris: Didot 1828), Collection Centre Canadien d'Architecture / Canadian Centre for Architecture, Montréal

Similarly, Blouet's collage is framed in the space of his whole publication, which sets the tone for the reading of both the actual and represented content, that is, the baths themselves as well as the text and plates. Blouet frames his presentation of the baths by beginning first with a dedication to the members of the Académie Royale des Beaux-Arts de l'Institut de France, including also a description of the 1824 archaeological digs that prompted his publication. After providing a general description of Roman baths, Blouet writes specifically on the Baths of Caracalla, and lists their detailed parts. Finally, he presents the plates. The 15 plates begin with the assembled fragments (*Monuments antiques provenant des Thermes de Caracalla)*, and end with the only two perspectival representations of the baths. Both drawings on the final plate are of the central hall, a perspectival reconstruction of the central hall, placed above a perspectival depiction of the hall in ruin as it appeared to Blouet in 1825. In Blouet's work, everything from the prologue to the texts and sequence of the plates tightly frames the context of the reading, just like the museum as an institution may frame our perception of the objects exhibited. While museums can be considered as though they offer a somewhat atemporal and neutral frame wherein works can be collected, these institutions effectively reorganize these works on a new plane. The same can be said of a publication, or even, simply, a drawing.

In a short essay on depth, architectural historian Peter Carl compares the relation between the particular and the universal to the more recent coupling of fragment and field. His discussion touches on three key ideas: that of a shared ground for meaning, the idea of depth, and the relatively new notion of the fragment. Carl argues that the concept of fragment and field came to the rescue of a world that had rid itself of universals. While the particular can generally be inferred from the universal, human finitude 'requires a universal to be available only through its particulars', and any interest in particulars inherently involves mediation with claims of universality.[11]

Today, universal claims are interpreted as personal beliefs, synonymous with ideologies at best. In other words, they are, by definition, particular. It is in this context, where human beings have lost a potential ground of shared meanings, that the interest in fragment and field emerges. The field, which can also be called a site, or *tabula*, is a void where the distance between different elements or fragments is established. Far from neutral, this field always informs the reading of its fragments: 'These fields supply a background, but at the cost of flattening everything to their own level of generality'.[12] One could say that historicist approaches to building fragments flatten an understanding of style. Carl is interested in the recovery of a certain depth, one that may be rooted in a more complex definition of time.[13] While modernity has a complex approach to space, it generally rests on a fairly simple conception of time, one that precludes depth in its inability to account for anticipation and recollection. Carl writes:

> *Particulars become fragments under the special conditions of attempting to transpose to explicit relatedness – for which the field needs to be invented – the referential universality of institutional concreteness. The mobilization of the background required to secure the field of fragments silences the temporality of analogy (embodiment) and therefore a concrete participation in history. This is the equivalent of losing one's memory […].*

Carl's short essay is a plea for a depth that is at least latent in any search for the universal rather than by-passed in recent plays between fragments and fields. Rather than turning to a controlling field to neutralize the fragments, the recognition of the depth of fragments calls for a willingness to engage them not only in and of themselves, but as an index of an intangible whole that provides traces of a forgotten past.

Carl's concept of the fragment against the field can provide a lens from which to observe the different reconstruction drawings considered thus far, and allow us to view these as a constant reconfiguration of the field. When Blouet describes the making of his restoration of the Baths of Caracalla, he not only includes his reconstructed images as well as his depictions of the site's badly ruined parts, he also divulges an array of his outside sources. In the accompanying text, he explains how beyond the actual ruins at Caracalla, he turned to the Pantheon to restore what he perceived as the traces of a circular room, to the Baths of Diocletian for the details and roofing of the central room, and to the Temple of Peace for the pavement decoration and vaults of this same main room.[14] For the mosaics at Caracalla, he referred to the Baths of Titus. Blouet adds that he also consulted Palladio's 1554 survey of Rome's churches and ancient monuments, a text that may be called one of the first tourist guides to the Eternal City.

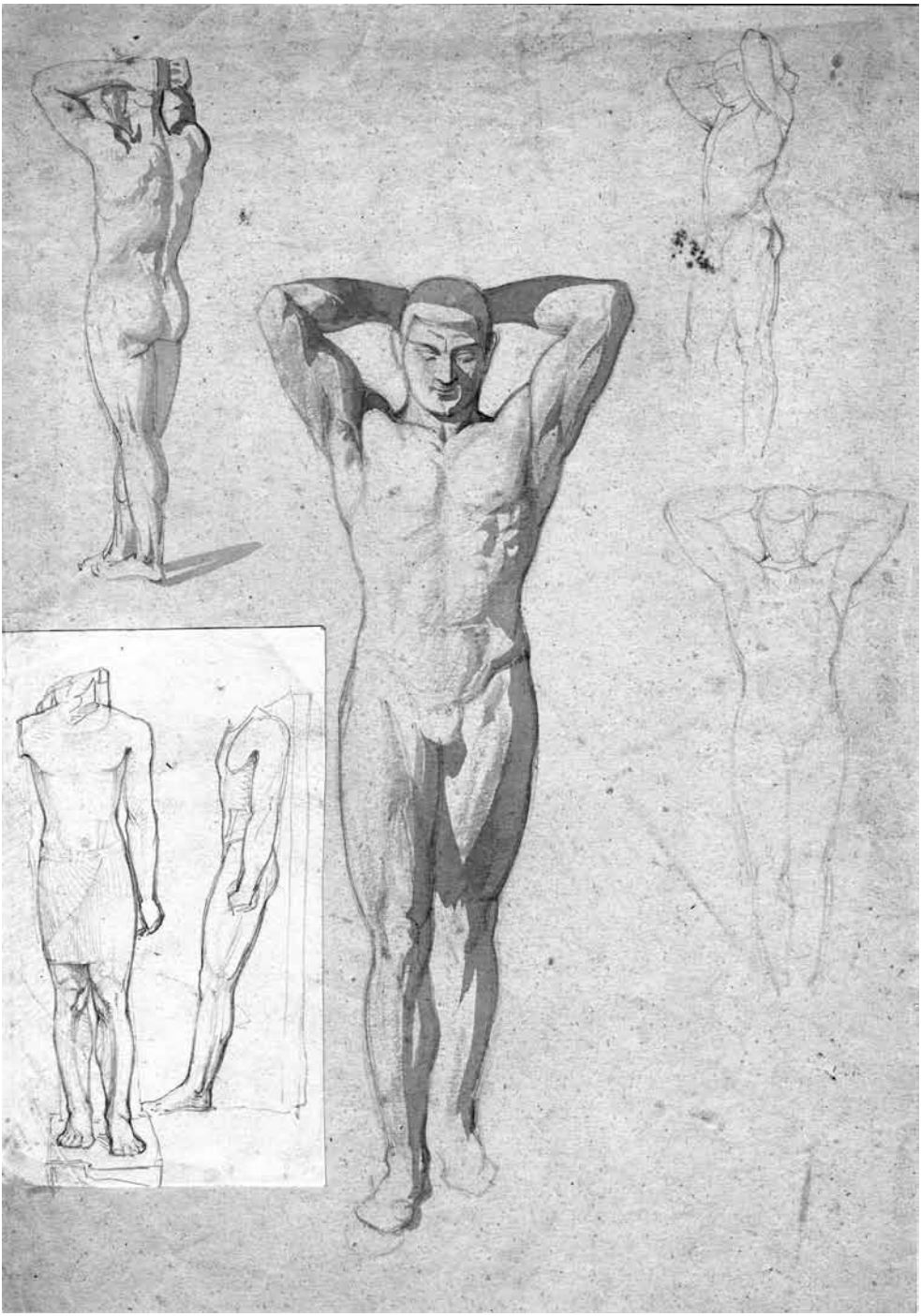
Fifteen plates follow Blouet's explanatory notes, the first being his assemblage of the bath's scattered fragments (Figure 3.1). This threshold into Blouet's presentation of the baths, as well as his decision to repeatedly combine the reconstructed view with the view of the baths in their current condition, is in sharp contrast to Stuart and Revett's approach (described in Chapter 2). Blouet's layout encourages the exercise of the imagination, a faculty that hinges on a willingness to move between places and times, whereas Stuart and Revett's approach appears to be that of a stable field of history from which fragments of time could be, apparently, precisely retrieved (or preserved). With Blouet, a more complex relation exists between the fragments of history and their field of interpretation. By including an array of references and highlighting the different 'lives' of certain fragments, Blouet provides his reader with far more information. Instead of challenging the possibility of reconstruction, the tentativeness of Blouet's reconstruction paradoxically enables the viewer to engage more freely in reading between the two drawings and their different times. Referring back to Carl's theorization of fragment and field, we can consider Blouet's publication as one that resists becoming a field that neutralizes the fragment. Instead, the work remains in a liminal zone that in fact preserves the potency of the fragments.

Blouet's reconstruction of the Baths of Caracalla was widely known and respected. In 1843, Cockerell refers to this *envoi* (published in 1828) in a discussion on the Roman Baths in one of his Royal Academy lectures.[15] In 1845, Cockerell drew a restoration of the Frigidarium of the Baths of Caracalla, a drawing that was probably inspired by Blouet. It is also likely that Elmes was first introduced to Blouet's restoration through Cockerell. At the time of the competition for St George's Hall in 1839 and 1840, Elmes was closely associated with Cockerell, who acted as his guiding light. To add another layer to this already complex web, the architectural historian John Olley presented Elmes's project for St George's Hall as a

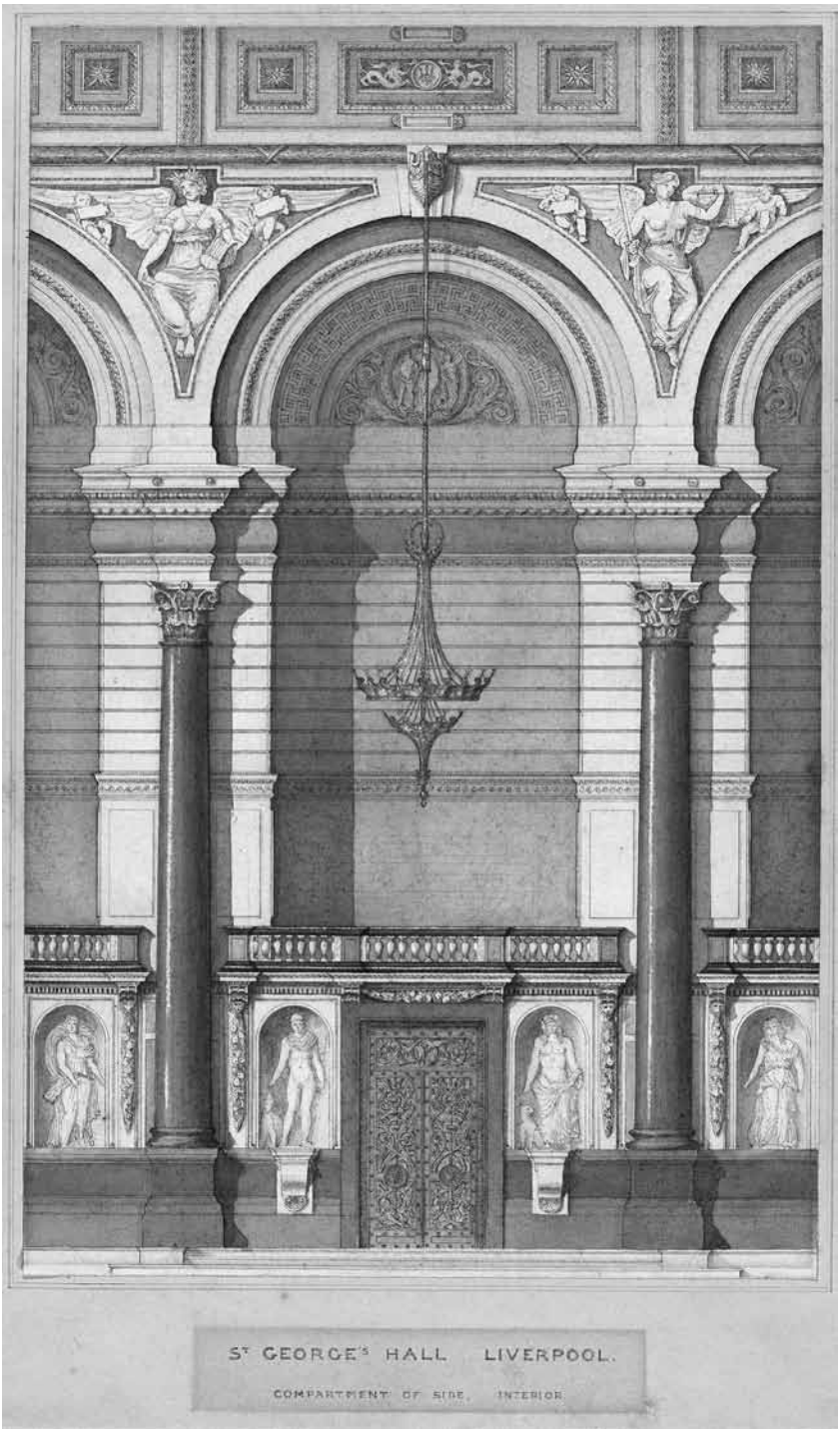
'paraphrase' of a design by Cockerell for Cambridge University Library.[16] While it can be argued that the reference to Cockerell's library may rather point to a common influence of the Caracalla baths, all these intertwining interests and influences invest Goodchild's drawing for St George's Hall with extremely rich references. Drawn in 1854, it may indeed have numerous roots, in one of Cockerell's 1829–30 Cambridge University Library designs, in the Roman Baths of Caracalla dating from the beginning of the third century, and in Blouet's 1828 restoration. Additionally, Goodchild's drawing no doubt originates from Cockerell's own drawn restoration of the baths, from Elmes's design, and from the incomplete structure that Cockerell was left to work with.

Cockerell approached Elmes's unfinished project as he would have a ruined temple. Both Goodchild's illustration of St George's Hall and Cockerell's design for the building's interior speak of the architect's desire to bring its latent beauty to life. In this respect, Cockerell's approach to the building's fragmentary condition remained consistent with his attitude as Grand Tourist. In both cases, fragments played a key role. In *Plate X*, though Cockerell limited the drawing to a lightly drawn temple frame instead of a fully developed restoration, his composition emphasized the fragments in the foreground so that these could ground both his restorative studies of the temple for which the plate acted as the hinge, as well as the viewer's reading of the drawing and hence of the building that could be envisioned from it.

Cockerell's restoration of the Ulpian Basilica presents a similar tripartite composition as the drawing for St George's Hall: fragments appear in the foreground, a sectional perspective in mid-construction features in the middle ground, and the occupants of the building in the background appear to belong to a former time.[17] What is striking here is how both the walls and ceiling hermetically seal the observer from the outside. The external light that enters through the clerestory windows draws attention to the ambiguous nature of the fragments assembled in the foreground in a manner that strangely delineates the shadow that the light casts. Despite the Ulpian Basilica drawing obviously being a restoration, these fragments could easily be mistaken for building materials. Cockerell presents the pieces as the very material from which his own restoration arises. The sealed walls direct the viewer purposefully to the interior, a room gradually brought to life through ornamentation and a succession of different crowds inhabiting the drawing/building. While one can imagine the groups in the foreground discussing restoration plans for the building, the gathering in the background would appear to be taking place in a more remote past were it not for the nearby scaffoldings ready for workers and stone and brick materials. Oscillating the three-dimensionality of the represented space with this two-dimensional representation, the engaged columns on the left wall appear to be solid constructions, whereas their counterparts at the right read as though they were merely painted on the wall's surface. Goodchild's *Fantasy* may easily be paired with the Ulpian Basilica restoration, with the subtle difference being that the Ulpian Basilica site is a reconstruction bounded by the space of the page, which also plays with the quality of the paper as that site, while the St George's Hall site is an actual lot in Liverpool.



3.2 C.R. Cockerell, Four studies of a male figure standing in the pose of the telamons from the Temple of Jupiter Olympius at Agrigento, and two studies of an ancient Egyptian statue on a sheet of blue paper stuck down on to the first sheet, c.1812, British Museum, London, © The Trustees of the British Museum



3.3 C.R. Cockerell, *St George's Hall, Liverpool*, c.1853, Yale Centre for British Art, Paul Mellon Collection, New Haven

The *Fantasy* is not the only St George's Hall drawing revealing the interests already present in Cockerell's restorative efforts. Cockerell animates the hall's surfaces in other drawings through ornamentation, or treats sculptural elements as though these were alive and actively inhabiting the space. A study of a partial interior elevation reveals how Cockerell worked between the actual shell and Elmes's drawings to develop the polychromatic interior. He animates the internal space with colour, reliefs and decorative subdivisions along the walls. In another drawing, Cockerell brings a pilaster to life, in the form of a man whose body and muscles are tense with supported weight. The figure's posture is reminiscent of Cockerell's sketches at the Temple of Jupiter Olympius in Agrigentum (also called The Temple of the Giants). By giving the sculpture a tensile, muscular quality comparable to something seen in a Michelangelo drawing, Cockerell succeeds in animating the restoration's structural – and ornamental – elements.

It is tempting to suggest that St George's Hall is a new field that reorganizes its constituting fragments. And here perhaps lies the unique strength of Cockerell's buildings: a firm equilibrium is expressed both internally and externally, along with a form of open-endedness that makes the assembled fragments an essential part of the building, while these still retain their original anachronism. The building is not a temporal battlefield where each piece must fight for its place and time. Instead, a delicate tension reveals traces of earlier occurrences and allows the assembled fragments to stand both here and there, now and then, part of the present and full of their pasts. In St George's Hall, Cockerell's scheme both completes and competes with Elmes's original design, picking up on certain 'original' intentions and departing from others. The plinth oscillates between being the base of a detached monument to offering an inviting ascent towards the city hall's front door. Inside, Cockerell's subtle shift in the decorative colour scheme completes a transaction between two architects, marking the necessary translation required in any borrowing.

BRINGING IN 'THAT SUBTLETY OF LINE'

In 1846, in circumstances similar to those leading to his engagement in St George's Hall, Cockerell was asked to take over the completion of Cambridge's Fitzwilliam Museum after the untimely death of architect George Basevi (1794–1845). As he would five years later at St George's Hall, Cockerell approached this museum commission as a work to be executed from existing fragments. In his response to the site, Cockerell compounded considerations of the significance of the museum in Cambridge, intimate readings of the drawings left behind by Basevi, and an investment calibrated to the level at which the museum was already completed when Cockerell became involved.

Cockerell's sensitive approach can be most appreciated in his work on the main entrance hall. By the time Cockerell was appointed, most of the external and structural work had already been executed. Consequently, Cockerell's intervention was confined to the interior: the hall, the staircase, and the detailing of the ceiling and galleries. Architect Digby Wyatt (1820–77), who was later asked to widen the

staircase, studied Cockerell's drawings and ultimately refused to remodel it on account of 'the extraordinary care with which the staircase had been set out by Professor Cockerell – every step drawn with a slight curve, so that from whatever point of the hall one went the step presented itself to the tread'.[18] For Wyatt, both the design of the staircase and the ceiling decoration testified to Cockerell's sensibility to the movements of visitors:

> *On examination of the drawings, which were made to a large scale, it was found that there was scarcely a horizontal line in them. Professor Cockerell probably had noticed the optical illusion formed by the tendency to sink in the centre of the flat portion of a ceiling, and he tried to correct this by slight curves, imperceptible to the ordinary eye, in order to give just that subtlety of aspect which would add to its beauty. As the ceiling was oblong on plan, with a dome in the centre and flat portions each side, it was a difficult task, and Sir Digby Wyatt was astounded by the great pains taken and calculations made to produced the refinement required. The ceiling, which was, he thought, still in existence, showed that Professor Cockerell had attempted in that building to bring in that subtlety of line which was in the Greek buildings of old.*[19]

It is interesting how reference is made to ancient Greek buildings to illustrate Cockerell's approach to Basevi's unfinished project. In effect, Cockerell's plans for St George's Hall and the Fitzwilliam Museum both reflect his approach to the construction of a new building as one that begins by considering the fragmentary nature of its existing elements. This directly echoed the sensitivity he displayed when searching through and learning from his studies of the ruins of Greek temples.

Cockerell's acute receptivity is partly what enabled him to be the first architect to measure the *enthasis* on Greek columns. It was Cockerell who produced the first nineteenth-century records of this slight swelling in Greek columns.[20] In 1814, Cockerell sent a drawing to his former tutor Robert Smirke (who was soon to become architect of the British Museum) in which he crudely represented his proof of the existence of *enthasis* at the Temple of Minerva in Athens. Conducting two separate experiments on site, Cockerell verified what had until then remained hidden to other surveyors, something that was 'indeed so delicate that unless one measures it the eye alone cannot perceive it'.[21] Cockerell did not seek to draw attention to the possibility of measuring *enthasis*, something that had already been done, but to attest to its very presence in a masterpiece of ancient Greek architecture. As Salmon has recently pointed out, *enthasis* had actually been measured and written about by Paolo Antonio Paoli in 1784, from work done at Paestum at the Temple of Hera in the 1750s. Even a decade after this, the French Prix de Rome *pensionnaire* Claude-Mathieu Delagardette still refused to accept the swelling as Greek, instead tracing its origins to Roman hands. This same viewpoint was shared in William Wilkins's publication on the ruins of Greece. Wilkins included the description of a swelling at the Temple of Hera I at Paestum, but was of the opinion that this Temple had been built when Paestum was under Roman rule.

Without getting into the intricacies of the debate any further, what is at stake here is whether Cockerell was the first to measure, accept, and understand that *enthasis* was not a product of Roman misinterpretation of Greek practices,

but indeed a refinement to be found and measured in one of the greatest buildings of the Greeks, at the Parthenon in Athens. In this, Salmon asserts, Cockerell was indeed the first.[22] The recognition that a refinement might involve something beyond the harmonious and exact proportions that had been the main objects of works published until this point is the key significance here. Cockerell's acknowledgment of the Greek practice of integrating actual deformation to achieve a form of perceived perfection implied a willingness to consider the buildings not in and of themselves but, more importantly, as a moving or stationary viewer might experience them. *Enthasis* enabled one to see a straight line and not the swelling itself. Only expert eyes could distinguish the swelling by carefully following the fluting of the column. The level of refinement in this practice is directly related to the viewer's inability to perceive the 'trick': it is a visible effect created by an invisible artifice.

Because a building's artifice had been previously understood to include its ornamental additions, Cockerell's recording of *enthasis* on the Parthenon bore deep repercussions. First, its presence forced a major reconsideration of the artifice's integrity in terms of not only the building's destination or even its structural development (as had already been acknowledged), but also in light of the phenomenological experiences of visitors to the site. This shifted the appreciation of the work beyond its physical boundary and into the previously unconsidered sphere of experience. Secondly, the appreciation of *enthasis* elevated the invisibility of the fine detail insofar as it benefited an actual, intangible experience. In this context, the real tour de force was the creation of an appealing, immediate experience, founded on the subtlety of architectural decisions beyond the scope of a viewer's direct rationalization.

When Cockerell inherited the Fitzwilliam Museum commission, he also received Basevi's drawings. Like in his later work in Liverpool, he was working from an existing shell and the intentions of the architects that preceded him and, just as they would in Liverpool, these intentions reached back to different examples and practices, both ancient and contemporary. In his drawing for an 'elevation of a doorway for the principal gallery' (1843–5), Basevi included various notes on materiality (such as bronze, red marble, and Egyptian granite), precedents ('same cap. as at Conservative Club'), and where he also specified the use of curved lines: 'Columns and pilasters to diminish by a curved line'.[23] These notes, along with Cockerell's own sensibilities, directed the continuation of the work. What Wyatt qualified as bringing in 'that subtlety of line which was in the Greek buildings of old', was Cockerell's ability to tackle what could only be appreciated by remaining invisible. If in his restoration drawing Cockerell sought to situate observers and stage their movements about the temple, this sensibility translated into an extraordinary awareness of future movements when constructing architecture out of present fragments. By prioritizing the immediate encounter, Cockerell was testing the drawn proportions of the projected building against the envisioned experience of a space perceived by moving users in actual time.

In his project for the Fitzwilliam Museum, Cockerell was operating within at least three sites: his memory of Greek architecture and its subtleties, the existence of the already completed frame overseen by Basevi, and the memory of Basevi's

projected building as preserved in his drawings. Within this compounded context, Cockerell proposed a whole that would remain faithful to its parts. Both projects, the Fitzwilliam Museum and St George's Hall, successfully amalgamate different visions and different times. Ultimately, the restoration of St George's Hall expresses a sensibility to the site of architecture, whether it is a great Greek ruin, an existing context, or the vision of a fellow architect.

IMITATION AND INNOVATION: DRAWING IN TIMES

The paradoxical relation between field and fragment bears similarity to the distance between imitation and innovation, a tension felt acutely in the nineteenth century. The question here is how the 'new' fragment can claim its pace against the 'existing' field, how far it is seen to be 'neutralized' by the past or conversely, whether it may be considered as being enriched by the potential multiplicity of temporal grounds. A critic writing on the competition for the new Houses of Parliament in 1836 reflected on the issue that would brand nineteenth-century British architecture:

> *Is it beyond human power to produce some new system of architecture? Surely not. Preserve all your ancient buildings; store them up as words belonging to the languages of your art; but use these words only to compose new sentences; and do not reproduce those already known; for, if you do, what will posterity say of you? That you could copy well in the nineteenth century, but you could not invent.*[24]

The struggle between imitation and innovation reached a critical point in the nineteenth century, but the root of the debate harked back to the '*Querelles entre les ancients et les modernes*'. Invention was praised over servile veneration of the past; architects and critics sought to emancipate innovation from imitation. This belief in the possibility of novelty and the never-seen or never-done-before was inscribed in a new, open conception of the world: both the roots and future of humanity were blank fields open to breakthroughs and discoveries. Concurrently, language itself was increasingly perceived as a mirror to a large array of humanistic or scientific conceptions. Etymologically, language was expected to keep up with scientific discoveries or humanistic studies, and embracing the proper terminology was considered essential. The critic quoted above was responding to a similar imperative in his comparison of the preservation of ancient buildings to the act of storing them up 'as words' to be used to 'compose new sentences'. While he is referring to its application and development, language's internal workings were also being reconsidered. Along the way, the essential human faculty of language gained new autonomy from the world.

In his work, *Les mots et les choses* (1973), Michel Foucault studies the progression of language's autonomy. He first describes a period before the Renaissance when origins were understood analogically through a relationship between the microcosm and the macrocosm, and when the existence of a 'primitive text' was not yet contested. It was a period when signs were not constituted by the human mind but belonged to the things themselves, as if they had been marked. In this

world of resemblance, significations could be discovered and deciphered by an invested reading of the pre-existing mark. Later, in the classical age, just as the tight connection between microcosm and macrocosm was being questioned, so was the a priori of the signature that until then was thought to mark each thing. Just as the words of the world were no longer considered to be the image of the things they were representing, signs were dissociated from objects and increasingly considered as born from an '*acte de connaissance*'. In other words, a sign could no longer be present prior to one's awareness of its presence. In modern times, Foucault describes the situation as one where everything has always already begun, where origins recede into history. He refers to this shift as a mutation from 'Order' to 'History', from the simultaneity of the *tableau* to historical successions:

> *Just as Order in Classical thought was not the visible harmony of things, or their observed arrangement, regularity, or symmetry, but the particular space of their being, that which, prior to all effective knowledge, established them in the field of knowledge, so History, from the nineteenth century, defines the birthplace of the empirical, that from which, prior to all established chronology, it derives its own being … In the nineteenth century, philosophy was to reside in the gap between history and History, between event and the Origin, between evolution and the first rending open of the source, between oblivion and the Return. It will be Metaphysics, therefore, only in so far as it is Memory, and it will necessarily lead thought back to the question of knowing what it means for thought to have a history.*[25]

In this context, the revived notion of imitation was linked to a complex understanding of its actual impossibility. For the ancients, true mimesis implicitly referred to an active participation in a shared cosmological movement. In the nineteenth century, imitation still attempted to bridge a gap between man and the world, but its outcome laid more emphasis on the distance itself (between something past and something new) than on the possibility of bridging. This emphasis was largely due to a changing understanding of the world. This world was no longer addressed as a whole such as the cosmos formally implied. Rather, the world was synonymous to its known history, and this history was fragmented into specific periods. In this respect, the apparent impossibility of imitation shares roots with the widening gap between words and things. Imitation is no longer participation, it is the transposition from one historical context to another, a process that inherently requires transformation.

The parting of words and things, leaving human beings in a lived history and with a metaphysics that is but a memory, forms the context within which Cockerell spoke of architectural imitation as a translation and as a copy. His understanding of imitation acknowledged a temporal distance that could be bridged through translation, not one 'close and philological' but 'free' and 'confined to the senses only'.[26] Cockerell drew attention to the free and rich translations of Alexander Pope (1688–1744), praising the writer's awareness of the context in which he was writing. Cockerell also noted the shortcomings of another writer, Georges Wightwick (1802–72), mourning the missed nature and lost life of Colonna's work

in Wightwick's translations.[27] Praising sensuality and vitality, Cockerell stressed how the translator necessarily had to be aware of two times, whether this was two texts or two buildings. What is more, Cockerell recognized the crucial play between the 'imperfect' but '*actual* remains', the necessary movement between the work of the imagination and the possibility of discovery. Fundamentally, it also seems that the pairing of architecture and language – and the parallel between translation and imitation – owed more to their being construed as acts of communication that could no longer be taken for granted. In this respect, it was not the erudition, exactness, or amount of learned notes that mattered, but that the observer's senses were being affected.

If Novalis described the translator as 'the poet of poetry',[28] we could consider Cockerell the 'architect of architecture'. His consciousness of time led him to approach architectural history as the *prima materia* of the architecture of his day, and his work as consisting of a translation from one time to the other. His work was not merely translated architecture but new architecture, just as translation in poetry leads to the creation of a new poem. Building in the nineteenth century, Cockerell was indeed working in the distance between 'history' and 'History', between times and Time. In both cases, fragments formed the basis of his work. Cockerell emphasized the 'imperfect *actual* remains', approaching the construction of new buildings as fragments of larger wholes.

Cockerell's drawings become one of the sites in which this complex relation takes shape. Epistemologically, his drawings hark back to actual precedents or existing representations. Phenomenologically, they offer projections for present and future viewers. This next section will scrutinize two drawings considered thus far – *The Professor's Dream* and *Plate X* by Cockerell, then returning to Goodchild's *Fantasy of St George's Hall* to elucidate the unfolding relation between the epistemological and phenomenological dimensions of drawing.

First Analysis: *The Professor's Dream*

Comparing *The Professor's Dream* with an even earlier graphic essay by Cockerell, *A Tribute to the Memory of Sir Christopher Wren* (1838), reveals the nature of the involvement Cockerell was seeking in his 1848 drawing.[29] Like the *Dream*, the *Tribute* presents an atmospheric rendering of a collection of public buildings, yet these assembled buildings have all been designed by the same architect: Wren (Figure 3.4). This reveals a fundamental variance in the scope of the two drawings: while the *Dream* could never encompass the infinite number of significant buildings of history, there was necessarily a finite number of buildings built by Wren. Perhaps this difference in scope partially explains dissimilarities between the experiences suggested by the two drawings. The *episteme* of the *Tribute* is finite, and the experience of contemplating Wren's work allows one to stand as though dominating and assessing a complete whole. Meanwhile, the epistemological framework of the *Dream* is the unfathomable breadth of a history still running its course. An attempt to collect all of history's works dooms one to experience but a fragment of an unknown whole.

3.4 C.R. Cockerell, *A Tribute to the Memory of Sir Christopher Wren*, 1838. Published with the permission of the RIBA Drawing Collection, London

This epistemological difference leads to different staging of phenomenological readings. In the *Dream*, buildings are arranged on four platforms. In the *Tribute*, the ground rises in perspective, and the observer is placed above the rooftops, looking down at the parade making its way through the central gate – Temple Bar, which Cockerell wrongly attributed to Wren – dominated by St Paul's. From this static viewpoint, the observer remains in control, slightly above and slightly detached. The observer could even draw a complete street plan of the *Tribute*'s imagined city. In the *Dream*, there are no streets, and hardly any perceived physical space exists between the buildings. Here, Cockerell calls upon his viewers to enter and discover for themselves which buildings bleed off to the side, and which others can be guessed at through the translucency of another. The *Dream* is infused with what has not been drawn, necessitating that it be explored in a more involved, quasi-experiential reading. The shift of the horizon, from one drawing to the other, further attests to the different levels of involvement demanded of the observer. The ratio of building to sky varies drastically in the two drawings. In the *Tribute*, St Paul's Cathedral dauntingly breaks the horizon line located halfway up the page. But in the *Dream*, despite the four levels across which the buildings have been staggered, it is undeniably the lower line grounding the Egyptian productions that establishes itself as the first reference for the horizon. This horizon also has a thickness that is not present in the *Tribute*. In the *Dream*, because the viewer has no fixed vantage point from where earth and sky could be set to meet in a clear line,

3.5 C.R. Cockerell, Gate detail from *A Tribute to the Memory of Sir Christopher Wren*, 1838. Published with the permission of the RIBA Drawing Collection, London

it is as though the distance between earth and sky must be travelled. The horizon becomes the depth of a distance spanned by the buildings in time, as well as the spatial depth of their juxtaposition even within each historical period. The viewer can only explore these times and spaces through a direct involvement in the drawing, thereby thickening the line of the horizon into a depth where the human experience can unfold.

Both drawings share another element that invites the viewer's involvement: gates. In the *Tribute*, viewers would have to travel from their privileged vantage point and attempt to make their way through the busy parade marching to join them as they enter through the gate (Figure 3.5). And to what end, considering that everything is already before them? The scenario is different in *The Professor's Dream*. In front of the high gate, which can be identified as the First Pylon of the Temple of Ramesses II at Thebes, two small figures stand, perhaps about to enter (Figure 3.6). Although there are signs of human intervention in front of it, this gate really does mark the beginning of the timescape the architecture represents. The buildings – some in ruins, some reconstructed, some partially drawn, others partially concealed – await the observer's involvement. And while most of the represented buildings are identifiable, they must first be distinguished from one another before the viewers can begin to associate one fragment with another, dwell on the details, or simply immerse themselves in the richness of time. The same Egyptian gate also occupied the lower centre of Cockerell's drop-scene (Figure 1.7), but it opened onto a solid wall. In the *Dream*, there is space beyond the gate, in front of the brightly lit Greek buildings, inviting the observer to enter into the depth of the drawing. One group is evidently meandering their way up to the Parthenon, rendering it possible to move through and across the drawing.

3.6 C.R. Cockerell, Gate detail in *The Professor's Dream*, 1849. Published with the permission of the Royal Academy of Arts, London

Just below the main gate, the entry into the Pyramid of Cheops is represented. The 4,000 year old building thus nearly spans the entire height of Cockerell's drawing, dominating the cathedrals of St Peter's and Ulm, St Stephen's and Strasbourg. As indicated by Goodchild, Cockerell decided to place the pyramids of Cheops and Chefren upon the fourth ground line rather than on the first Egyptian level where they naturally belonged, 'for the better comparisons with the moderns'.[30] Yet, Egyptian architecture also appears on the first platform. In their experience of *The Professor's Dream*, observers entering through the gate, whether traveling horizontally, vertically, or in the depth of the page, would be brought back to their starting point. This double positioning of Egytian architecture may suggest that Cockerell considered that history developed through revolutions rather than evolution.[31] In his notes, Cockerell sometimes hinted at a comprehension of history as a series of revolutions where the forces at play were always essentially the same.[32] But placed amid medieval and modern works, the pyramids on the fourth level are first and foremost anachronistic, literally brushing history against the grain.

In his *Dream*, Cockerell the professor invited his students of architecture to dwell in history, not to order it. He privileged experience over the aerial view, favoured temporal depth over the fixed perspective, promoted anachronism rather than a strict spatial and temporal order. Whether it be the gate, the thickness of the

horizon, or the anachronistic position of the Egyptian pyramids, Cockerell suggested that the search for the origins of architecture was driven by a multiplicity of new beginnings: history must be experienced anew, by each individual. In his lectures, Cockerell emphasized how history's significance was rooted in one's willingness to physically dwell in its details:

> *modern arch[itec]t have been too much influenced by the prosaic & exact system of modern times, & have often sacrificed the matter to the manner & lost themselves in minute unproductive enquiries – . not so Palladio & those masters who sought to penetrate the mind with which these works were designed. They failed in exactness as we shall see thereafter – but they enriched their mind & were (enabled?) to bestow those great examples of master in our art which only the True translator can accomplish. The modern arch[itec]t in his investigations has adopted the close & philological, the literal translations of his author[;] – the former arch[itec]t were free translators confining themselves to the senses only – They like Pope wrote the siege of Troy in their own manner, not the siege of Troy of Homer. We on the contrary encumber the text with an ocean of learned notes. the text itself literal […] & chained with the shading of exactness to the imperfect actual remains – without any aid afforded to the imagination, scarcely enables you to discover the merit & the beauty of the original.*[33]

Praising Renaissance architects for relying on their senses rather than on erudition, Cockerell stressed the importance of the senses but also of imagination in architecture. In doing do, he was suggesting that rooting architecture in history was comparable to the efforts of a translator. He likened the student of history – the architect as translator – to an artist:

> *First that we should examine antiquity not as antiquaries with minute attention to temples, or a blind adoration of their venerable age – but like artists to discover the scope – the intention – the mind which was exerted in them.*
>
> *Secondly that in our examinations of antiquity & Precedents[;] we should always follow the great works & vast efforts of the art. we should love to contemplate greatness. we shall find our account in it – in them vast principles in a vast scale are embodied & developed. [gap] never look to second notes for examples, go to the fountainhead.*[34]

Thus, the gate of history was open, inviting students of architecture to wander in, to form their 'own account', to travel – with their imagination – to the fountainhead and, trusting their senses, to build a new architecture as a free but true translation (that is, an imitation) of architecture's origins, its history.

Second Analysis: *Plate X*

Plate X involves a one-point perspective, with the vanishing point located approximately at eye level in the centre left of the image. While it is difficult to identify exactly what the stone 'holding' the vanishing point might have been a part of, it clearly falls beyond the *naos*, or sacred precinct of the temple. As such, it falls even beyond the location of the single Corinthian column, and is possibly of

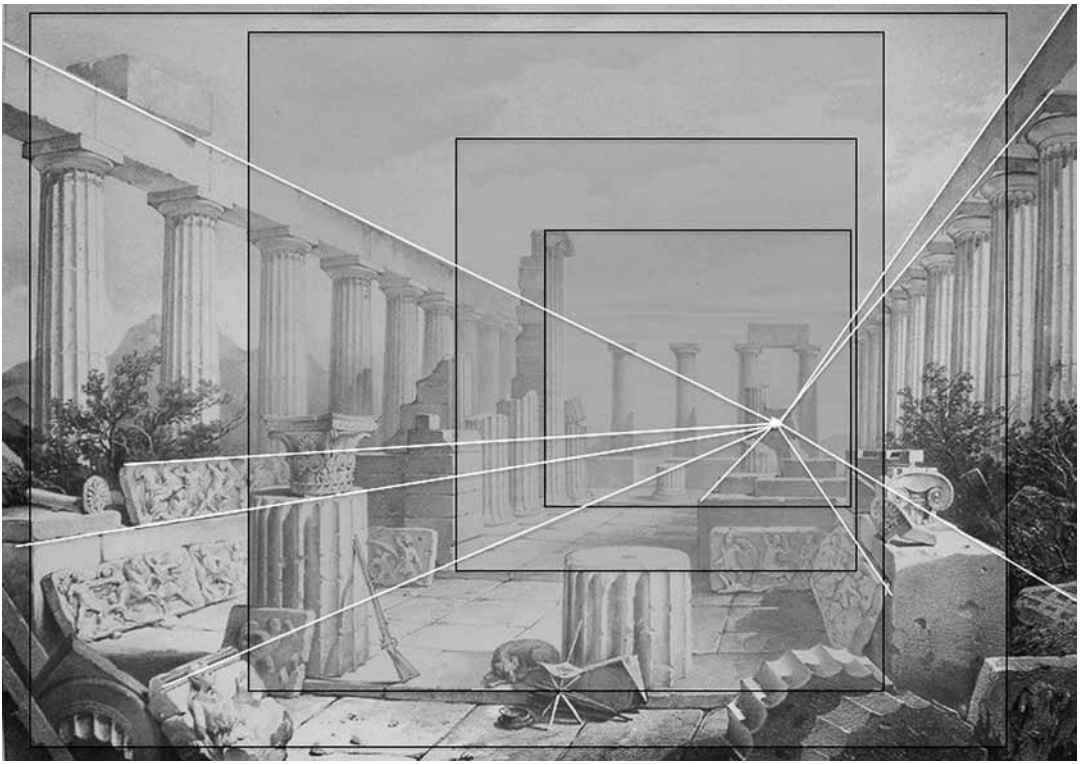
the *adyton* where a large sculpture would have once been located. It is clear from the drawing that the stone is within the temple, but unclear whether it is part of the wall between the *adyton* and the *opisthodome* at the back, or whether it belongs to a column that defines the *opisthodome*'s outer edge.

The difficulty in matching this drawn fragment to the temple's reconstruction suggests that it is perhaps one of the props Cockerell used when making his drawings. It may be that this was included to collect the lines from which every other fragment was projected within the representation. In the drawing, this piece of stone stands unnoticed, but if one visualizes the vanishing lines from this point, it emerges as a mysterious shape lying at the source of the graphic projections (Figure 3.7). Because the vanishing point lands on this stone (as opposed to disappearing in the depth of the landscape beyond), its position creates two noticeable effects. It grounds the drawing as a reconstructed world of its own belonging to a different realm than the landscape it includes. And, if we imagine the architect directly facing the vanishing point, this nondescript piece of stone momentarily becomes a small speculum within which the whole scene is withheld.

The viewers in the drawing stand to the left of the architect, in the opening created through the fragments that otherwise populate the foreground. They are positioned between the peripheral columns and the two fragments of columns defining the threshold of the *pronaos*. The temple fragments are contained below the horizon line. Fragments of the frieze and columns share the space with a Doric capital in the lower left foreground, and a Corinthian and Ionic capital on the left and right middle ground respectively. Above the horizon, the perimeter wall of the temple now frames views to the landscape beyond. Above a continuous line of Doric capitals, a sole example of the Bassae Ionic still stands, its two eyes (volutes) presiding over the scene.

In this plate, a form of layering dominates the composition. Moving into the depth of the drawing, a series of frames define interlocking layers. Frame 1 is before the threshold of the *pronaos*. Frame 2 opens onto the *pronaos*. Frame 3 marks the entrance to the *naos*. The last, Frame 4, is partially defined by the Ionic column and opens onto the peripheral wall, the landscape and the sky beyond. The first frame, closest to the viewer, is also the nearest temporally. It contains the apparently untouched fragments, recent plant growth (inside the temple precinct), some rearranged sections of the frieze, and the architect's easel. The second frame is claimed by the architect, with his rifle, his dog, and his main hunting trophy (the Corinthian capitals) staged within. The third frame is more barren and more mysterious. Apart from the tall Ionic column that allows the viewer to piece some of the temple fragments together, the space between Frame 3 and Frame 4 is remote both physically and temporally. Finally, the last frame holds what is of a different time: the absence of the Corinthian capital and the immutable landscape, a view onto what would not have been visible were it not for the temple's ruination in time.

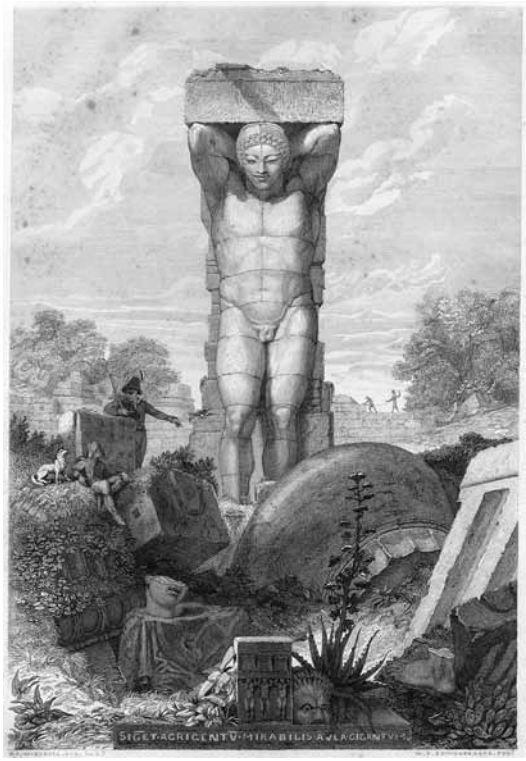
It is impossible to attest how much Cockerell was consciously distinguishing between these different frames, and how much of these divisions arise naturally from the temple's own character. What is certain is that the drawing's interlocking quality, the way in which different elements simultaneously occupy various spatial



3.7 Analytical study of *Plate X* (by the author), based on image in *The Temples of Jupiter Panhellenius at Ægina, and of Apollo Epicurius at Bassae near Phigaleia in Arcadia* (London: J. Weale, 1860), Musagetes Library, University of Waterloo

and temporal frames, is experienced in a number of Cockerell's buildings. While in *Plate X*, the presence of the Corinthian capital in the foreground carries the shadow of its former presence in the background, likewise the main façade of the north wing of the Cambridge University Library features echoes of past projects studied by Cockerell, as well as traces of quadrangle sections he designed but never built.[35] Cockerell also seems to have translated the pleasure he derived from observing ancient fragments from an unexpected perspective to his own architectural projects. In *Plate X*, the viewer can scrutinize an Ionic capital neatly placed just below eye level, and simultaneously appreciate the breadth of the column and capital – experiences possible only due to the temple's ruined condition. At Cambridge University Library, Cockerell encourages visitors to navigate freely around the columns, whether by spiralling up a staircase around a column's base and up its fluting, or even walking up on a catwalk seeing eye-to-eye with the column capitals. In all these instances, Cockerell's approach enables the play between presence and absence, fragment and wholeness, between spatial proximity and temporal distance.

Comparing *Plate X*, which occupies the heart of Cockerell's publication on the Temple of Bassae, with another representation of fragments by Cockerell, the frontispiece to supplements to the fourth volume of the *Antiquities of Athens*, we find the dog and the artists 'at no great distance' in both images. In the second plate, etched by William Camden Edwards, we can appreciate once again the image's richness, but in this case it is achieved mainly through a play of scale (Figure 3.8).



3.8 C.R. Cockerell, *Temple of Jupiter Olympius, Agrigento: fragments* in *The Temple of Jupiter Olympius at Agrigentum* (London: Priestley and Weale, 1830). Published with the permission of the Royal Academy of Arts, London

As the name indicates, the Temple of the Giants featured rare anthropomorphic pillars. According to the most recent reconstructions, it is thought that at least seven giants, each one measuring about 7.5 m high, were placed in niches between the columns on the building façade. Similar to the Caryatids, the anthropomorphic columns were shaped in such a way as to convey the support of the building's load. Upon his arrival at the temple, Cockerell described the pleasure he experienced in reconstructing the fragments of these giants, and singled out the pieces that could be assembled to recreate a substantial part of one of them. Although Cockerell misinterpreted their location, and reconstructed the temple with the giants acting as a second order inside the cella, his success in identifying the fragments necessary for the assembly of one of the giants was no small feat.

Cockerell's composition for the frontispiece to his 1830 publication does not display the same spatial depth as *Plate X*, but operates similarly, with layers of fragments both up the page and into the depth of the drawing. Focusing specifically on human forms, a glance from the foreground to the background reveals a variety of scales and conditions. What could be a scaled model of the temple occupies the centre of the foreground, showing three figures supporting the load of what might be an entablature. While Cockerell chose to include this fragment in his composition of an ancient site, the piece in fact represents the arms of the modern city of Agrigento. The stone above these arms reveals the grooves that would have enabled Greek builders to use a metallic or vegetal handle to lift and secure the stones in place. Beside this, to the right, is a *mascherone*, a kind of grotesque mask associated with water and the gods of water. Slightly behind and to the left is a fragment of a head. It is likely the lower half of a woman's head, together with part of a drapery that would have been on the pediment.[36] Farther up and deeper into the page, two explorers and their dog stand amidst the fragments, tiny in comparison to the giant behind them, but themselves giants to the scaled model below. In the distance, to the left of the reconstructed giant order that dominates the page, two additional figures are seen on what looks like the remnants of a large wall.

In this scenario, what is particularly interesting is the even vitality of every piece represented. Whether it is a plant, a reconstructed part of a temple, a human being or an architectural fragment, each piece vivaciously claims its space. Freezing as it does a moment of time, the drawing makes it possible to see these assembled pieces against this arrested time, a quality that seeps into the viewer's experience and affects how they might envision the next moment. The possibility that the man

in the middle left may drop his arm or raise it even higher tints the few seconds of our reading of the drawing, making us aware of the characters' potential movements. Likewise, the giant's smile could in a moment spread into a full grin or disappear entirely; the *mascherone* might blink. In short, the apparent stillness and solidity of the reconstructed giant – itself the result of Cockerell's movements about the site as he physically grappled with fragments on the ground – paradoxically testifies to the fleeting nature of all things. Beyond the similarity of forms, each eclectic anthropomorphic fragment brings its associated temporal framework, and these reframe the viewer's reading of the assembled fragments. Fathoming the giant's movements can momentarily tint the viewer's reading of the two small figures as forever monumentalized heroes. Hence, Cockerell reveals not only the potential power of interlacing spaces, but also the potent effects of the interpenetration of times. Simplistically put, this might involve transporting the viewer from a nineteenth-century museum to a Roman hall; but perhaps with more subtlety, it represents the willingness to consider the formal attributes of precedents with all their historical and phenomenological bearings.

If *Plate X* points to the key role of interlocking frames operating in juxtaposition both spatially and temporally, the frontispiece for *The Temple of Jupiter Olympius* hints at the potency of contrasted scales. It also builds on the viewer's propensity to perceive the fragments against their field, encouraging connections that might not otherwise emerge. Cockerell's efforts to bring fragments to life on the one hand, and encourage the viewer's phenomenological engagement with the image on the other, reflects his intention of portraying movements of projections in time. Here, Cockerell plays on a dual condition that can be observed, for example, in sculpture: life-like yet immobile. In the accompanying text to his thorough publication on the antiquities of Sicily, Charles Hittorff describes this quality. Arguing that Greek sculptures were always painted, he points to the pigment traces observed on fragments, but his main proof rests on the impression the sculptures make when left bare:

> *Our opinion [that sculptures were painted] was confirmed following a number of trials that allowed us to see the horrible effect created by figures when their painted lips and eyes contrasted to the natural tone of the ivory or marble: their whiteness bring up the paleness of death and make them look like petrified specters. Conversely, a soft skin tint produces the most harmonious effect. The appearance of life gives real charm to the face; the absence of movement grants it an incontestable majesty.*[37]

The play between 'the appearance of life' and the 'absence of movement' permeates Cockerell's drawings and buildings. As he strove to bring life to fragments, to bring halted projects into being, Cockerell sought to animate the spaces and scenes with a vital quality, also depending on the viewer's observation of a momentarily arrested movement to invigorate this effect.

Third Analysis: *A Fantasy of St George's Hall*

In contrast to the drawings considered so far, the foreground of the drawing for St George's Hall is not dominated by fragments but by scaffolding and traces

of construction, time's future rather than its past. A crowd seems to have been transposed to St George's Hall from Cockerell's watercolour of the *trepidarium*. Between the translated *trepidarium* of the Baths of Caracalla, the floor reminiscent of Cosmati and the shrunken giants, the interior space is filled with anachronic fragments carrying their own past and projecting into the space. As ever, the sculptural elements are treated as if these were alive and populating the space – just as in Cockerell's reinvigoration of Elmes's polychromatic study, just as in translating Agrigento's giants to Liverpool.

This life-like quality emerges as one of the most potent characteristics of Cockerell's re-presentations, drawings, and buildings. Through layering, scaling, framing, and by letting each fragment emerge, Cockerell presents anachronistic collections that insist on the viewer's willingness to operate outside a single time. His drawings inherently and critically address architecture's relation to time. Cockerell's accretive approach to drawing calls forth actual and represented precedents as well as contemporary references. His drawings constitute an open site upon which multiple perceptions and untapped potentials can emerge: they act at once as record (or memories), as actions, and as projections.

DRAWING AS RECORD, ACTION AND PROJECTION

The term 'record' is taken from the Anglo-Norman and Middle French word, *record*, designating a piece of evidence about past events in the form of a memory, an account, a story, or a discussion. 'To take record of' is to bear testimony to a fact or series of facts. 'To record' is to preserve something as knowledge or information. While the term is typically used to designate a memorial or a thing preserving the memory of a fact or event, a more rare but nevertheless pertinent definition of record is as the account or reckoning of past time. As a record, a drawing not only addresses the specific topography of a site, but is implicitly the expression of a particular stand on the cultural, historical, and social contextual dimensions of that specific site. In recording through drawing, architects inevitably assume a perspective on time. This positioning may communicate a sense of completeness or the acceptance of the ever-unfinished, it can range from assuming the possibility of the whole to embracing the inevitability of the fragment.

If as a record the drawing offers a perspective on the temporalities embedded in a site, as a projection the drawing opens onto potential futures. To project comes from *projectum* and *projicere*, and applies to the act of pushing forward or that which has been thrown forward. As Robin Evans argues, 'Projections – the invisible lines that relate pictures to things – are always directional. Drawings arrest and freeze these vectors, but even in this fixed state, projected information can be mobilized by the imagination of the observer'.[38] The drawing as projection thus concerns its power to induce further actions. This projective nature is left to the imagination of the viewer, but also anticipates a body moving in space, that is, the apprehension of the kinetic and embodied experience of architecture. In this respect, the drawing is not only a projection of a building yet to be constructed, but also projective in how it expects movements in time. What is visible becomes seen, so that, ultimately,

what is spatial can be experienced and lived. When considered strictly in the context of architectural drawings, projections hinge on the dematerialization of lines, on walls becoming spatial, on rooms opening and closing, and on the inside moving outside. In Cockerell's case, projections occur most potently when different times fold into one another, when breaks are experienced as continuities.

Beyond the embodiment of the recorded site and the projection of a future building, each step in the drawing process carries its past and its future. Drawing is an action. In the words of Juhani Pallasmaa:

> *[…] every act of sketching and drawing produces three different sets of images: the drawing that appears on the paper, the visual image recorded in my cerebral memory, and a muscular memory of the act of drawing itself. All three images are not mere momentary snapshots, as they are recordings of a temporal process of successive perception, measuring, evaluation, correction and re-evaluation. A drawing is an image that compresses an entire process fusing a distinct duration into that image. A sketch is in fact a temporal image, a piece of cinematic action recorded as a graphic image.*[39]

It is in this sense that the drawing is action, in its dialectical power to put into relation past and future, but also, the haptic and the optic, the dynamic and the static. Drawing as action ties the image recorded in memory to its projection on paper; it summons both the memory of the body tracing the line, and the visual perception of the world in the momentary arresting, on paper, of the movement of a constantly shifting reality. The presence referred to by the projection is anachronic, belonging to a time yet to come or maybe even already past. Hence, the act of drawing finds its strength in its anachronistic suspension as a piece that constantly harks forward and backward.

In this triple consideration of the drawing as record, projection, and action, the emphasis each time is on the inherent quality of the drawing to summon phenomenological time. As a record, the drawing is polarized between the expression of a deep, embodied spatiality at one end of the spectrum, or a flattened or frozen time at the other. In this manner, the record implies a projection of its author's conception of the relation between architecture and time. It also indexes the sensibility with which the architect is willing to engage with architecture's temporal dimension. As a projection, the drawing calls upon the viewer's phenomenological involvement in the space of the drawing, engaging their willingness to actively travel it in time rather than passively receiving it as a fixed image. Inviting projection across, up, and into the page, the author of a drawing can enable incursions into the fourth dimension where projections may be extended and new movements can be found. As an action, drawings operate dialectically, between recording and projecting, between the architect's perception and that of the viewer. As such, to acknowledge that drawing is action is to accept the architect's responsibility and intentions, while remaining open to a multiplicity of readings. Drawings are dialectical, embodying polar identities as recording and as projection. In this situation, neither the recorded site nor the projected building are stable, and only as the drawing wrestles between these two conditions can it do justice to the multiple temporalities embedded in both the site and the project.

NOTES

1 Commendatore Canina, C.R. Cockerell, J.S. Harford, *Illustrations, Architectural and Pictorial, of the Genius of Michael Angelo Buonarroti* (London: Colnaghi, 1857), 1.

2 As Goodchild was Cockerell's employee for over 25 years, we may reasonably assume that this drawing was, if not set up by the latter, at least executed under his supervision. Similarly, the drawing of Cambridge University Library is also thought to have been executed by Goodchild. Likewise for the restoration drawings, Phené Spiers argues that, 'the original perspective drawings […] were probably made by his chief clerk, [J.E.] Goodchild, and these were worked upon by the professor, who drew in the figures and gave that brilliant effect of light and shade which characterises them'. See R. Phenè Spiers, 'Cockerell's Restorations of Ancient Rome', *The Architectural Review* 29 (1911): 123.

3 Cockerell, *Travels …*, 207.

4 In 1824, restoration was defined, in relation to architecture, as 'the process of carrying out alterations and repairs with the idea of restoring a building to something like its original form; a general renovation'. In 1836, restoration was also applied to 'a representation of the original form of a ruined building, extinct animal, etc.' An 1841 definition reads: '*Restorations*, in Architecture, a term applied to drawings intended to show ancient buildings according to their original design … In some cases the building itself will afford sufficient data for a complete restoration of it upon paper'. (*Penny Cycl.* XIX. 420/1). From *Oxford English Dictionary*.

5 Namely, Salmon describes how George Ledwell Taylor and Edward Cresy were eager to collect accurate measurements and replace Antoine Desgodetz's *Les édifices antiques de Rome* (1682) with their *The Architectural Antiquities of Rome* (1821). See Salmon, '"Storming the Campo Vaccino"', 146–75.

6 See Henri Labrouste, *Les temples de Paestum: restauration exécutée en 1829* (Paris: Firmin-Didot, 1877).

7 The drawings of *Imaginative Reconstruction of Athens in the Time of the Antonines* and the Forum of Nerva are respectively held at the RIBA Drawing Collection and the Royal Academy of Arts in London.

8 Sigmund Freud, *Civilization and Its Discontents,* trans. J. Rivière (London: Hogarth Press, 1957), 4.

9 Salmon, *Building on Ruins,* 219–20.

10 All of this is noted by Blouet in his introduction to the plates. Guillaume-Abel Blouet, *Restauration des thermes d'Antonin Caracalla à Rome* (Paris: Didot, 1828), 6.

11 Peter Carl, 'On Depth, Particular and Universal, Fragment and Field', in Barry Bergdoll with Werner Oechslin, eds, *Fragments: Architecture and the Unfinished: Essays Presented to Robin Middleton* (London: Thames and Hudson, 2006).

12 Carl, 25.

13 After contrasting Le Corbusier's *Poème de l'angle droit* to the iconostasis found in Greek Orthodox churches, Carl suggests that 'the pictorial depth and ontological flatness of the field of fragments contrasts with the pictorial flatness and ontological depth of the iconostasis also temporally. Modernity has complex space and simple time, traditional culture has complex time and simple space'. Carl, 35.

14 Blouet, P. xiii.

15 Salmon, *Building on Ruins*, 90

16 John Olley, 'St George's Hall, Liverpool', *The Architects' Journal*, 186 (1986): 50 (quoted in Salmon, *Building on Ruins,* 212).

17 Cockerell's restoration of the Ulpian Basilica, *Imaginary Sectional View of the Interior of the Ulpian Basilica, Rome*, can be seen online on the website of the Royal Academy of Arts, London, at http://www.racollection.org.uk.

18 R. Phenè Spiers, 'Discussion of Mr Brydon's Paper', *Journal of the Royal Institute of British Architects* (1900): 366–7.

19 Spiers, 367.

20 Frank Salmon, 'C.R. Cockerell and the Discovery of Entasis in the Columns of the Parthenon' in *The Persistence of the Classical: Essays on Architecture Presented to David Watkin* (London: Philip Wilson Publishers, 2008), 106–23.

21 Salmon, 'C.R. Cockrell', 110.

22 The remaining contending issue was whether this could be noticed by the eye (as Allason claims he had, and also shared his sense of having perceived it with Haller, Cockerell, and also Fauvel), or whether it indeed had to have been measured, which it seems that Cockerell was indeed the first to do (Salmon, 'C.R.Cockerell').

23 Salmon, *Building on Ruins*, IXX.

24 B., 'Remarks on the Unsuccessful Designs for the New Houses of Parliament, Now Exhibiting in the National Gallery, Charing Cross', *The Architectural Magazine*, 3 (1836): 201.

25 Michel Foucault, *The Order of Things* (New York: Random House, 1973), 220–21.

26 Cockerell, RA Archives, mis/co 1, First Lecture, 1842. This is described further in Chapter 5.

27 George Wightwick, *The Palace of Architecture: A Romance of Art and History* (London: James Fraser, 1840).

28 Quoted in George Steiner, *After Babel, Aspects of Language and Translation* (New York: Oxford University Press, 1975), 338–9. Significantly, Steiner is referring here to Rudolf Borchardt's adoption of Novalis's definition in his challenge of the conception of the past as immutable: 'Even as the human mind can dream a future so it can reshape a past. […] Borchardt conceived of translation as having a unique authority against time and the banal contingency of historical facts. By virtue of 'creative retransformation', the translator could propose, indeed enact an alternative development for his own language and culture. True archaism […] is not antiquarian pastiche, but an active, even violent intrusion on the seemingly unalterable fabric of the past'.

29 The *Tribute to the Memory of Sir Christopher Wren* was exhibited at the Royal Academy in 1838. Both the *Tribute* and the *Dream* were produced similarly: after making separate studies of the individual buildings, these were cut out and laid out for the final composition. For notes on the making of *The Professor's Dream*, see Robert Pepys Cockerell, 'The Life and Works of Charles Robert Cockerell, R.A'., *Architectural Review,* XII (1902): 137–9. On the making of the *Tribute*, see *Charles Robert Cockerell's Tribute to Sir Christopher Wren,* intro. John Schofield (London: London Topographical Society, 2003).

30 Goodchild, RIBA Archives, Goodchild Album, vol. 8, 80.

31 Indeed, there are no strong affirmations in Cockerell's lecture notes of his possible adherence to the understanding of history as an organism that evolved and naturally grew. However, it is not entirely clear where Cockerell stands. In his later lectures, he refers to the French historian François Guizot (1787–1874) on progress:

'thus as […] Guizot has finely observed each age & nation seems to have florished for some beneficial purpose to mankind & having accomplished its Task disappears from the Stage, *in fact* the progress of architecture and the useful arts may [be] described in the words of the Psalmist (?) – In them a hundred years are but as a day'. (RA Archives, mis/co 8, Second Lecture, 1843.) Cockerell thus hinted at how architecture could stand for civilization and embody the progress of humanity.

32 Cockerell: 'Before agamemnon there were many agamemnons', (RA Archives, mis/co 9, Third Lecture, 1843); 'he [the architect] should test all his inventions by the highest Principles & opinions – having respect to those taste *of the acknowledged authorities, especialy* [sic] *those* which have ever constantly recured [sic] from time to time, proving thereby *i.e. by that constant recurrences*, their consonance with the nature of man his susceptibilities & organs his wants & his tastes a popular cry will not alarm'. (RIBA Archives, COC 1/13/xiv (Box 1)). This cyclical understanding was not uncommon, and one of Cockerell's acquaintances, Gottfried Semper, remarked after the closing of the London Industrial Exhibition in 1852: 'Nothing new happens in the world; everything has already once been around! According to philosophers, society moves (if it advances at all) in a spiral line. When we view it from this perspective, the beginning and the end of a period coincide'. See Gottfried Semper, 'Science, Industry, and Art', in *The Four Elements of Architecture and Other Writings,* trans. Harry Francis Mallgrave and Wolfgang Herrmann, intro. Harry Francis Mallgrave (Cambridge: Cambridge University Press, 1989), 144.

33 RA Archives, mis/co 1, First Lecture, 1842.

34 RA Archives, mis/co 1, First Lecture, 1842.

35 This will be described in greater depth in Chapter 4.

36 This is described by Charles Hittorff, in Ludwig Zanth, *Architecture antique de la Sicile, suivi de recherches sur l'origine et le développement de l'architecture religieuse chez les Grecs* (Paris: E. Donnaud, 1870), 633–4.

37 My translation of Hittorf: 'Nous avons été confirmé dans cette opition par une suite d'essais qui nous firent voir l'effet affreux de figures où les lèvres et les yeux peints se detachent sur le ton naturel de l'ivoire ou du marbre: leur blancheur rappelle la pâleur de la mort et les fait ressembler à des spectres petrifies. Un léger ton de chair produit au contraire l'effet le plus harmonieux; l'apparence de la vie donne au visage un veritable charme; l'absence de tout movement lui communique une incontestable majesté'. In, Ludwig Zanth, *Architecture antique de la Sicile, suivi de recherches sur l'origine et le développement de l'architecture religieuse chez les Grecs* (Paris: E. Donnaud, 1870), 637.

38 Robin Evans, 'Architectural Projection' in E. Blau and E. Kaufman, eds, *Architecture and Its Image: Four Centuries of Architectural Representation* (Cambridge, MA: MIT Press, 1989), 19.

39 Juhani Pallasmaa, *The Thinking Hand: Existential and Embodied Wisdom in Architecture* (Chichester: Wiley, 2009), 89–90.

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4

Cambridge University Library under Construction: Building Fragments

In the main staircase leading up to Caius and Gonville Library is a framed reproduction of Cockerell's 1839 construction plan for Cambridge University Library (Plate 4). This is not a construction drawing, nor a presentation or exhibition drawing, nor a fantasy by any means, but rather a strange composition by Cockerell's faithful pupil Goodchild providing a window into the story of the Cambridge University Library building.[1] In the lower centre of the drawing is a small key plan inconspicuously nailed to a fence, which shows three rectangular forms. The first, a light grey square in the top left corner, depicts a fragment of the west end of James Gibbs's Senate House (1722). Vertically and at the right is a solid rectangle representing the late-Gothic King's College Chapel. The third solid rectangle indicates the north wing of Cockerell's projected quadrangle for the new university library; the three other wings are indicated but left blank. In the larger representation, a cut-away sectional perspective shows the north wing on its own, without the rest of the planned project. The sole fragment of the proposed quadrangle buildings, it extends perpendicularly from the existing Old School, itself represented on the larger sheet but not included in the small key plan to make space for the east wing of Cockerell's proposal.

The discrepancy between what appears in the larger representation and the smaller key plan is a record of the doomed fate of this project. While Cockerell was commissioned to design, and did in fact design the entire quadrangle, only the north wing was ever built.[2] After a series of chaotic competitions – in 1829, 1830, and 1835, during which Cockerell was first awarded the project, then not, then again – the committee responsible for the new library building realized their budget would only allow for the construction of a portion of the planned quadrangle.[3] When the north wing was completed in 1840 it was unclear whether the remainder of the quadrangle would ever be built. Today, this north wing stands as a fragment of a projected whole, much like the cut-away perspective of the larger drawing relates to the completed quadrangle depicted in the key plan.

This representation of Cambridge University Library exposes the complexities of any actual architectural project: how an architectural site is in fact never a clean slate. Rather than presenting the planned library as an idea for a preset future, the drawing illustrates a process shaped by the past, the present, and the future. The small key plan depicts fragments of what was already on site (the King's College Chapel, the Senate House), what was due to be erected (the north wing), and planned future constructions (the rest of the library), yet does not include buildings intended for demolition (the Old School). Most buildings in the key plan are not shown in perspective (the Chapel, the Senate House, the completed library quadrangle); conversely, the buildings that do appear in the overall drawing (the Old School, St Mary's Church) are not visible in the key plan. The only element that appears on both the key plan and the rendered perspective is the library's north wing. The drawing's 'present' is ambiguous, precariously positioned between discarded and preserved fragments of the past on the one hand, and future demolitions and constructions on the other. To decipher this drawing, viewers must operate between times. Meaning unfolds with the observer's willingness to move – spatially and temporally – between the actual site in Cambridge, the represented site in the larger drawing, and that of the small key plan within it.

This drawing is comparable to many others by Cockerell which display a complex coexistence of times and spaces. Goodchild's drawing of the library during construction speaks to the temporal dimension embedded in the fragmentary quality of the north wing as it still stands today, inevitably leading back into the history of the project and its site. By delving into this project's context, this next section investigates the ways in which buildings, like drawings, are set in a complex web of interlacing times.

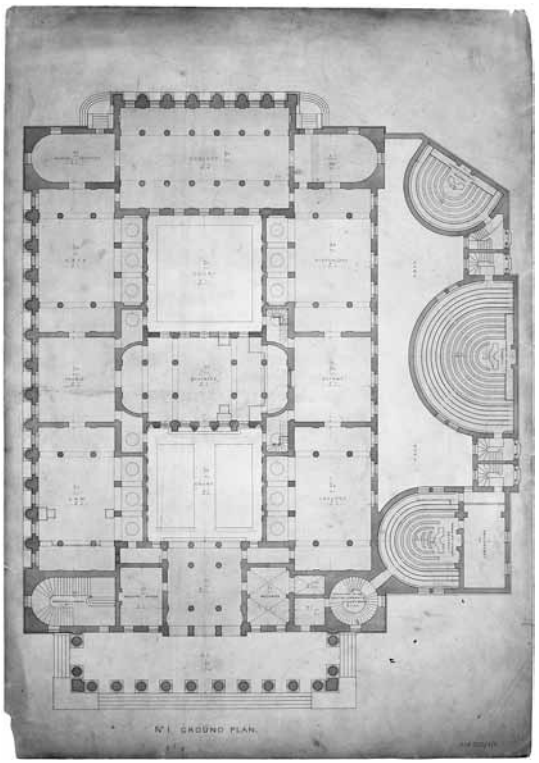
CAMBRIDGE UNIVERSITY LIBRARY AS A FRAGMENT

The graphic composition of *Cambridge University Library under Construction* is reminiscent of other drawings used for exhibition purposes, such as, famously, the drawing of Soane's design for Marylebone Church (Figure 4.1).[4] In this presentation drawing, Gandy (Soane's draughtsman) assembled a number of elements which were also found in Cockerell's library drawing: a key plan, building fragments, and an open sectional perspective. Among the architects who exhibited their works at the Royal Academy from the 1770s until the middle of the nineteenth century, Soane can be identified as having introduced two important elements to architectural representation: 'the knitting of words with images and of images with images'.[5] From a strict composite depiction which put three individual images within a larger frame (such as the *Vestibule, at the Bank of England; the Great Hall, Bentley Priory*; and the *Withdrawing Room at Wimpole*, exhibited in 1792), Soane moved on to the grouping of a number of varied views, such as perspectival and orthogonal drawings of a single building,[6] and finally to compositions, usually by Gandy, which assemble a variety of representations in a single space.[7] The climax of these developments was Gandy's composition for the *First Design for a New State Paper Office*, characterized as unique in its combination of plan, section, and view of the building.[8]

4.1 Trustees of Sir John Soane's Museum, J.M. Gandy's *John Soane's Design for Marylebone Church*, Sir John Soane's Museum, London. By courtesy of the Trustees of Sir John Soane's Museum

While a similar combination of drawing types is employed in Goodchild's Cambridge University Library representation and Gandy's representation of Soane's design for Marylebone Church, their impact is different. At first glance, Soane's building oscillates between the condition of ruin and that of a building in construction. Conversely, Cockerell's building clearly appears to be in the process of being constructed. The other great difference between the two drawings is the level to which the context is represented. For Soane's church, the key plan is elaborate and shows the structural layout and articulation but nothing of the footprint of the surrounding buildings. In the drawing for Cockerell's library, both the key plan and scope of the representation situate the construction in its larger context.

Comparing Goodchild's representation of Cockerell's library with Gandy's representation of Soane's New State Paper Office and the building at Whitehall, leads to similar observations. The key plan, including intricate details on Gandy's drawings, is strictly diagrammatic in the Cambridge University Library drawing. The first leaves the context unspecified, while the latter illustrates not only the buildings among which the library was to be erected but also those to come down. Gandy's drawing features the building, but Cockerell's represented site involves a juxtaposition of times and spaces. In Goodchild's drawing, the disparities between the key plan and the overall rendering are testimonies of potential spaces held in more than one time. What lies spatially beyond the boundaries of the watercolour rendering is brought within the space of the actual paper, whereas what lies in a different time is the main subject of the rendering. St Mary's is the only building drawn as an extension of the space shown on the plan; the rest of the watercolour occurs in a different time. Like the fragments at Pompeii, which had a direct relation to the restoration as components to be re-assembled, the different fragments of the Cambridge site become integral elements of Cockerell's construction.



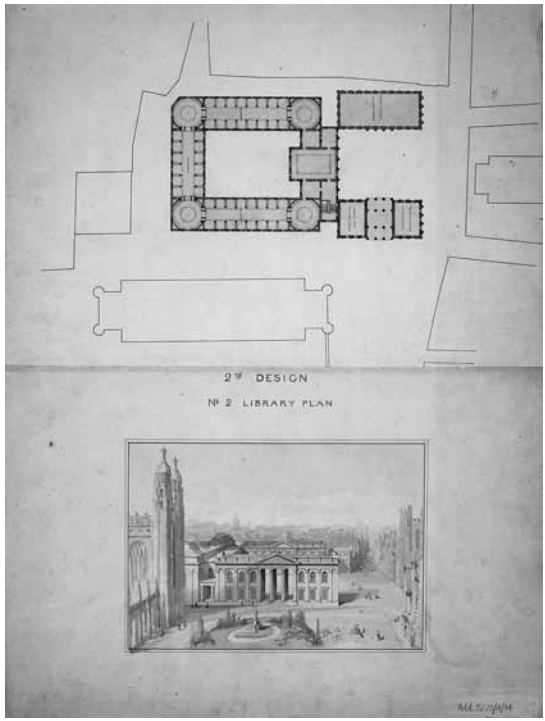
4.2 C.R. Cockerell, *Design No. 1, Cambridge University Library*, 1829, Cambridge University Library, Cambridge (CUL ADD. 9272/4/6.4.2). Reproduced by kind permission of the Syndics of Cambridge University Library

In his approach to the Cambridge University Library site, Cockerell accepted its condition as an eclectic and temporarily complete amalgamation of fragments of spaces built at different times, ultimately also describing his own intervention as a fragment: 'Have mercy on my Library, consider it a fragment of a great Quadrangle […].'[9] There was an 18-year delay between the decision to increase the size of the library and its incomplete execution resulting in only the quadrangle's north wing. The university first considered the purchase of King's College Old Court in 1822, and finally transferred the land in 1829, after the architects' submissions for the first competition were received. The 1829 competition was the first in a series, with the last held six years later in 1835, leading to the approval of the architect and the project only in 1836.[10] The Syndicate's extensive difficulties in accumulating the library's funds and future books only partly account for the resulting three different competitions. There was also much debate on the adequate architectural response to this significant project, which included more than just a library, albeit an important one. The enlargement of the Old School Library on a site directly adjacent to the Senate House represented a key opportunity to give greater visibility to a central university building. The intentions for the new Cambridge University Library included, in addition to the library, requirements for museums, lecture theatres, schools, and a registry.

The Syndicate's instructions to architects entering the competition were specific, and included suggested pathways, adjacencies, and space allocation.[11] On the whole, the architects involved attempted to respond as best they could to these requirements. It is in Cockerell's slight deviations from these that his distinct approach can be most clearly appreciated. Cockerell's departure from the Syndicate's instructions was at an urban scale, and involved the pushing and conflating of the library's proposed site. In doing so, Cockerell was thinking beyond the idea of a new 'autonomous' building to consider how the library would affect and effectively recast the experience of its larger context.

In the first competition, two out of the four competitors submitted two difference schemes. Working as a team, Rickman and Hutchison submitted a Grecian and a Gothic scheme – essentially suggesting a different dress for the same building. Like these competitors, Cockerell submitted two options, which he named '1st design' and '2nd design'. Unlike the other competitors, the difference between Cockerell's two schemes was spatial and not stylistic. In the '1st design', Cockerell confined his scheme to the site delineated by the Syndicate (Figure 4.2). In the '2nd design', he took the liberty of challenging the planned confinement of the library to a limited site, revealing his intentions of setting the university library in a larger context that

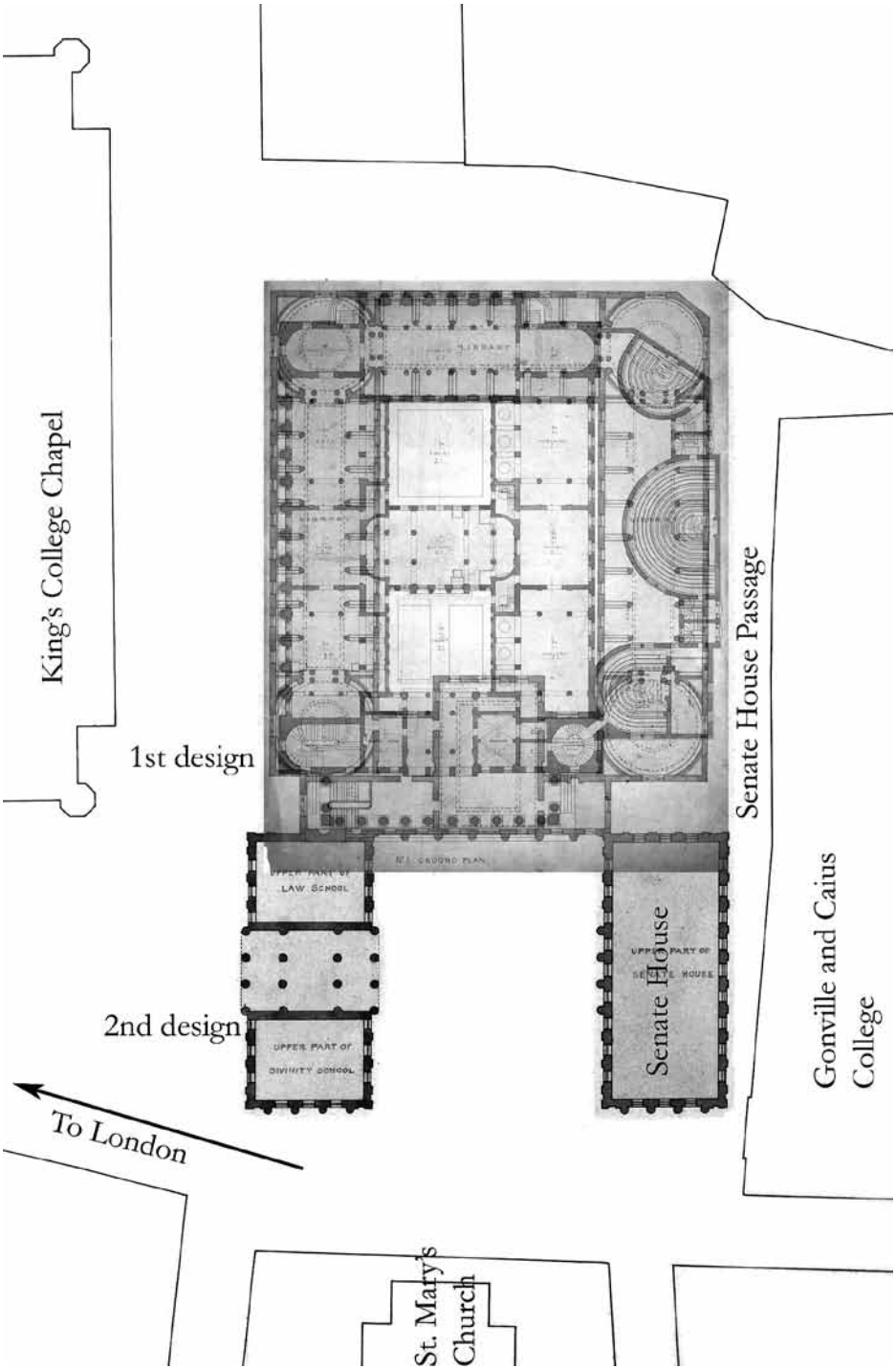
could be stretched spatially and temporally (Figure 4.3).[12] For example, Cockerell's '2nd design' included a wing projecting out from the quadrangle that mirrored Gibbs's Senate House, thereby echoing this architect's earlier unexecuted project.[13] This projecting wing gave Gibbs's plan new life, and even provided improvements to the ensemble to render it 'more light and less confined' overall.[14] Cockerell's '2nd design' thus resonated with previous attempts made at designing for this site. This '2nd design' reached back to the site's intangible history, a history only traceable from a reading of the Senate House as a fragment of a larger, never completed ensemble. In this sense, Cockerell set his project in the thickness of time, approaching it as the materialization of other potential presents.



4.3 C.R. Cockerell, *Design No. 2, Cambridge University Library*, 1829, Cambridge University Library, Cambridge (CUL ADD. 9272/4/14). Reproduced by kind permission of the Syndics of Cambridge University Library

Cockerell's '2nd design' challenged the temporal but also the spatial boundaries of the site. In the instructions sent to the architects, it was specifically written that the Syndicate 'consider the extent of ground now the property of the University, including the site of the present Library, as amply sufficient for all those objects [specified in the programme]'.[15] In mirroring Gibbs's Senate house, Cockerell created a second court towards St Mary's Church. This effectively enabled him to bring the Senate House into the overall composition, shifting the centre of the new quadrangle. While the main bulk of the building had to lie inside the Senate House in the '1st design', the north wing was aligned with Gibbs's building in the second, resulting in a more generous courtyard. Furthermore, this '2nd design' presented a more imposing elevation as it treated the northern part of the building as an integral element of the composition. In all the other schemes – Cockerell's '1st design' as well as those submitted by other architects, this part always remained tangential, hidden behind the Senate House and filled by necessity with lower buildings housing larger lecture rooms in an unresolved manner. Defying the site's nature as a flat, geometrical, enclosed piece of earth, Cockerell reached out to surrounding buildings and beyond, intent on the effect his '2nd design' would have on approach 'from London'. Cockerell's second scheme expressed a broad, inclusive understanding of the site, recovering past projects and existing buildings, animating these anew with his additions. In contrast to the dress alternative provided by Rickman and Hutchison, Cockerell's design insisted on the project's larger context, referring and responding to, and even entering a dialogue with not only its immediate surroundings, but what also belonged to other times.

To add yet another layer of temporal complexity, Cockerell conceived the Cambridge University Library as an unfolding experience of fragments he had himself measured and encountered at home and abroad. In presenting his scheme,

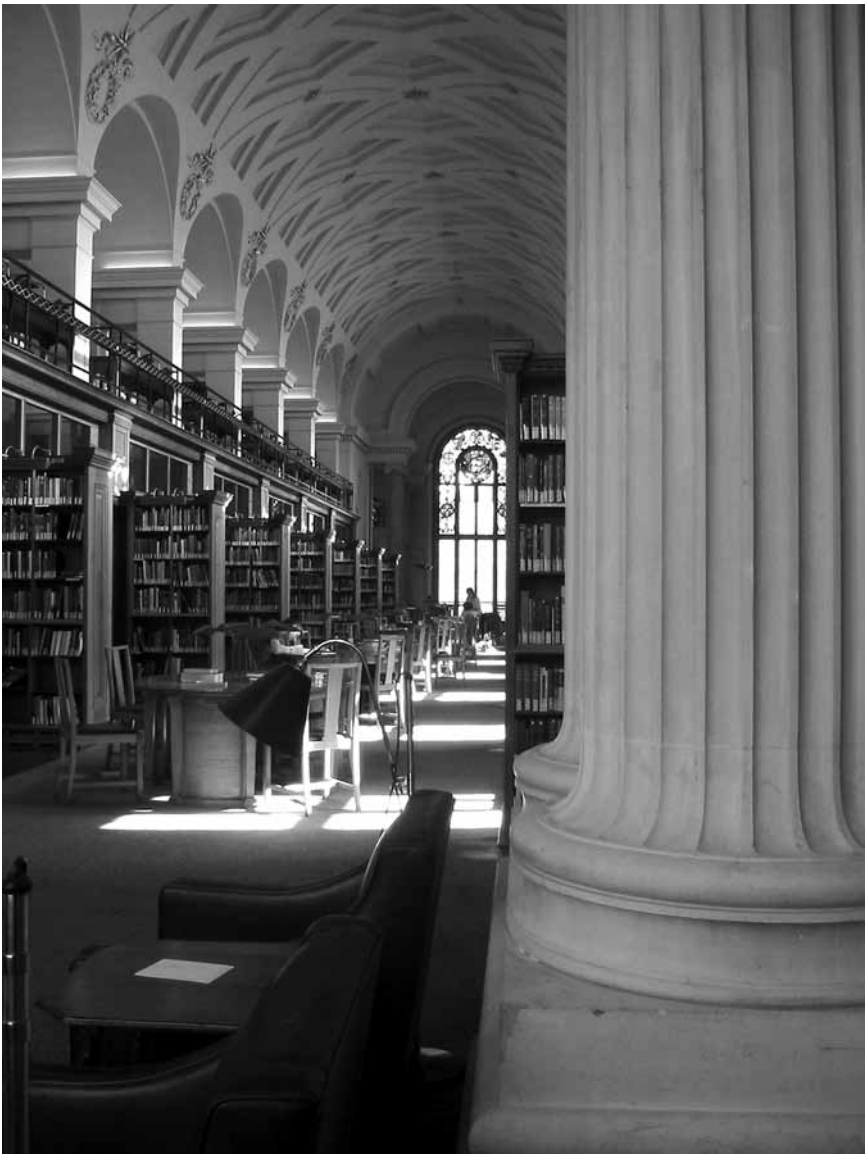


4.4 Overlay of C.R. Cockerell's Designs No. 1 and No. 2, Cambridge University Library, 1829 competition (by the author)

he acknowledged different parts of his design as quoting from other buildings, from the Temple of Nerva to Wren's Trinity Library. More concretely, the order intended for the library was the peculiar Ionic order Cockerell had studied at Bassae during his Grand Tour expedition. The volutes of the capitals are angled and repeated on each side, which Cockerell believed must have been done to create a variety of effects as users moved about the temple. Cockerell favoured the Bassae Ionic explicitly for its consideration of the visitor's movements. In Cambridge, the Bassae Ionic order would have accompanied readers as they moved round and round the four wings of the library, whether at the main level or on the upper gallery.[16]

Acting as a hinge around which readers move, the Ionic order quoted from Bassae also acts as a singular scaling element within the completed wing of the projected quadrangle. From the main level of the library, the columns stand tall and solemn, replacing the solid projecting bookcases in couples (Figure 4.5). On the gallery level, because the continuing bookcases are pierced by a corridor and perceived from the inside rather than assessed from the outside, the Bassae capitals suddenly confront the user. Even as the stair winds up the shaft to the gallery, the immediate relation between the observer and the column's details replaces any subdued or static expression that the columns may have given at first glance (Figure 4.6). The columns' active role is revealed as the reader moves about the library: the columns mark the incomplete junctions between the wings and are integral elements to the varying treatment of the ceilings at both extremities. They also act as anchors to the narrow staircases leading up to the gallery (Figure 4.7). Finally, their capitals greet the reader who has wandered upstairs, finally revealing their striking details in close proximity.

Cockerell orchestrated his library's integration into a difficult site through a complex scenography of ornaments. Today, a visitor can accumulate successive layers of the context along different pathways. Library users will be surprised as they move along the Senate passage into the library and all the way to the library balcony, as they experience the possibility of peeking down at the Gibbs building. As in Karl Friedrich Schinkel's (1781–1841) great loggia entrance at the Altes Museum, visitors are transported concomitantly to Greece via the library's gallery level – where else could they come so close to an Ionic capital if not by retracing the steps of nineteenth-century architects on their Grand Tour? As library-goers approach the main entrance of the libraries, the smooth transitions or abrupt clashes rely first and foremost on temporal dislocations. The experience is constructed in time through a progression, from the harmonious walk down the Senate passage to the dramatic peeling of the three stone skins, and as one moves perpendicularly towards the door and experiences the desquamation (Figure 4.8). For a moment, visitors are poised between times, each fragment competing not necessarily for its space, but for a temporal ground in a set of multiple temporalities. Like the complex coexistence of times and spaces in Goodchild's drawing for Cambridge University Library, Cockerell's architecture presents a set of heterogeneous spaces referring to different temporal frames.



4.5 Bassae order, Cambridge University Library (photograph by the author)

4.6 Bassae order, Cambridge University Library (photograph by the author)

4.7 Bassae order, Cambridge University Library (photograph by the author)

BUILDING IN TIME

The expression 'building in time' carries two distinct connotations. First, the consideration of time as a site in which one might be building, that is, how a building takes or creates a perspective on time, provoking a sense of time and history. This touches on the epistemological consideration of the temporal groundings of an architectural project. The other aspect is phenomenological and involves the consideration of the building as it unfolds in time, in the actual moment of experience. At the fold between these two aspects lies the notion of communicability. By the 1830s, it was clear that buildings were situated against a new temporal framework. At an epistemological level, architects had to take a position as to which times they were referring to. Historicist buildings could set themselves against a Greek, Roman or Gothic past, evoking certain qualities of the chosen past but also necessarily adapting the chosen language to new programs and users. In other words, although buildings could take their form in reference to existing historical models, their translation from one time to another required considering the experience and context of their new modern users. Looking at three other works by contemporaries of Cockerell – Dean and Woodward in Oxford, Soane in London, and Henry Labrouste in Paris – we can shed some light on the uniqueness of Cockerell's approach to the dilemma of history.

4.8 Elevation of North Wing, Cambridge University Library (photograph by the author)

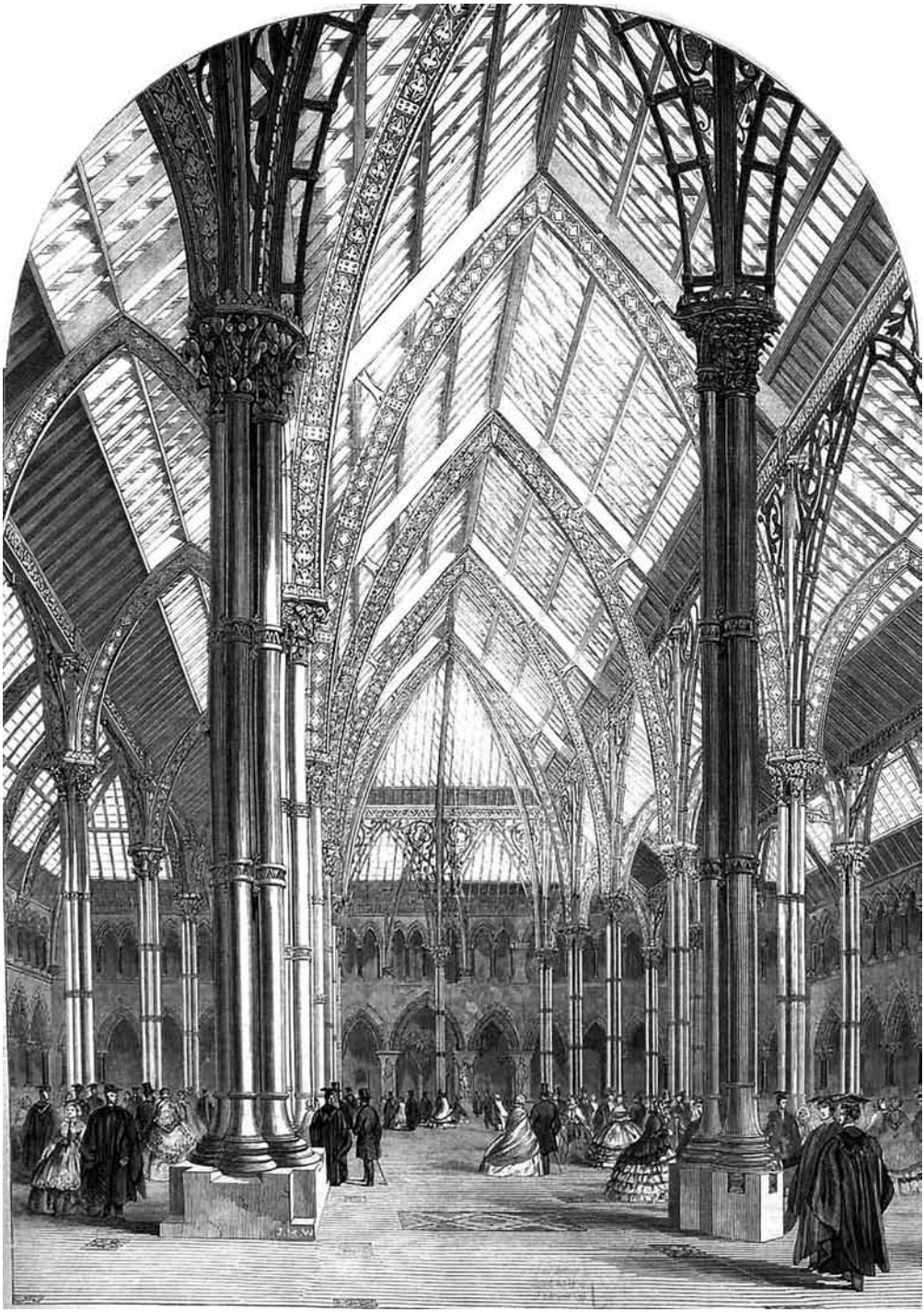
First Analysis: Oxford University Museum

Dean and Woodward's approach to the conception of the Oxford University Museum was informed by its epistemological grounding in historical time and how it would be phenomenologically experienced in time. Completed in the 1860s by the two architects in conversation with John Ruskin, the museum is paradoxically set between Judeo–Christian temporality and positivist history (Figure 4.9). This university museum is a hybrid, one set in its own time, and also imported from a different time. It merges an existing religious worldview with the reality of new scientific discoveries; it also translates a language initially spoken in a traditional material to a contemporary one, as it moves from stone to iron. Caught between two worlds, this building is both representational and empirical, aiming to be at once scientific and religious, systematic and symbolic. Epistemologically, the museum ambiguously positions itself between God's temporal framework and the potentially infinite chronological scientific timescale that was gaining credence in the nineteenth century. Here, a formula commonly used during the blessing of buildings upon completion rings especially true:

> *We humbly but fervently desire to glorify Thy great Name by the edifice which we are about to erect. We earnestly pray that therein the knowledge of Thy great and glorious works may be continually advanced among us, and thereby Thy wisdom, Thy power, Thy goodness, developed and magnified […]. Grant that the building now to be erected on this spot may foster the progress of those Sciences which reveal to us the wonders of Thy creative power.*[17]

Undeniably Gothic in form, the Oxford University Museum building is even more so experientially, staging the communication of the empirical world in a similar manner to which the greatest Gothic cathedrals communicated the story and significance of Christ: as an experience unfolding in time. The symbolic iconography of the stained glass windows and ornate cathedral portals has been translated from biblical illustrations to empirically verifiable fragments of the book of nature. Each column was made from a different type of stone from a different region of Great Britain, and each capital was carved from a recently sampled plant from a species indigenous to the country, and brought daily from the conservatory for the sculptors to carve. The column and capital were complete with the representation of a small animal or insect buried in the foliage. If the walls and windows of a Gothic church communicated stories from the Bible, the first book of God, this museum experience translated God's second book: nature. No longer would the fervent learner be faced with the sculptures of different saints and apostles. Here, the learner encountered Newton, Leibniz, Galileo, and Hippocrates.

It is only in appreciating the distance between the Gothic cathedral and its neo-Gothic reincarnation as a nineteenth-century museum in Oxford that the building is complete. The museum essentially operates in the space between two times, borrowing its symbolism as much from its adopted time as from its time of construction. It only achieves this by being rooted in nineteenth-century Oxford, an era when iron began to replace stone in monumental architecture, but also a time when fast advances in science were still considered complementary to faith.



4.9 Oxford Museum, view of the interior court, by architects Dean and Woodward. *Illustrated London News*, 1859, p. 439

The Oxford museum takes its place alongside the iron-frame Crystal Palace just as it could constitute a built version of a Bridgewater treatise.[18] Its cast iron details reflect nineteenth-century fascination with biology, imitating the living lines of nature and suggesting the movement of growth. Equally, its construction is reminiscent of Gothic craftsmanship. The sculptural work executed by the O'Shea brothers appears to have been directly adapted from the level of detailing praised by Ruskin in both the *Stones of Venice* and *The Seven Lamps of Architecture*. Their work coexists with the cast iron assembly inside, as they superimposed their craft to the newer option of standardized pieces and operations. At technological, programmatic, and symbolic levels, the building is a historical hybrid that merges two times epistemologically and phenomenologically.

Second Analysis: Sir John Soane's Museum

The Soane Museum offers a different example of the potential relation between the epistemology of a project and its phenomenological experience. At Lincoln's Inn Fields, Soane lived and worked in houses numbered 12, 13, and 14. The publicly accessible spaces at the front of the museum belonged to the house at number 13, while at the back the museum was expanded to include all three houses indiscriminately. Here, the epistemological framework underpinning the building operates on at least two scales: that of its collection of nineteenth-century architectural and archaeological discoveries, and its architect's own lifespan. The museum collects in more than one ways: it collects and unifies three adjacent Georgian buildings; it collects fragments from the past and the present, both at home and abroad; and it collects Soane's lifework and architectural collection.

The fascinating Soane and his no-less fascinating museum have been discussed at length in numerous other works. Here, our focus is on the relations between the tightly framed motivations for the creation of the space, and the ways in which Soane envisioned its perception. In this respect, it is striking how the dual frameworks that mark the destination of the building also inform its reading. If the section of Soane's museum (Figure 4.10) bears some parallel to comparative architectural plates by Gandy, it also contains Soane's own narrative. The viewer might be inclined to imagine him lying in the sarcophagus in the basement, or selecting specific paintings or fragments to be displayed, or hanging his own drawings amid his accumulated riches of history.

Gandy's representations of Soane's lifework with drawings like the *Bank of England in Ruins* or *The Dreams of Fancy* convey the intricate and puzzling nature of Soane's Museum. As the art historian Donald Preziosi acutely describes, a common sensation at the museum is that of being tempted visually by an object that cannot be directly approached.[19] For example, while views are granted up or down the building through interior skylights, the actual means of ascending or descending into these spaces are often out of immediate reach. As visitors move in the hopes of finding their way to the object that has caught their gaze, they are often distracted by other fragments, which in turn might play the same trick. What is visibly offered cannot necessarily be spatially understood, and the space that unfolds for visitors moving through the building confuses their memory of what they have seen while

4.10 G. Bailey, *Section through Sir John Soane's Museum*, 1810, Sir John Soane's Museum, London. By courtesy of the Trustees of Sir John Soane's Museum

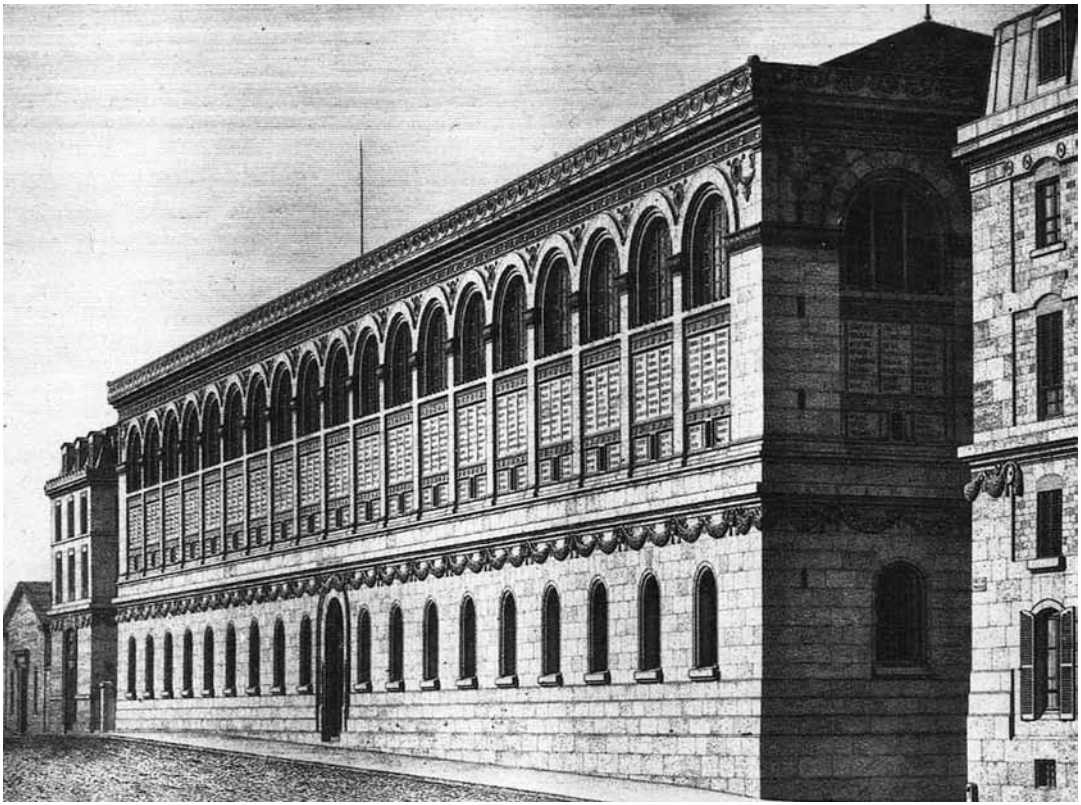
layering upon these different desires and expectations. And yet, just as the entire building is grounded in the sarcophagus below, it seems Soane's practice and its historical roots are found summarized in Gandy's drawing of the *Bank of England in Ruins*. Ultimately, the museum rewrites history solely for Soane's purpose and fame. This is indeed the world as he arranged it, and as visitors move deeper into the thickness of the museum's spaces, they are drawn closer to Soane, even if what originally attracted them was the glimpse of a historical fragment that they sought to place within a larger history. Here, history becomes Soane's, and the mirrors in this old house, this museum, truly only reveal Soane looking at himself.

The confusion that exists in this context is between the epistemological framework and the phenomenological experience. Epistemologically, the museum operates between the apparently open fragments of history and their appropriation by Soane. Phenomenologically, there is a constant play between what is readily visible and what remains physically inaccessible. This play between the two highlights the tension between the invisible and the visible, between the hidden and the overt meaning. And yet the building itself comes to life in this play, just as fragments of history are momentarily reinvigorated in Soane's overall project. In this house-museum, the notion of anachronism permeates the project and its representation. The contradiction, juxtaposition, and superimposition of different times requires the visitor's willingness to memorize, to project themselves and actively engage all at once with the space, its different pasts, and potential futures.

Third Analysis: Sainte-Geneviève Library

As Cockerell was completing his most important projects, the Ashmolean Museum and Taylorian Institute in Oxford, and the Cambridge University Library (1840), Henri Labrouste was emerging as an important representative of young French architects being referred to as the Neo-Grecs.[20] Now, Labrouste's project for the library of Sainte-Geneviève is of particular interest in relation to the epistemology and phenomenology of the architectural project as it could be envisioned in the midst of the overbearing historicism of the nineteenth century. In Labrouste's library, there are a number of translated references which have formal and symbolic foundations in the architecture of Greek antiquity, but there are equally potent suggestions made as to their translation in nineteenth-century France. Perhaps the most interesting operation is the relentless play at work between opposites such as movement and stability, inside and outside, up and down, day and night, or even life and death.

In this library building that is not unlike a large coffin, and around the periphery of which runs a funerary garland, Labrouste inscribed the names of those men who, from Plato to Buffon, made substantial contributions to the progress of knowledge (Figure 4.11). Inside, large stone pieces beneath high windows block the natural light to a significant height. Against this stone are books lining the four peripheral walls of a large open reading room. This is perhaps the most obvious step in the space's larger narrative: of a movement from darkness to light brought about through accessibility to knowledge via the printed word.



4.11 Henri Labrouste, Sainte-Geneviève Library, unknown engraver (Paris: *Revue générale de l'Architecture et des travaux publics*, XI, 1853)

Likewise, the thoughts of past scholars are bought back to light and life, in the movement of contemporary readers through the space. This play is reiterated by the organic cast iron structure growing from the stone, and hinted at by the figures of day and night which ornate the pilasters onto which every central column falls. The original layout of the reading tables traced a specific path: an unobstructed, continuous, circular movement about the building's central axis. Yet even today, the building exemplifies the paradox of the book as described by Walter Ong, which:

> *… lies in the fact that the deadness of the text, its removal from the living human lifeworld, its rigid visual fixity, assures its endurance and its potential for being resurrected into limitless living contexts by a potentially infinite number of living readers.*[21]

Labrouste was interested in Saint-Simonianism and receptive to some of the utopian socialist ideas developed earlier in the century not only by Claude Henry de Rouvroy, Comte de Saint Simon (1760–1825), but also by Charles Fourier (1772–1837). Perhaps fortuitously, the 810 names Labrouste had engraved around the four walls of the library building are also found in Fourier. In his elaboration on philosophical or spiritual immortality, French socialist Fourier suggested that human beings returned to life more than once, richer each time from previous experiences. He postulated that each human being lived long series of

reincarnations over the course of about 80,000 years. Fourier further suggested that half these lives – specifically, 810 out of a total of 1,620 lives – were spent on earth, whereas the other half occurred in a sort of vague state akin to being asleep.[22] The coincidence between the number used in Fourier's theory of immortality, and the number of names engraved on the façades of the Sainte-Geneviève Library, are too uncanny to be ignored, and the connection could be made that the books are a form of dormant incarnation. The books within could be seen as a mediating device between the names outside, testifying to past experience, and the living readers inside actively building upon this experience. In his study on Labrouste, architectural historian Neil Levine likened this series of outside names to the positivistic calendar of Auguste Comte (1798–1859). Comte's work, published in 1852, focused on new and non-Christian commemorative practices that, in Levine's words, 'infused meaning into the mute images culled from the past'.[23] Whether these exterior names do indeed hark back to Comte or are derived from Fourier, what remains significant is how these works are all based on a complex understanding of time.

Epistemologically, the Sainte-Geneviève Library expresses both the commemoration of the past and an orientation towards a future project. In this respect, it is akin to Comte's position that the two necessary modes of the cult of humanity are the 'concrete glorification of the past, or the abstract idealization of the future'.[24] Phenomenologically, the building is perhaps closer to Fourier, in that its life-like qualities insist rather on the present and its need for a cohesive society. The reader's progression through the building suggests a narrative of rebirth. After paying homage to the funerary monument outside, the reader moves as though through a tombstone, into a dark, low space lined with busts of famous men, and ascends a staircase that gradually lets in more light and, at the first level meets the sculpture of Ulrich Gehring (the man who introduced printing to France). Here, a sculpted book is on a pedestal and natural light reappears, as though a reincarnation were about to take place. As the reader continues up the stairs, a reproduction of Raphael's *School of Athens* marks the threshold of the library proper on the first floor. Here again, an anachronistic grouping of great human minds reminds the reader of the thickness of time one encounters in seeking knowledge. As the reader enters the library, the space, generously lit by high windows, becomes active. The walls occupy the center and the periphery, with the reader embodying the possibility of knowledge coming to life again. Here, past and future, mortality and posterity, life and death exist in constant tension.

THE EPISTEMOLOGY AND PHENOMENOLOGY OF ARCHITECTURE

Comparing these three works reveals the distinct epistemological frameworks against which they are cast, whether the preservation of a Gothic ideal, an immersive experience of desire and appropriation in the larger sea of history, or the balancing act of stable principles and progressive innovations. These examples also illuminate the circumstances wherein a certain timelessness can be granted through the animation of matter, particularly through the play between polar opposites such as

static and dynamic, typical and atypical, or visual and experiential. The experience of the tension between these polarities rests on a willingness on the part of the observer to stand both in and out of time, revealing yet again the importance of the fragment and its relation to time. Ultimately, what these three works express is that to build in time involves, at least partially, the consideration of time as an integral element of the site. These three buildings not only provide a space, but a specific experience of that place, which in turn speaks of a certain positioning in larger temporal frameworks. Indeed, any consideration of time implies a particular perspective on time, and it is this perspective that informs the architect's approach to the project and how it will be experienced.

Looking back at each of the three examples, it is possible to qualify how these call attention to time. Labrouste, for example, may have been influenced by Saint-Simonist readings of time, mixed with a certain notion of progress in time. The time in which Labrouste was building was both progressive and circular, and implied rebirth and continuity. Soane's time, conversely, remained closer to historicist time. His museum operates across fragmented periods meeting in succeeding generations, thus creating a time when a Egyptian sarcophagus can cohabit with both a Greek sculpture and a medieval window. In this respect, a reading of time as a site for Soane results in the acknowledgment of the eclectic nature of the times assembled and represented, an eclecticism that also translates to the experience of the space. And yet, there might also have been an inherent attempt by Soane to make some sense of this multivalent time and offer a perspective on its order. Indeed, Preziosi argues that a fairly clear narrative is evident if one considers the possibility that the lower level may be the way to understand the building's take on time. To bolster this, Preziosi suggests that naming one of the basement rooms 'antichamber' was a sign that this was the main room leading into the narrative of the building. Thus, the person entering through the basement would indeed be walking from Egyptian through Greek, Roman, medieval and modern times, culminating in the display of Soane's own projects upstairs.

With Dean and Woodward, the Christian timeframe dominates, and the main translation is summarized in the movement from the Book of the Word to the Book of Nature. This approach underpins most decisions in the building – from the layout to the selection of materials and iconographic program. It is of course possible to look at modern architects under the same light. If we turn to Le Corbusier, we could consider that he moved from a mostly linear and uniform consideration of time in his notion of the *promenade architecturale* that unfolded along a given path – whether in Villa Savoye or in his unrealized project for a museum in his Mundaneum – to a much more disjointed, labyrinthine, less controlled, and ultimately more immediate consideration of time in the Bestigui apartment, or most vividly at La Tourette.

But there is a second dimension implied by building in time, where time is not only the site of intervention but also the site of experience. As in the examples above, to describe an architect's perspective on time nearly always involves considering how the building is experienced *in* time. To consider time as a site where we can build inevitably leads to the consideration of time as a site within which perceptions are constructed. The phenomenology of the architectural project does not involve a

single and singular conception of time. A building cannot be frozen in a specific, singular time – it cannot shift itself – but is experienced in many different times, in conflicting and multiple temporalities. It acknowledges the depth of human experience.

While Colin Rowe and Robert Slutzky's distinction between literal and phenomenal transparency may seem anachronistic here, their approach can provide insight in terms of depth.[25] In their 1963 article, the two authors argue that depth exists behind some surfaces, but not all. They first suggested this in discussions on various cubist paintings, some of which seemed to display depth but failed to involve the viewer, while others that were apparently shallow surprised the viewer. Similarly, they applied this to the 'reading' of buildings, and how these operate in time. Ultimately, their study raised two connections between building and time. On the one hand, an inherent complexity will be revealed to even an immobile observer, as perception is prolonged in time. This can happen whether a viewer stares long enough at a building, or if cued by the building to do so. On the other hand, the study describes the built-in complexity revealed to active observers, as they move through a building, propelled by the expectations it generates, only to be met with the unexpected. This condition produces a narrative of the building as it unfolds in time. Both these situations may rest on two distinct sensitivities. The first situation implies that the building does not give itself away all at once, and that there is a moment during which it somehow reconfigures itself. This scenario is cued as time envelops the perception of the building, whether this is just because of time passing, which leads to the opportunity to look again, look further or look beside. In this first situation it may also be that time manifests itself in the shifting of clouds, in the changing of light, in the motion of the sun, in the turning of the weather, and even in longer seasonal or annual spans. The second situation inherently depends on the knowledge that a building does not reveal itself all at once but is ceaselessly being reconfigured. The subtlety relies on the distinction between what could be described as an external time in the first case, and in the second, an embodied time. In other words, external or objective time is a time whose movement affects all objects, whereas subjective time is the span of time during which the subjects themselves move, that is, when the visitor moves through the building.

In objective time, the power of the fragment points to an implied multiplicity of possible readings, the one currently being held, along with an infinite number of possibilities. For subjective time, the reading of the building itself is fragmented, as while it can be grasped as a whole, the necessarily fragmentary condition of any built or given object also comes into play. For example, in the Soane Museum, one can read the building as never complete, as there is a continual play between what one sees and what one can access, where one can walk or peek, and what one can touch or imagine. In this instance, the things are experienced as 'aesthetic objects' and so become fragments of a latent world, oscillating between what is at hand and what might be imagined, what is there, what was there, and what will be there.

Recognizing this fragmentary condition encourages anachronistic perceptions that break the confines of chronological narratives, allowing for multiple stories to be told rather than the grasping of a singular story. If a façade can take on different

meanings as a viewer continues to look at it, even shifting in time, so a building can be perceived as multivalent. Furthermore, acknowledging this fragmentary nature also encourages a move beyond static, mathematical constructions towards more communicative, participative, animated constructions, all qualities that can only play out in time. As the architectural historian Robin Middleton suggests: 'Fragments may be construed in both negative and positive ways: as remnants of achievements and a plenitude that is irrevocably lost, or as elements of a restorative power that can provide symbolic and poetic meaning to newly constructed wholes'.[26] In other words, considering architecture 'as' fragment, and even the building itself 'as' fragment, raises an awareness of multiple temporalities, some reaching back to unknown pasts, others ahead to potential futures, and both offering promises of completion.

Once again, anachronism emerges as a fundamental concept. Indeed, only if architects embrace being anachronistic to time can buildings become deep synchronizing devices[27] – a sort of open field for existing fragments in space and time – with the potential to fuse the natural with the human, the everyday, and the extraordinary. The static, mathematical nature of Labrouste's library is brought to life in participative appropriation, just as anachronistic perception allows for a potentially chronological narrative of Soane's building.

BUILDING FRAGMENTS

In a short essay on the fragment, Dalibor Vesely suggests that architecture might learn from the power of the aphorism:

> *The parallel between the nature of modern situation and the nature of aphorism is striking. In both cases, fragments are endowed with meanings and values once resident in the whole. It is by virtue of an immanent that is, self-conscious interpretation that they cease to be fragments rather than by virtue of a belief in a transcendent whole. The aphorism is not simply a figure of speech. It is a configuration of discourse, usually a short statement in which the primary topic (theme) is confronted by a second one. In the tension thus crated, the usually well-established common-sense meaning of the original topic is challenged and, as a result, a new imaginative interpretation and reading becomes possible. The new reading can be metaphorical or reflective, and often cannot be precisely identified or labelled. The truth revealed in aphorism is primarily a truth of suggestion and sudden illumination. But the integration of wholeness which can be achieved through the fragmentary nature of aphorism is possible only for brief moments. The real virtue of aphorism is their heuristics quality, that is, the discovery of new relations and thus new insights into the personal world which may eventually become a common world.*[28]

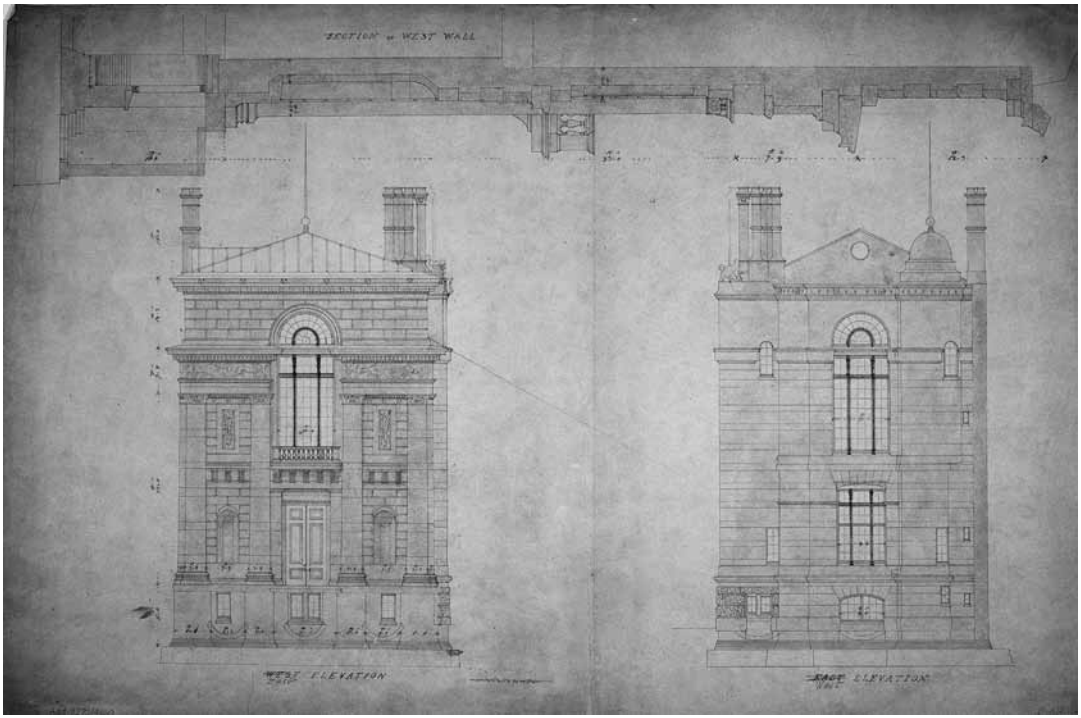
In bringing together fragments from the past with his own encounter with the ruins, and by confronting the layers of interventions still latent in the site of his new north wing, Cockerell was possibly exploring in both his drawings and his architecture what Vesely calls the 'restorative meaning of fragment'.[29] The series of drawings for Cambridge University Library are fascinating for a number of reasons:

they bring forth a set of historical fragments; they geometrically lay out an array of contextual conditions that also reach back to unrealized as well as potential histories; and, particularly in relation to the unfinished quadrangle, they embed dimensions of an unrealized but complete project in the only actualized fragment of the scheme. The drawings were used to effectively overlay the project's different temporal conditions, something that is most vividly expressed in Goodchild's rendition of the project during construction. What is more, Cockerell could not have attuned the north elevation as well as he did through his drawings had it not been for his ability to operate between the existing site as experienced in time, and his vision of a tangible building responding to existing conditions that also unfolded in time. Cockerell's later developments on the north wing's main façade included a subtle intention to suggest that the whole eastern elevation migrate to this northern fragment. In effect, the sketching that was done to emphasize the north wing was strongly influenced by how Cockerell had originally planned to treat other parts of the full quadrangle. In one of the few drawings depicting the north wing in isolation, the façade includes elements developed elsewhere: the pediment, a Venetian window, and surface ornamentation. Hence, when it fell onto the north wing to speak for the building as a whole, the intended tripartite composition was translated onto its short elevation, marking a newly important junction with the existing Old School building.

The building likewise was a tableau made up of many fragments whose temporality could be experienced as one moved about the site. In his drawings as well as his buildings, different elements preserve the ambiguous qualities of fragments, oscillating between historical vestiges of bygone time, and the present experience of living and lively actors.

Cockerell's approach to drawing thus contributed to what could be described as an architectural synchronization of anachronistic elements. Whether in his depiction of archaeological sites or in his conception of architectural projects, Cockerell understood the need to create a certain sense of time. That is, neither in his drawings nor in his buildings did he consider time to be one-dimensional. Just like his reconstructions operated beyond the conception of a single moment in time, so he built in an extended field of time, synchronizing a Bassae capital in an adapted Wren gallery that opened onto Gibbs's Senate House, and confronting us with an un-built future and a past that was yet to disappear in the proximity of the Old School Library's heavy stone wall, perceived from the north wing's new bay and still awaiting a larger quadrangle.

The sense of time architects build into their constructions is inherently made up of a great number of dimensions. These dimensions should be explored regardless of how latent they are in a drawing's two-dimensionality or a building's three-dimensionality. By drawing a multiplicity of times into his archaeological surveys, restoration drawings, and his buildings, Cockerell points to the restorative potential of the fragmentary condition of architecture. As Vesely suggests in his discussion of fragments, and as Middleton has described Soane's spaces, the willingness to embrace the ambiguity of the fragment transforms the experience of architecture into a heuristic quest.[30] If Soane's interiors remain more potent,



4.12 C.R. Cockerell, East and west elevations of the North wing, Cambridge University Library, c.1837, Cambridge University Library, Cambridge (CUL ADD. 9272/4/60). Reproduced by kind permission of the Syndics of Cambridge University Library

we must acknowledge Cockerell's ability to evoke the power of the aphorism in his treatment of space not only internally, but also externally, in-between buildings. Translating his sensitivity to the multiplicity of time from his restorative and archaeological work to his architectural practice, Cockerell devised ways of drawing that led to more than just a specific moment in time as perceived from a static viewpoint. He thus continually challenged the linear consideration of time and strict continuity of space.

NOTES

1 In his article on Cockerell's Cambridge University Library, John Olley refers to Goodchild's drawing as a fantasy. See John Olley, 'Masters of Building. A Modern Architecture Based on History. University Library', *Architect's Journal,* 189:6 (1989): 59.

2 The north wing was completed in 1840, but it is suggested that the drawing could have been made as early as 1837. See *Caius and Gonville, the Transformation of a Library* (Cambridge: Cambridge University Press, 1997).

3 For a description of the project and three competitions, see John Olley, 'Masters of Building. A Modern Architecture Based on History', and 'Masters of Building. Inspired Use of Classical Precedent. Classical Masters' Plans for Cambridge', *Architect's Journal*, 187:49 (1988): 36–57.

4 See Nicholas Savage, 'Exhibiting Architecture: Strategies of Representation in English Architectural Exhibition Drawings, 1760–1836', in David H. Solkin, ed., *Art on the Line* (London: Yale University Press for The Paul Mellon Centre for Studies in British Art and The Courtauld Institute Gallery, 2002), 201–16.

5 Savage, 'Exhibiting Architecture', 208.

6 See for example *The Elevation, Plan ... Section and other Parts of a Design for a National Monument …,* exhibited in 1818.

7 Namely, *A Group of Churches, to Illustrate Different Styles of Architecture,* exhibited in 1825.

8 Savage, 'Exhibiting Architecture', 201–16.

9 Quoted in David Watkin, The *Life and Work of Charles Robert Cockerell* (London: Zimmer, 1974), 196.

10 The competitions are well documented in John Olley, 'Masters of Building. A Modern Architecture Based on History'.

11 The architects who submitted proposals in the first competition were W. Wilkins, D. Burton, C.R. Cockerell, and the firm Rickman and Hutchison.

12 Cockerell: '[The 2nd design] occupies the whole site belonging to the university to greater advantage than is possible in the other […]. [It] combines the Senate House in conformity with the designs of Gibbs's & (?) with the difference that the centre being pierced, & forming an open Portico, renders this plan more light and less confined than theirs, & makes a magnificent Portal to the whole building with a very striking effect in the approach from London'. *Letter to the Honorable the Vice Chancellor and the Syndics Appointed to Consult Respecting the Appreciation of the Premises Lately Purchased by the University for the Enlargement & Improvement of the Public Library, the Erection of Schools, Lecture Rooms, Museums &c.*, 31 Oct 1829, CUL Archives, Add. 6630 (1).

13 For a discussion of the previous schemes for this site, see Olley, 'Masters of Building. Inspired Use of Classical Precedent'.

14 Cockerell, Letter to the Honorable the Vice Chancellor, CUL Archives, Add. 6630 (1).

15 George Peacock, *Observations on the Plans Proposed for the New Library* (Cambridge: Cambridge University Library Archves, 1831), 1.

16 Cockerell had first made a drawing of a 'design for a Ionic Capital' in 1829. It was then used at Cambridge University Library as well as in 1845, in the Taylor and Randolph Buildings in Oxford. See A.E. Richardson, 'Design for a Ionic Capital by Professor Cockerell', *Journal of the Royal Institute of British Architects,* August (1918): 229–30.

17 Oxford Museum Archives, HBM 5/2, 'Statement of the Requirements of the Oxford University Museum and Plan of the Site', quoted in Frederick O'Dwyer, *The Architecture of Deane & Woodward* (Cork: Cork University Press, 1997), 186.

18 The Bridgewater treatises were a series of books written by eminent scientists bringing their most recent findings harmoniously together with orthodox readings of the sacred texts. These treatises, published in 1836, were a result of the Earl of Bridgewater's will (d.1829) who instructed his successors to oversee the publication of works that reconciled the advances in science with the idea of an intelligent creator. Whewell, an important player in the project for Cambridge University Library, was the author of one of these treatises: *On Astronomy and General Physics*. The treatise on geology was published by William Buckland.

19 Donald Preziosi, 'Seeing Soane Seeing You' in Claire Farago and Robert Zwignenberg, eds, *Compelling Visuality, The Work of Art in and Out of History* (University of Minnesota Press, 2003), 211–36.

20 Unlike the 'Greek' Thompson or 'Athenian' Stuart, the 'neo' of the Neo-Grecs recognized the necessary translation of an approach to architecture which in effect is to be 'new' for the second time.

21 Walter J. Ong, *Orality and Literacy, The Technologizing of the Word* (London and New York: Methuen, 1982), 81.

22 Thomas A. Kselman, *Death and the Afterlife in Modern France* (Princeton, NJ: Princeton University Press, 1993), 146.

23 Neil Levine, 'The Romantic Idea of Architectural Legibility: Henri Labrouste and the Neo-Grec', in Arthur Dexler, ed., *The Architecture of the Ecole des Beaux-Arts* (Cambridge, MA: Cambridge University Press, 1978), 352.

24 Comte: 'Or, cette dernière innovation était déjà commandée par les principales exigences du culte systématique de l'Humanité, dont les deux modes nécessaires la rendent également indispensable, soit à la glorification concrète du passé, soit à l'idéalisation abstraite de l'avenir'. Auguste Comte, *Calendrier Positiviste* (Paris: L. Mathias, 1849), 4.

25 Colin Rowe and Robert Slutzky, 'Transparency: Literal and Phenomenal', *Perspecta*, 8 (1963): 45–54.

26 Robin Middleton, 'Soane's Spaces and the Matter of Fragmentation', in M. Richardson and M.A. Stevens, eds, *John Soane Architect: Master of Space and Light*, (London: Royal Academy of Arts, 1999), 35.

27 I am borrowing the expression from Mark Wigley, 'The Architectural Cult of Synchronisation'. *The Journal of Architecture*, 4:4 (1999): 409–35.

28 Dalibor Vesely, 'Architecture and the Ambiguity of Fragment', in Robin Middleton, ed., *The Idea of the City* (Cambridge, MA: MIT Press, 1996), 112.

29 Vesely, 111.

30 Middleton, 'Soane's Spaces'.

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PART III
The Language of Ornaments

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Bassae Capital: The Indexical Nature of Architecture

> *The Ionic order of the interior presents features of so novel a character, and of such interest, as to demand a detailed description of these two plates, It is evident that in constructing the details of this order, those considerations of optics and perspective which are so apparent in every part of this elegant work, were here most especially consulted, because seen from points of view often abrupt and or an acute angle, in this narrow cella, the form of the order would otherwise have failed. We discover, therefore, the sculptor no less than the architect, in the design of these capitals, and proof that they had been carefully modelled and adjusted to their places before they were ultimately executed in marble. … These notes will serve to show the optical considerations of the architect in adjusting this cap to its peculiar points of view, both in the front and on the sides.*[1]

In *The Temples of Jupiter Panhellenius at Æ*gina*, and of Apollo Epicurius at Bassae Near Phigaleia in Arcadia*, Cockerell expressed his deep admiration for the peculiar Ionic order that the Greeks had devised at Bassae (Plate 5). Above all, Cockerell noted how the order was so particularly suited to the humble dimension of the room in which it was situated, adjusted to the variety of angles from which it would be perceived. In Cockerell's representations of the temples in ruin, he gave a sense of the sharp angle from which the capitals in this narrow room would have been perceived. In the same drawing, he also sought to communicate the effect this order achieved in situation.

This peculiar version of the Ionic Cockerell encountered, studied, and drew at Bassae re-emerged in many different instances throughout Cockerell's oeuvre, in publications, lectures, and buildings. Cockerell's appreciation of the Bassae capital – the careful modelling, the adjustment to its place, the consideration of optics and perspectives – directly informed his theoretical conception of ornaments. His different uses of the Bassae capital propel us to consider his rich architectural approach to ornaments, as Cockerell's buildings remain the best testimony to his approach to ornamentation. At Cambridge University Library, Cockerell staged experiences of unexpected and respected adjacencies between museums and libraries, and from predicated circulatory movements to moments

of pauses. Cockerell animated the building through decoration, bringing it to life through suggested interactions at the time of its construction in 1840; the same elements are still vital to one's experience of this Cambridge library today. By and large, the library's ornamentation is what guides users in their apprehension of the building, inducing a look back at the building's surrounding here, suggesting an introspective moment there. Indeed, while many historians have drawn attention to Cockerell's commitment to the classical style in an age dominated by historicism – a commitment that contrasted both the customary tendency to move freely between different styles and the growing attraction towards the Gothic – it was first and foremost through his conception of ornament that Cockerell resisted the prevalent historical relativism of his time.[2]

THE ROLE OF ORNAMENT

> *The purpose of the present lecture will be to draw your attention to that essential accompaniment of the art & science of architecture viz. the decoration of the Sister Arts of sculpture & painting; and the decoration part of our art is so much the more interesting as it speaks to the majority of mankind in much plainer language than the recondite art of Architecture. While one in a 100 may enter into the graver and more interesting motives of structure & proportion 99 in the 100 will appreciate and occupy themselves in Ornament.*[3]

In likening ornaments to a plain language that could be understood by all, Cockerell participated in a discussion that preoccupied many of his contemporaries. After the revolution in France and a series of reforms in England, the idea that culture should be accessible to a larger, broader audience began gaining ground. In England, this desire for a wider diffusion of culture led to the creation of a number of circulating libraries, played a part in the creation of schools of design, and also affected the search for an appropriate architectural language. For those who advocated a progressive attitude to design, such as architect Owen Jones (1809–74), the capacity to adapt ornamentation to a new mechanized means of production was as important as the growing desire to educate the population at large. Basing his views on what was seen as the largely debased ethics of English industrialization, Augustus Welby Northmore Pugin (1812–52) claimed that a return to the principles of a perpendicular style would positively affect the moral health of the English people. John Ruskin (1819–1900) also praised the Gothic style, mourning the medieval architecture practices that effectively reflected the soul and everyday life of the craftsmen who carved its surfaces.

Theories on ornaments variously shifted between conventionalized or naturalized concepts grounded in symbolic or scientific considerations. By the Great Exhibition of 1851, ornamentation had become a key topic not only in architecture, but also in relation to design, society, industrialization, economy, and taste. While architects and theorists such as Pugin, Ruskin, and Owen offered diverging theories on the origins and expressive contents of ornaments, they tended to agree on one point: architectural ornamentation constituted the main vehicle for architectural expression. In the same vein, Cockerell defined architecture

as both art and language. The art of architecture was an unfolding narrative, an epic performed in the language of ornament.[4] The veiled art of architecture could only be communicated to society at large through ornamentation, the voices and gestures of the building enacting itself.

Cockerell developed his theory of architectural ornaments within a larger European context, echoing and influencing theoreticians both at home and internationally. His conception of ornamentation can be gleaned through journal entries, loose notes, and most importantly, through 15 years worth of lecture material written during his professorship at the Royal Academy of Arts. Between 1841 and 1856, as he dedicated himself to the preparation of his lectures, Cockerell the professor was reflecting on an already mature architectural production, having completed two of his most highly regarded projects, Cambridge University Library (1829–41) and the Ashmolean Museum in Oxford (1839–41).

In the course of his lectures, Cockerell used two common metaphors to define architecture: the book metaphor and the language metaphor. He generally applied the former to his consideration of architecture as an art, comparing the art of architecture to an epic of human history. When addressing how this history could effectively be communicated to observers, he turned to the language metaphor to explain his conception of ornaments. How Cockerell situated himself with respect to these two prevailing metaphors reveals how the mature architect defined his position in relation to some of the larger themes that nineteenth-century architects were then facing. Cockerell upheld that architecture could remain an important cultural signifier despite the ubiquity of the printed book, and it is through a differentiation between the narrative powers of books and buildings that he articulated some of his most interesting contributions to the practice of architecture. Printing and the advent of comparative linguistics were far from the sole challenges to architecture's cultural significance, but the questions of means and meaning inherent to these two metaphors touch on the most pressing issues that architects faced then, and still struggle with today. Cockerell's conception of ornaments effectively challenges the static interpretation of these metaphors, and this chapter traces how a passive reading of the building as text can lead to an active experience mediated by the building's ornaments at work.

The Book Metaphor

Cockerell's metaphorical parallel between the book and the building implied three inter-related issues. The first was the question of accessibility (universality was praised over exclusivity); the second concerned the message or material content that could be conveyed through the respective media (what could books or buildings represent?); and the last was strictly concerned with the distinction between the power of representation of the book versus architecture (exactly how did each of these represent?). Cockerell's position concerning the first two issues can be traced to Victor Hugo's *Notre-Dame de Paris* (1831). In his novel, Hugo addressed the capacity of the book and the building to preserve culture,

and praised the accessibility of the book over the limited reach of architecture. The main argument expounded in the chapter 'This Will Kill That', was that the invention of the printing press challenged architecture's traditional monopoly in the preservation and expression of a way of life. Based on a parallel between the fixed constituent parts of architecture and the book ('the pillar which is a letter, the arcade which is a syllable, the pyramid which is a word'[5]), Hugo argued that the accessible book would soon render architecture obsolete: the book would kill the building.

In a page of notes presumably written in preparation for a Royal Academy lecture, Cockerell echoed Hugo's argument by referring to the printed book as a 'gigantic engine' that expanded the horizons and reaches of knowledge, devastating architecture along the way.[6] In line with Hugo, the professor also traced how responsibility now fell on books, and no longer architecture, to safely record and make these records more accessible:

> *In the fourteenth century, another new and fatal blow [my emphasis] was given to the genius of architecture by the discovery of the press, the ambition of Princes and ingenious men & which had hitherto found in the durable monuments of architecture the most imperishable records of their fame, found the press a far more universal and lasting means of securing it than was ever offered by the granite block or the vaulted temple, and architecture lost in this rival its chief incentive to beauty and solidity of design tradition became written type […].*[7]

The dooming description of the 'fatal blow' is not typical of Cockerell, and was likely inspired from Hugo's introduction to his novel. Hugo purports that it was upon seeing the Greek word ΑΝΑΓΚΗ (fatal) inscribed on Notre-Dame's walls that he was prompted to write the novel, explaining how he was later unable to find this inscription because architecture had failed to preserve the carved word in the materiality of its wall:

> *The man who wrote that word on that wall was erased from the midst of the generations several centuries ago, the word in its turn has been erased from the wall of the church, and soon perhaps the church itself will be erased from the earth.*[8]

Hugo's view of the displacement of culture from architecture to the book was metaphorically embodied in the history of this lost word. In his novel, Hugo proceeded to restore the story of the carved word, bringing architecture back to life through literature, paradoxically preserving the building in the medium of the printed book.

In recognizing the ubiquitous reach of the book, Cockerell aligned himself with Hugo. He described how tradition, like Hugo's ΑΝΑΓΚΗ, 'left the marble monument for the vellum pages, and diffused herself silently but copiously to the remotest corners of the world'.[9] Though both Hugo and Cockerell welcomed the capacity of the book to disseminate culture well beyond the limited reach of architecture, this was at the cost of displacing architecture's monumental role onto the book. As a writer, Hugo monumentalized architecture in a work of literature. But as an architect,

Cockerell had different questions to face: how could the monumentality of architecture resist the volatility of the book? Could an adapted architectural language preserve architecture's fundamental role, but also make it more accessible?

In establishing a parallel between architecture and the book through an equation of their constituent parts, Hugo neglected a key issue. Hugo assumed that architecture consisted of fixed parts that could be read like a book, but did not distinguish further how these two media 'represented' the world in which they took form. Conversely, for Cockerell, the crucial issue was the development of a specific conception of architectural representation. Ultimately, it was not Hugo but Quatremère de Quincy (1755–1849) who would provide the scaffolding for Cockerell's theorization of architectural representation.

Cockerell was acquainted with Quatremère, familiar with his work on polychromy and, judging from the annotations in his copy of the work, an avid reader of *De l'architecture Egyptienne*.[10] In this work, Quatremère touched on the parallel between the book and the building, recognizing the power of Egyptian buildings to act as great books, but criticizing them because they were actually inscribed, that is, written, like books.[11] Cockerell's marginalia testify to his enthusiasm for the idea that a building could be a repository for a people's history. He was enticed by the idea that the Egyptian buildings – literal, simplistic, plain, and non-metaphorical though they may have been as books – still became 'depositaries of rites', of exploits and glories, of the philosophical and political history of the nation. Notwithstanding his interest for the power of Egyptian architecture to act as record and cultural signifier, Cockerell was in full agreement with Quatermère's position on the flaws of their architecture: '[…] we have seen that the fault of the imitation which is at the basis of Egyptian architecture resides in too close an identification with that which it used as a model'.[12] He agreed with the French theoretician that Egyptian architecture was limited by its direct translation from the written language to the language of architecture.

For Cockerell, the key question was how architecture could act as a record. Quatremère's use of the book analogy involved imitation, which offered an interesting answer to the question of architectural representation. Developing an idea that would also be picked up by Pugin, Quatremère established a distinction between merely 'copying' a style and 'grasping its principles and spirit'.[13] To better define the latter, he elaborated his views on imitation, joining a long tradition of theorists who contrasted the painter's and sculptor's representation of nature to the architect's imitation of nature's workings – *natura naturans*. Quatremère departed from this tradition however by placing emphasis on the distance between the architectural work and the forces of nature it imitated. While this had been explored in abstract terms since the Renaissance, Quatremère's discussion of the fictive, the veil, and the necessity of artifice made the distance between imitation and the real tangible. Cockerell was evidently interested in this distance between architecture and nature, a distance which prevented 'misrepresenting truth' or 'presenting it unveiled', as he marked the pages where Quatermère qualified imitation as an 'agreeable fiction', an 'ingenious mask', and a 'happy metaphor'.[14] He agreed with Quatremère that the pleasure sought through imitation was to experience the

image as the veil of truth, a fiction, or a lie that fooled observers without leading them astray. By modelling itself too closely on how representation occurred in written works, Egyptian architecture had failed to provide the necessary distance: 'so the Egyptian sculptor, to represent a great man could only do a tall man, and to represent a tall man, he only could do a huge man'.[15]

Cockerell's definition of architectural imitation broadly followed Quatremère's. He referred to the importance of the bond between architecture and the other arts and accepted the distance defined through the more abstract order of architectural imitation. Cockerell upheld that only by recognizing the imitative dimension of human nature, and thus architecture as an imitative art could its practice avoid the reign of stylistic relativism. Concerned with the necessity of preserving tradition, Cockerell suggested that architects should not only turn to nature but also to history, and developed a *historical* conception of architectural imitation on which he founded his Royal Academy lectures. In this historical grounding lies the essence of Cockerell's conception of the representational role of architecture as record, subtly setting him apart not only from Quatremère, but also from Ruskin and Pugin. Certainly, Cockerell was aware of Pugin's writings, but the consideration of principles necessitated for him the recasting of the Puginian moral into the moral–historical. Similarly, while he shared Ruskin's perceptive reading of the life carved in the stones of Venice, Cockerell refused to be bound by a religious world order embedded in nature's movements, and so prioritized a man-made historical framework (see Chapter 6). What Cockerell the professor sought to communicate was a way of looking at history that would enable his students to bridge one time to another.[16] The study of history meant one could learn to look for principles that were 'constantly recurring'. Principles were not to be traced to one single origin but revealed as they emerged first in one time, then in another:

> *The work of the architect founded upon past time & calculated to last to future time, & comprehending therefore an extended field of Time, should be constructed on those Principles which have been best approved by enlarged Experience thro many ages.*[17]

For Cockerell, new architecture was not to be abstracted from nature but from the architecture of the past: it was the 'happy metaphor' of history. This precluded the segmentation of different periods as well as the indiscriminate movements between one style and the other. History was considered whole, as an unfolding narrative that moved of its own natural force. To imitate history, one had to understand the forces at work – whether climactic, political or religious – and build on the principles abstracted from a flowing tradition.

Recognizing how architecture's representative and communicative powers had been exploited throughout time, Cockerell framed his definition of imitation in terms of translation. The distance offered by architectural imitation meant one could build traditionally in a distinct contemporary mode. Cockerell's historical comprehension of imitation established the temporal distance between the now and then, all while bridging the present with its pasts. But an additional distance was being hinted at. Beyond the translation that had to span a solidified history with the ephemeral now,

Cockerell also highlighted the distance between ornament and the recondite art of architecture, between the surface and the essence of a building:

> *The Greek made sculpture the chief attraction of their Temples & the foil by which the arche was appreciated and in our own country who can resist the extreme interest developed in the front of Well's cathedral ~~picturing~~ storying as it does the whole substance of revelation!*[18]

Ornaments revealed architecture in the distance between architecture's graver qualities and this happy metaphor, with the ornaments themselves constituting the foil, the veil that both revealed and concealed architecture. In the process, the distance between the plain language of ornaments and the obscure art of architecture defined another dimension: neither the reified present nor the past, but architecture experienced as an event taking place in the moment of experience. Replacing 'picturing' with the neologism 'storying' in his description of the communicative role of Greek and Gothic sculptures, Cockerell not only reiterated the parallel between the book and the building, he significantly reinforced the active role of ornaments in narrating an event – that is, their animation of the perception of a building, as it were, in time.

The Language Metaphor

If the book metaphor was invoked to describe a base or declining architecture, the language analogy opened avenues for scientific, systematic, and semantic considerations of architecture. The parallel between language and architecture was first made in an effort to raise architecture to the status of a liberal art.[19] By the sixteenth century, Horace's *ut pictura poesis* was successfully established as *ut architectura lingua*.[20] Essentially, the parallel compared the assembly of parts in architecture to literature's assembling of words. Most importantly, architecture could be seen as expressive and not strictly a mechanical art. Throughout the seventeenth and eighteenth centuries, the link between the two remained metaphorical and was used to the same end. Given the comparison of language parts to architectural parts, the metaphor eventually centred on ornaments as moving between the literary and the architectural. While the focus on these constituent parts suggests a syntactic approach to architecture, it would be incorrect to presume that architecture was already being considered a language. From Vitruvius until the nineteenth century, architecture was seen as being like a language, but not a language in itself. In 1836, Wilhelm von Humboldt published *On Language*, one of the first expressions of a general theory of language. It came some 30 years after Friedrich von Schlegel's *Concerning the Language and Wisdom of India* (1808), a pioneering work in the field of comparative philology. Until the development of such theories, architecture had never been considered comparable to a linguistic phenomenon.

Informed by these developments in comparative philology, German architect Gottfried Semper (1803–79) is one of the first theoreticians to have systematically

compared the rhetorician's language to the architect's language, suggesting that their roots and transformations could be traced through similar processes.[21] Semper quite literally adopted the methods of comparative linguistics by substituting 'language' with 'art':

> *Just as the roots of language always maintain their validity and the basic forms appear again throughout all later modifications and expansions of the concepts attached to them, just as it is impossible to invent, for a new concept, a completely new word, without missing the first goal, of being understood, just as little may one disregard, and discard in favor of others, these oldest types and roots of artistic symbolism. […] the same advantage that a present-day rhetorician can take of the comparative study of language and of research into primeval affinities between languages is enjoyed in his art by the architect who discerns the oldest symbols of his language in their most original sense, and takes account of what transformations in form and meaning these, with the art, have gone through.*[22]

In considering the language of architecture, Semper was interested in the forces motivating the transformations of languages so that these remain understandable in shifting circumstances. Whether architecture was considered to be like a language or conceived as a language itself, Semper's primary interest was still in its expressive powers. The great difference lay in the distance between what Semper calls 'making' and 'becoming', between the study of architecture as 'facts' and architecture as 'events':

> *Such a theory will be no handbook for the practice of art, for it will not show the making of artistic form, but its becoming; it will take the work of art as a result of all the factors involved in its becoming. […] Nor is this theory a pure history of the arts; in passing though the field of history it will not apprehend and explain the works of art of different periods and countries as facts, but as events developing as it were; it will identify the different values of a function composed of many variable coefficients, and will do this primarily with the intention of revealing the inner necessity that governs the world of artistic form, as it does nature.*[23]

Essentially, conceiving architecture as language involved a new dynamic element, leading from the static reading of architecture as an assembly of fixed parts, to its active comprehension as a developing language.

Semper lived in London between 1850 and 1854, during which time he completed *The Four Elements of Architecture,* a number of his important theoretical works on polychromy, ornament, and style, and lectured at the Department of Practical Art. Semper's stay in London coincided with the Great Exhibition, which he entered as both designer and critic. He also attended meetings at the Royal Institute of British Architects, and it is perhaps in this context that Cockerell and he were first acquainted, as we do know that they met regularly around this time. Until 1853, Semper advised Cockerell on acoustics questions for his work on Harvey Lonsdale Elmes's unfinished design for St George's Hall in Liverpool. Their conversations no doubt touched on the subject of polychromy, which interested

them both, and Semper's dynamic approach to the definition of architecture would have resonated with Cockerell.

Semper's theory of style was founded on the active elements of form: the idea, the task, the means – basically the preconditions of form rather than the static form itself. Following in the footsteps of contemporary linguists such as von Schlegel, Franz Bobb, and Jakob Grimm, Semper sought to uncover the primal idea that enabled ornaments to work as powerful artistic symbols that could activate architecture.[24] He described these ideas as 'motives' that were impressed on architectural forms:

> *That is to say, just as nature with her infinite abundance is very sparse in her motives, repeating continually the same basic forms by modifying them a thousandfold according to the formative stage reached by living beings and their different conditions of existence […], just as nature has her history of development within which old motives are discernible in every new formation – in the same way art is also based on a few standard forms and types that stem from the most ancient traditions and that always reappear yet offer an infinite variety and like nature's types have their history. Therefore, nothing is arbitrary; everything is conditioned by circumstances and relations.*[25]

As in nature, transformative forces such as Semper's 'circumstance and relations' brought about changes in architectural forms and types. In other words, Semper was a critic of uncritical appropriation, and argued that 'forces still active in the present' should inform modifications in architectural motifs.[26]

Like Semper, Cockerell was interested in active transformative forces. In his lectures at the Royal Academy, Cockerell also referred to the forces that modelled architecture as 'motives'. Rather than echoing Semper's fourfold categorization of motives as hearth, mound, roof, and vertical enclosure, Cockerell emphasized how ornaments were called upon to express the 'motives of the art of buildg. & the partic^{r} character of the times'.[27] He likened details to poems, fables, and histories, effectively considering these as the life embedded in architecture and the vocal expression of this life. While he accepted Semper's genealogical understanding of the development of forms and types in history, Cockerell's consideration of the dynamic transformative forces focused on the life embedded in the space between the essence of architecture and its ornamental dress.

Cockerell used the linguistic analogy specifically in reference to how ornaments have the capacity to convey life. Cockerell was familiar with some of Schlegel's work, and though he was neither consistent nor systematic in his adoption of comparative linguistics, he often paralleled the expressive power of language to the role of ornaments. In his lecture notes, he variously drew on works by grammarians, rhetoricians, and poets, or more generally on etymology and language to situate the realm of architectural expression. Seeking to understand the role of architectural elements by tracing their linguistic roots, Cockerell referred to the etymology of the Greek term for frieze to draw attention to the life-bearing function of ornaments:

> *In fact the zophorus the greek terms for the Frieze is attributed explained by some etymologist to composed the verb & substructure bearing life. Life as contrasted in that feature with the stillness of the other members of arch*[e].[28]

Developing further the idea of the life-bearing ornament, Cockerell hierarchically described three levels at which ornamentation could play a role. At a basic level, ornaments were called upon to 'carry out the geometrical rigor'[29] of architecture's still members. This first level was in contradistinction with the second level, 'the scroll of life bearing ornaments, frieze or zophorous, in which less of rigor and more of variety life & picturesque are observable & in which a contrast with architectonic rigor is proposed to give at once effects & relief to that architectonic rigor'. This second level of 'life bearing' ornaments was inferior to the last level in which life was communicated to the spectator:

> *Three- But the third & the higher quality of ornamental talent is that which is given by the chisel – the historical, sculptor, the poet who symbolises in significant grouping the intent & purpose of the Building making it speak in intelligible language & communicating a lofty idea to the spectator, exalting in imagination by beauty & fitness poetry & allegorical meaning.*[30]

Paradoxically, Cockerell only prioritized the 'higher quality of ornamental talent', because its role was to emphasize what was described at the first level as the 'geometrical rigor' of the lifeless substructure. For Cockerell, the art of architecture did not reside in the plain language of animated dress, but in the still, hidden and complex substructure. Indeed, this is something he criticized in Ruskin, who he accused of paying attention to the 'stones of Venice, […] to the Stones literaly […] but not to the structure which those stones compose, nor the laws of beauty as applied to the entire composition […] which constitute the most difficult & noblest achievement of the architect'.[31] Fearing that his young students would indulge in ornaments for their own sake, Cockerell repeatedly introduced 'decor & ornament' as 'the last operation of the archt taste',[32] once also using a colourful analogy to reinforce his point:

> *Those indeed are the last acquirement of the artists. – just as complexion lustre color & personal grace bewilder the imagination of the lover & put to flight the graver moral & intellectual qualities on which the great results & enduring ultimate satisfaction can alone depend.*[33]

For Cockerell, just as the grace that can spark love but deter recognition of graver qualities, ornamentation is not the essence of architecture, but rather is used to communicate this essence. As the quality of ornamental talent rose, spectators were being drawn simultaneously away from and closer to the essence of architecture. Taken away from the 'graver and more interesting motives of structure & proportion', they could finally experience the building as it came to life.[34] Cockerell's use of the linguistic analogy therefore remained grounded in semantic rather than syntactic consideration.

Cockerell defined the ornament within a series of dualities such as life and stillness, dress and essence, or ephemerality and permanence. In the course of his Royal Academy lectures, he polarized a number of other pairs of elements according to the same qualities. Discussing the relation between plan and elevation, he warned his students that, 'by searching after the Pretty rather than the sensible we are always mistaking the means for the End'.[35] The plan, which Cockerell defined as the trace of the ritual, constituted the true end of architecture, while the means were described as the 'Pretty' or the 'external dress', in other words, the elevation.[36]

Cockerell also differentiated between line drawings and the use of colour. He stressed that line and precision ought to be the first concerns of architects and students of architecture, before the colour of the 'dress'. Colour, in Quatremère's words, was 'the image of life to the child's or savage's eye'.[37] But colour not only signified life, it dwelt at the boundary of possible contradictions and linked the animate with the inanimate. In the debates during the 1830s on polychromy, French architects considered colour an expression of the 'awareness of this middle space between man and the monument'.[38] According to architectural historian David van Zanten, this middle space was made present both in the restorations drawn by French architects and in the buildings they constructed. It was a middle space between a 'dead' ruin and its rebirth through its reading by an architect; it was the middle space between what was alive and momentary, and what lasted, but lifelessly.

Cockerell was personally involved in the debates on polychromy in the 1820s and 1830s, when the essence and existence of Greek polychrome architecture was being discussed by French, English and German theoreticians.[39] As early as 1819, Cockerell published an article on the archaeological fragments he himself had uncovered at Aegina, and in which he spoke of the use of colour on Greek temples. In 'On the Aegina Marbles', he drew attention to the vivifying character of colours:

> *[…] the colours served as the means of distinguishing the several parts, and heightening the effect by a delicate variety of tones, so as to relieve what might otherwise be inanimate and monotonous.*[40]

While Cockerell believed that colours animated and highlighted otherwise dead and bland parts of buildings, he did not necessarily advocate the same use of colour in contemporary England. Even as he rejected the application of colour to external façades on account of the English climate, Cockerell still appreciated its vivifying functions, and his architecture was far from pristine white. In Oxford, Cockerell's Ashmoleum Museum and Taylorian Institute contrasted and brightened their surroundings through the use of different stones. Rather than employing the typical Oxford stone, Cockerell chose a combination of golden Bath stone and Portland stone, which entered in a dialogue with adjacent buildings and challenged the traditional materiality of Oxford.[41] Unlike Jones, who applied colour to the girders of the Crystal Palace, Cockerell embraced colour as an ornament inherent in the material's essence. Here again, Cockerell's approach to colour stands out because it is rooted in historical and geographical circumstances. While Jones abstracted a grammar of ornaments through mathematical operations that

produced autonomous geometries, Cockerell tackled historicism by relocating the seed of life in the very materiality of the buildings themselves, orchestrating a lived experience of the tangible building in relation to its immediate context and larger historical framework.

Cockerell tapped into the expressive power of different materials – their colour, properties, and how they would be perceived in their specific location in a building – to animate his polychromic architecture. In a discussion on how materials performed actions, he once described how a conversation could occur between various structural elements of the same building:

> *Of the magnitude dignity instruction, grace & variety which this art [sculpture/ ornament] confer on architecture we can never say enough. By the aid of the sculptor the stone out of the wall can speak & the beam out of the Timber can answer it.*[42]

Cockerell turned to materials and ornaments to bring his buildings to life. The stone 'spoke', the timber 'answered', and the profile dictated:

> *Profile has very fairly been called the diction of architecture, & it is certain that the characteristic & emphatic expression of this part of the art is as important almost as the conception itself. [A] good argument clothed in bad language must lose more than half its weight, so in architecture Profile becomes the leading means by which the character & merit of the work is to be expressed.*[43]

While Cockerell was not the first to describe architectural elements in terms related to language, his views on ornamentation as diction were unique. Diction stems from *dicere* – to say. It is related to the flow of the words, and involves delivery, elocution, and pronunciation. Thus, placed at the crux of the actual instant of enunciation, the ornament performed, and was not so much a motif as it was its own moment. The ornament speaks directly to observers in motion, catches their attention, and arrests the eye:

> *Every ornament whether simply a moulding carved or such sculpturesque adornments as I have named arrests the Eye which would otherwise be too quickly passed over the work at the same time that it magnifies it indefinitely – but the number & variety of ideas it conveys & the perspective which it contributes to the surface, in sculpture of various dimension. the small receding from the Eye while the large comes forward*.[44]

Just as the articulated sound of language expressed thought, Cockerell conceived of architectural ornamentation as 'parlant & expressive', as 'voice' and 'gesture' that could immediately communicate the soul of architecture.[45]

Following a tradition that began with Alberti, Cockerell reinforced the links that could be drawn from Cicero to the Renaissance theoretician on the distinction between structure and ornaments. As architectural historian John Onians argues, Alberti elaborated his dual appreciation of architecture as *utilitas* and *pulchritudo/ ornamentum* in parallel to Cicero's distinction between *honestas* and *officia*.[46]

Whereas Cicero defined honestas as moral rectitude that was recognizable in action, Alberti suggested that aesthetic rectitude could be recognized in outward appearances. Cockerell went beyond the separation, established since the Renaissance, between the functional structure and decorum. Revisiting Alberti's translation of Ciceronian rhetoric, he returned to something closer to the opposition between *res* and *verba*. Tracing the ornament's roots in 'bearing life', and referring to the 'life attribute of ornaments',[47] Cockerell likened ornaments to verbs, that is, to active language. This implied an audience at the receiving end: ornament vivified a building as it spoke to the users.

THE LANGUAGE OF ORNAMENTS

But a language can only be understood if one knows how to read it, otherwise it remains gibberish, or simply applied decoration. The value of symbolism was that it contained recognizable elements. Like Pugin, Cockerell had read the work of medieval canonist William Durandus (c.1230–96), the *Rationale divinorum officiorum* (1291). Translated in 1843, Durandus's text was available in English as *The Symbolism of the Churches and Church Ornament: A Translation of the First Book of the Rationale Divinorum Officiorum*.[48] Succinctly, Durandus's work consisted in a heavy symbolical description of various architectural and liturgical elements of the Gothic church. In Pugin's theory, this emphasis on the symbolic translated into the idea of ornament as emblem.[49] Inversely, when Cockerell brought attention to Durandus's text, and described how the ornaments were 'the animating spirit of architectural and ornamental composition', he repeatedly warned against 'veiled symbolism'. Starting from the conception of 'symbolism in art' which 'seems at all times to have been found both material and convenient – to represent an important Principle by a Type, & to convey an extensive meaning by a compendious sign', Cockerell pointed out that flattering 'the comprehension of the initiated who thus seemed to possess the keys of knowledge & salvation', the symbolic sign restricted communication and remained 'a mystery not understood by all'. Cockerell's own conception of ornaments stands in contradistinction to this privileged access to knowledge. According to Cockerell, 'the research of modern science and practical experiences […] has abundantly shown that knowledge and light are synonymous as mystery & darkness are also', and '[the use of compendious sign] was but a veil for ignorance & superstition – under any form of government or religion which has adopted those unhappy presumptions'.[50]

In summary, Cockerell argued that symbolism was in fact a veil preventing the distribution of knowledge at large. Clearly, Cockerell was against this propensity for the few to hold the keys to an otherwise obscure symbolic meaning. For Cockerell, the appeal of Greek and Roman architecture resided in how '[they] sought to distribute their learning amongst the people […]'.[51] Along the same line, he highlighted the early Christian use of obscure symbols in their catacombs, 'to maintain that kind of freemasonry (if we may so term it) through which their faith might be sustained amongst themselves and recognised by signs'.[52]

Cockerell suggested concentrating on pivotal points through which meaning could be communicated to a larger uneducated audience. Addressing the fundamentally accessible level at which architecture could signify, Cockerell discussed various experiential means of communication, which he presented as active processes – a movement through a space, a displacement from dark to light, a passage from inside to outside.

Challenging a static correlation between a specific ornament and its known symbolism, Cockrell's discussion of the animating spirit of ornamental composition included not only sculptural ornaments, but also a number of different architectural elements such as doors, windows, or longer passages. In most cases, the meaning of theses elements was derived from a shift in position. Recalling for example the great impression made upon him by a very humble and narrow entrance to a large hall, Cockerell described it as 'satisfying at once a symbolical Dogma & an artistic artifice of Effect'.[53] In another instance, Cockerell addressed the door as a fundamental hinge between inside and outside, in terms of the shifting perception of its scale or in direct reference to the human figure:

> *[…] the door is confessedly the scale, by which we measure the dimension of the whole Front, just as does the human figure introduced into Architecture – if that figure is large the Architecture shrinks in dimension, if small it acquires size – the door like the human figure is the scale and measure of all things in the facade – it is the modules of dimension – The artist, master of proportion, wisely therefore seizes this important means (the small doorway) of giving scale or dignity to his composition – he makes his door small, and the rest of the Architecture becomes relatively large (see Wells Cathedral).*[54]

In describing the signification of the door, Cockerell moved away from religious symbolism (he began by quoting 'straight is the gate and narrow is the way that leadeth to life […] I am the door […] I am meek and lowly') to a direct confrontation of the human body with the door in its larger setting.[55] Any newcomer to a building could sense its grandeur or humbleness from the size of the door they encountered, experiencing it in contrast to the external façade it pierced or the interior space it opened into. Similarly, Cockerell's description of the window brought attention to its pivotal situation, where expected relations between light and darkness, or between interior and exterior were at play. Finally, Cockerell highlighted the 'technical and mechanical sources of effect in medieval arche […] which affected its design so naturally', perhaps alluding to the possibility that materials themselves, particularly in the way they were assembled, could act as expressive elements that come to life as users move through the building.[56] In a lecture meant to 'draw […] attention to that critical accompaniment of the art and science of architecture viz the decorations contributed by the sister arts of sculpture and painting', Cockerell specifically addressed how ornaments contributed to the kinetic language of architecture.[57]

In moving away from a symbolic understanding of ornaments towards a more experiential approach, Cockerell was suggesting a new answer to the question as to how ornaments could lead beyond themselves. Cockerell's emphasis on movement

5.1 C.R. Cockerell, *Dividend Pay and Warrant Office of the Bank of England* (London: *The Architectural Magazine*, 1836)

and the importance of situation over the passive recognition of an established symbolism reveals his interest in modes of signifying based on movement and perception – moving about an object, identifying it through a change of light, the length of a shadow, or its repetition.

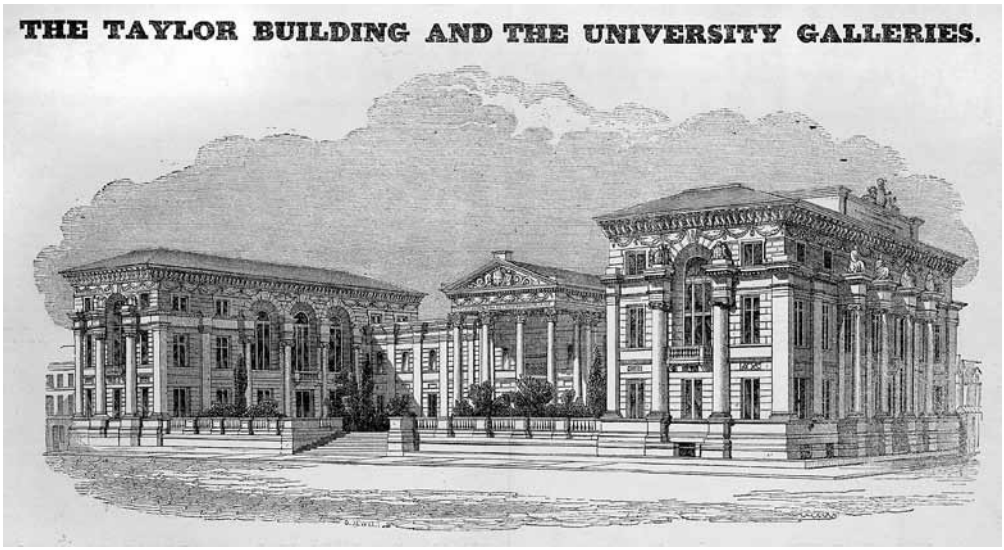
In 1836, a writer from *The Architectural Magazine*, reviewing Cockerell's new Dividend Pay and Warrant Office of the Bank of England, noted this active quality as being like a dialogue unfolding between the ornaments and the viewer at a fundamentally experiential level.[58] After a summary description of the building's layout, the writer, 'D.S.', described how the harmonious proportions of the interior court revealed themselves to a moving user. Perceptively, the reviewer contrasted the harmonious experience of the court, where the size and position of the elements were dictated by their physical circumstances, to a rash criticism based on prejudices and expectations only. The reviewer described how the intercolumniations, which in a static composition could be dismissed as being too large, were in effect suited to the overall kinetic composition experienced as one moved through the court.

Similarly, even though the entablature on its own could be considered inadequate, the reviewer described its position in the ensemble and hence its positive effect:

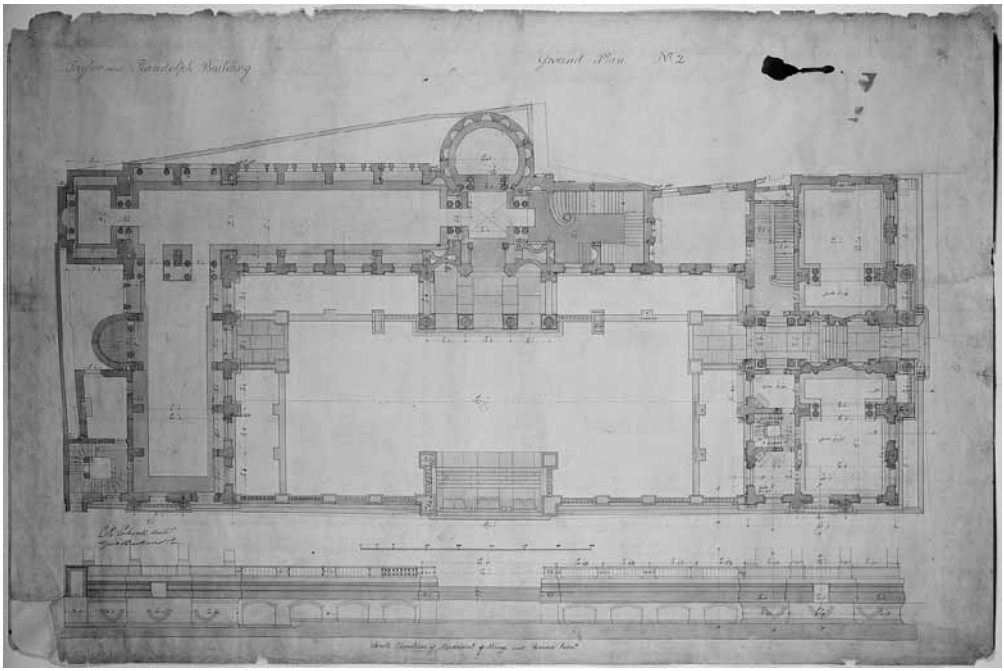
> *The entablature is rather diminutive and plain for the order; at least, so it would appear, were it not for the deep and highly enriched cove which surmounts it, and which may fairly be considered as forming an aggregate portion of the order itself; as it naturally forms the architectural finish to it, and defines the lower from the upper part of the elevation. Besides what it contributes to the design by its enrichment, two pleasing results arise from the application of this cove: by its projection, it causes the upper part of the room to seem to expand, and to appear wider than it otherwise might do; and, in the next place, owing to its being entirely thrown into delicate half shadow, it serves to prevent a too great glare of light, while the contrast of tint gives additional brilliancy to the upper story.*[59]

Still attentive to the phenomenological rather than to the dogmatic geometrical considerations of the building, the reviewer described the light – 'increased, in some degree, by the narrowness of the space, and the consequently strong reflection from the wall on which it strikes to the opposite one, is not a little powerful' – as well as the uncommon proportions of a 'character being, upon the whole, no less pleasing than it is striking and novel'.[60] The reviewer also commented on Cockerell's indexical play with the windows, reversing their function from introducing outside light to obtaining light from the interior:

> *It will be seen that the range of upper rooms (called the Accountant's Drawing Office) are continued quite round the interior, there being a window similar to the one […] at the other end of the room. These windows, and those along the sides, intended not to admit light into this hall, but to receive it from it, certainly produce a character very unusual in internal architecture, one that is piquant as well as novel.*[61]



5.2 O. Jewitt, *Engraving of C. R. Cockerell's Ashmolean Museum and Taylorian Institute*, 1840, © Ashmolean Museum, University of Oxford



5.3 C.R. Cockerell, *Ashmolean Museum and Taylorian Institute, Ground Floor Plan*, 1839–40, © Ashmolean Museum, University of Oxford

In conclusion, the reviewer generally noted Cockerell's uncommon treatment of ornaments: 'Much liberality has been shown as regards the ornamental part of the architecture […]'. What is particularly interesting is that though the reviewer noted the allegorical character of the sculptures of the façade, he did not spend any time elaborating on their meaning. Rather, he expanded on how various indexical elements or ornaments, which at first appeared faulty, were agreeably but also surprisingly set in place as he moved about the spaces.

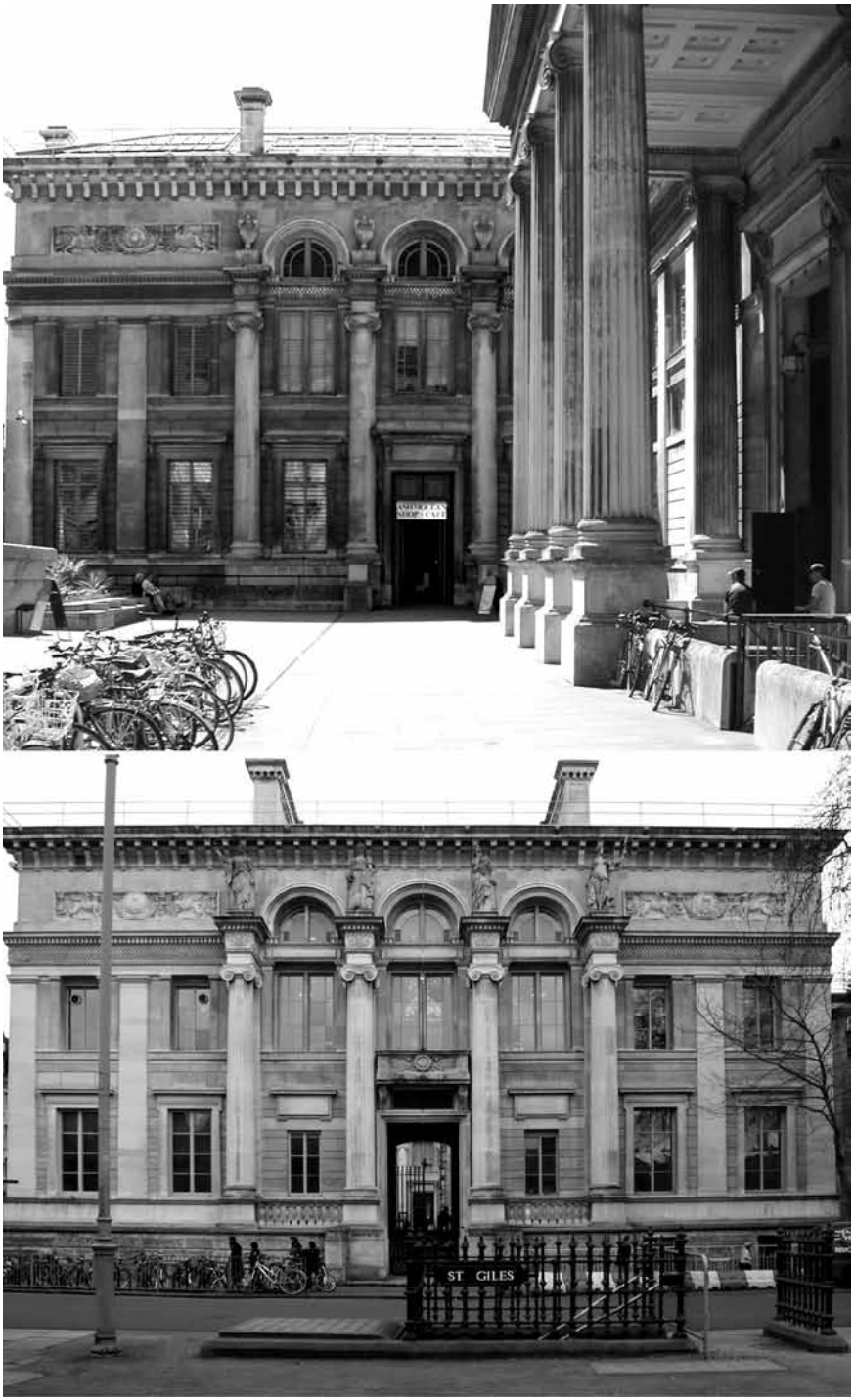
It is in the few buildings by Cockerell still standing today that the shift from static symbols to experienced ornaments is most vivid. Today, visitors can still experience how much Cockerell's architecture hinges on the movements of the potential users. Cockerell's kinetic approach to ornament produces moments of surprise or confirms expectations, inducing visitors to solicit answers as they move around the buildings. Their changing position has been considered, and provokes an awareness of a building's immediate surroundings. In both of Cockerell's Oxford sites, the Ashmolean Museum and the Taylorian Institute, it is remarkable how the ornamentation plays a role in bringing the whole composition to life as one moves about and within the buildings (Figures 5.2 and 5.3).

The Taylorian Institute, completed in the 1840s, was intended as both museum and library. The Institute of European Languages and its associated library occupied the east wing and faced St Giles Street, and the north and west wings, facing Beaumont Street, housed the museum collections. Dealing with an important site but also addressing the difficult situation of housing two important and distinct functions in one unifying building, Cockerell played with various readings to allow each of its parts to take precedence at different moments of one's movements about the building. For example, a high plinth on which the building rests appears to shift in the eyes of the passer-by walking around the corner. On the museum side, the solid plinth appears to be cut open to emphasize a large entrance gate at the main entrance of the museum. But by the time one reaches the Taylor wing, the plinth has become a pedestal for the south elevation rather than the wall it was previously when it shielded the museum entrance court. Finally, at the corner to the main façade of the Taylorian Institute, this plinth/wall/pedestal is pierced by a narrow stairway leading up to a passage that cuts across the east wing back to the interior court. Off this passage is the entrance to the Taylorian Institute, but the cut nonetheless also leads to the Ashmolean Museum. This ornamental feature, of a seemingly shape-shifting plinth element that not only demarcates the Taylor Institute wing but also leads to the museum as well as the institute, transforms the simple experience of walking down the passage into something much more elaborate and interesting.

Another shift awaits visitors as they move through the narrow passage. From the initial close proximity to the tall façade of the Taylorian Institute, the visitor will be offered a more adequate distance from which to grasp the new internal façade progressively revealed at the end of the passage (Figures 5.4 and 5.5). What could only be uncomfortably assessed in an awkward, close up, and upward glance can now be leisurely admired. This sense of ease and spatial relief presses one to consider the internal façade as though it were a duplicate of the previously encountered façade, newly pierced. This repetition that is not really a repetition

5.4 First sequence of entry through the Taylorian Institute, Oxford (photographs and montage by the author, with permission from the Ashmolean)

5.5 Second sequence of entry through the Taylorian Institute, Oxford (photographs and montage by the author, with permission from the Ashmolean)



5.6 Comparison of a courtyard and street elevation at the Ashmolean Museum and Taylorian Institute, Oxford (photographs by Sonya Jensen, with permission from the Ashmolean)

hinges on the viewer's previous encounter, or rather, their memory of it, brought to life here through the distinctions between recognition and what does not quite match (Figure 5.6). Increasingly, the awareness of what is dissimilar brings both façades to life – the one that stands directly in front of the viewer, and the one that has left a trace in their memory. Whereas the composition of the internal façade first appeared to be symmetrical, probably on account of having just come across a similar, symmetrical façade, it is now evident to the visitor that this internal one is lopsided, and that its missing mirror image is hidden by the central north wing.

Still looking at the internal façade and appreciating the animation provided by its ornamentation, one now also seeks to discover and remember how it differs from the first street façade. The disengaged columns are now pilasters, the statues have left the capitals, and the windows adjacent to the entrance stand taller. As the reader moves up into the library, the same ornaments undergo yet another transformation. Like the Bassae capitals in the Cambridge Library, the ornaments here intrude upon the user's experience. No longer peripheral to the appreciation of an overall – albeit lively – composition, it is as though they inhabit the library to the same extent that the reader might. The wreaths and pediment that were high up from the exterior view are brought to eye level; structure and ornaments take on a new composition. The capital of the engaged column of the interior façade – a variation on the order found at Bassae – turns its eye/volute so as to peek into the library. The Bassae capital's intricate relief not only addresses the viewer's displacement outside, but also becomes an eye into the library. The ornaments shift and present themselves differently as they are perceived by viewers moving along the building, through the building, or within it. These shifts sharpen a visitor's awareness, in that it forces them to look, and also sharpen an awareness of their own movements, as they are now being looked at (Figures 5.7, 5.8, and 5.9).

Cockerell's kinetic language of ornaments bears affinities Schinkel's scenographic approach to architecture. Schinkel's Altes Museum includes a spectacular entrance sequence from a hall ambiguously located between the inside and the outside leading up to the first floor loggia (Figure 5.10). Schinkel, the stage designer and panorama maker, appears to be consciously playing with the relations between inside and outside, up and down, near and far. From afar, the tall central columns rise and act as anchors for one's perception of the building. Once the visitor reaches the high point of the entry sequence, the first floor lobby, the real size capitals finally thrust themselves into view, and frame the point from whence the visitor came from. Schinkel's own representation of this moment reveals a deliberate setting.[62]

In the same building, Schinkel's multi-directional circulation device – a central rotunda operating on two floors, is reminiscent of Cockerell's negotiation of the corner around which the second floor libraries unfold in Cambridge. While originally conceiving the full library as four wings enclosing a quadrangle, Cockerell spent much energy articulating these domed corners as moments of engagement: between the connecting library wings and the vista into the building, down the central paths of the library and out through windows that carefully frame the adjacent constructions.

5.7 Perception of the Bassae capitals from St Giles Street, Ashmolean Museum and Taylorian Institute, Oxford (photograph by the author, with permission from the Ashmolean)

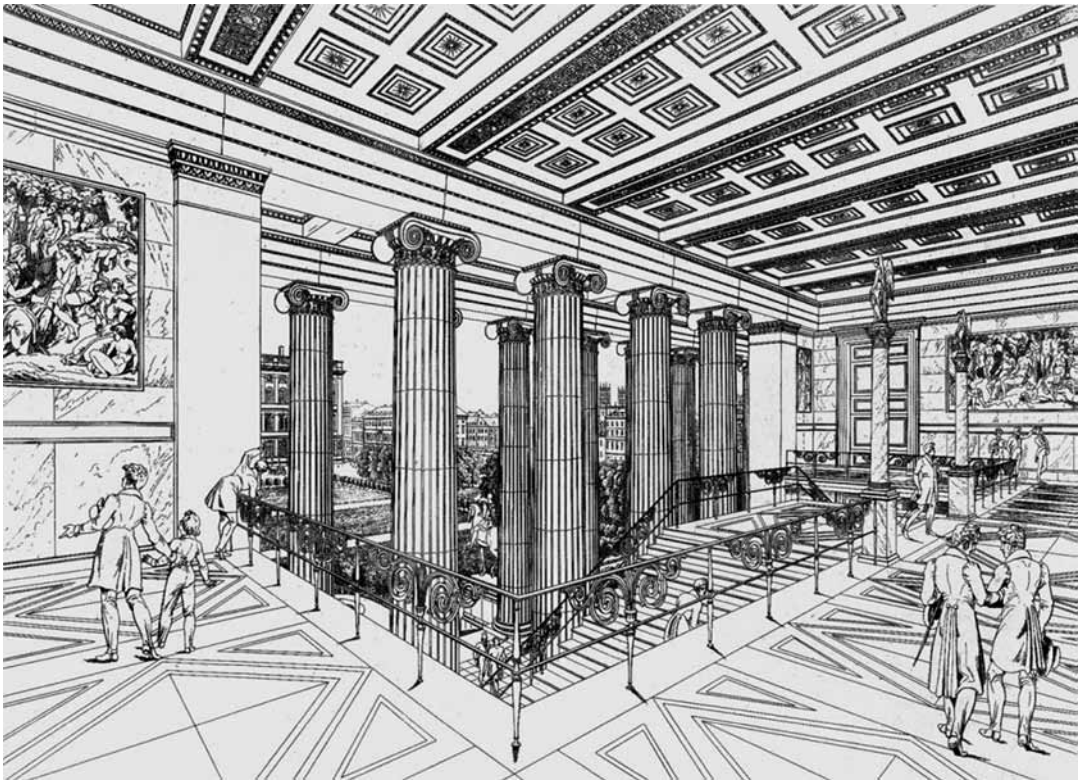
5.8 Perception of the Bassae capitals from the courtyard, Ashmolean Museum and Taylorian Institute, Oxford (photographs by the author, with permission from the Ashmolean)

5.9 Two views of the Bassae capital as perceived from inside the second floor library, Ashmolean Museum and Taylorian Institute, Oxford (photographs by the author, with permission from the Ashmolean)

Confronting visitors in motion with their animated architecture, Cockerell and Schinkel appear to have been able to define a mediating approach to what Alois Riegl would later term the haptic and the optic modes of vision.[63] While haptic vision involved associating visual signs to past tactile experiences, optic vision was predominantly built around visual clues such as light and colour.[64] The haptic is related to the actual mass, to stability and the monument; the optic evokes the luring element, an essential guide that must always be put in check through the body's shifts in position. In this play between what is seen and what is felt, between the 'pretty' and the 'essence', both Schinkel and Cockerell successfully introduced architecture as that which received, filtered, and shifted users' apprehension of the world in time.

Addressing the question of legibility, Cockerell framed a more direct encounter with architecture without changing much in the complexity of historical ornament and decorum. Cockerell effectively staged an *indexical* approach to ornaments, a term only defined later in the semiotics of American philosopher Charles S. Peirce (1839–1914). Whereas the capacity to understand the signification of symbols hinges on the knowledge of a pre-existing conventions (whether literacy in the classical language of architecture, or knowledge of the Bible), the comprehension of indexical elements rests on an awareness of how relations between physically present elements shift and explicate themselves as one moves about them. Cockerell obviously never referred to the indexical nature of his ornaments, but he was certainly concerned with how architectural ornamentation could be apprehended by a moving viewer. Most importantly, he also played with a building's capacity to pose questions and create an impression. His buildings come to life, and gaze back at their viewers.

Today, in what Vesely has called the age of divided representation, Cockerell's kinetic approach to architecture represents an alternative to a prevailing conception of architecture as ornament.[65] If the nineteenth century was preoccupied with the relation between structure and ornamentation, it may be that architecture has now surrendered its structural essence and resides entirely in its ornamental surface.



5.10 K.F. Shinkel, Sketch of the first floor loggia at the Altes Museum, Berlin (image in the public domain)

In this context, Cockerell's conception of ornaments as action represents one critical avenue to the preservation of meaning: architects ought to approach what is left of their art as an action.[66] Seen this way, architecture reveals something about the world as much as it reveals something about the architect and the user. Whether we consider architecture as durable, transient, purely functional, or eminently ornamental, what remains is that it occupies a place amongst men and women. Rather than considering the isolated architectural work, Cockerell sought the significance of architecture in the active and public nature of the relation that develops between a building and its users, affecting the one as much as the others.

NOTES

1 Cockerell, *The Temples of Jupiter Panhellenius,* 57–8. Further: 'The order exhibits the earliest example known to us of an Ionic cap on each face, as also of an abacus placed on the Ionic cap; the only examples of which have hitherto shown paintings on vases. The front and flank volutes will be found to differ both in width and in profile'.

2 Namely, see A.E. Richardson, *Monumental Classic Architecture in Great Britain and Ireland* (New York: W.W. Norton, 1982), originally published in 1914; R. Middleton and D. Watkin, *Architecture of the Nineteenth Century* (Milan: Electa, 1980); and the only published monograph on Cockerell, D. Watkin, *The Life and Work of C.R. Cockerell* (London: A. Zwemmer, 1974).

3 Royal Institute of British Architects (RIBA) MS. COC/1/11/i (Box 2).

4 Cockerell: 'The Painters art may be called dramatic, the architects is Epic' (emphasis in original). RIBA MS. COC 1/6/xviii (Box 1).

5 Victor Hugo, *Notre-Dame de Paris*, trans. J. Sturrock (London: Penguin, 1978), 190. Hugo's work was first available in French in March 1831; between 1833 and 1839, four translations had already been produced in England. As early as 1831, The *Foreign Quarterly Review* mentioned the success of Hugo's book in France.

6 Cockerell: 'By this gigantic engine [the printed book] innumerable fields of contemplation in art and science have been opened to mankind, architecture has been stripped of her sumptuous decorations and has been confined in public buildings to strict economy and utility and her magnificence is regarded as puerile in comparison of the vast and important ends of science, by which the happiness and civilization of the species is to be promoted. And she is now reduced to advocate her title to respect amongst the humanizing influences of the sister arts and sciences and national feelings of pride and decorum can scarcely advance her claims to the interest and care of public men'. RIBA MS. COC/1/98/i–xvii (Box 5).

7 Ibid.

8 Hugo, 25.

9 RIBA MS. COC/1/98/i-xvii (Box 5). On the relation between an educated society and the question of accessibility which runs parallel to Hugo (*Notre Dame de Paris*, op. cit., 179–202); see also RIBA MS. COC/1/76/iii (Box 5).

10 In 1818, Quatremère sought Cockerell's expertise on the Elgin marbles and visited the British Museum in his company. Cockerell's copy of *De l'architecture égyptienne* is now held at the library of the Royal Institute of British Architects.

11 Antoine Chrysostôme Quatremère de Quincy, *De l'architecture* égyptienne*: considérée dans son origine, ses principes et son goût, et comparée sous les mêmes rapports à l'architecture grecque* (Paris: Barois l'aîné et Fils, 1803), 59.

12 Cockerell emphatically marks the passage by three vertical lines in Quatremère de Quincy, *De l'architecture égyptienne*, op. cit., 237. Unless specified otherwise, the translations are mine.

13 For the progression of Quatremère's position with respect to imitation, summarized in this paragraph, see S. Lavin, *Quatremère de Quincy and the Invention of a Modern Language of Architecture* (Cambridge, MA: MIT Press, 1992), 102–13.

14 See Cockerell's copy of Quatremère de Quincy, *De l'architecture égyptienne*, op. cit., 206–7 and 242–3.

15 Ibid., 57–8. Underlined by Cockerell.

16 Cockerell: 'The History of the Art from the earliest records to the present day is the only means by which it appears to me that we can acquire a due appreciation of the art and its capacities, by it we shall learn the difficulty & slow progress of invention and thence the hazard of attempting that which previous experience has not already approved, we shall see how entirely subservient the best contrivances of art have been to climate[,] to the materials to use & convenience to the politics & to the religion of *the respective* countries, we shall discover what state of society has been most favourable to the art & thence may learn what may be the prospects of its future practice & improvement – we shall trace the variety of tastes arising from the invention of structure, & beauty, proportion, & composition, always coincident with the study of the fine arts & Painting & Sculpture […] we shall find certain rules of analogy with

animal structure & materials of nature constantly recurring and admitted as a part of the constitution of our Nature'. RIBA MS. COC 1/2/x (Box 1).

17 Ibid.

18 RIBA MS. COC/1/62/vi (Box 4).

19 On language and architecture, see Adrian Forty, *Words and Buildings* (London: Thames & Hudson, 2000), 10–85.

20 I am borrowing this expression from A. Payne, 'Architects and Academies, Architectural Theories of *Imitatio* and the Literary Debates on Language and Style', in G. Clarke and P. Crossley, eds, *Architecture and Language, Constructing Identity in European Architecture c. 1000–c. 1650* (Cambridge: Cambridge University Press, 2000), 122.

21 This is highlighted by Hvattum, *Gottfried Semper*, 133–6. See also Debra Schafter, *The Order of Ornament, the Structure of Style, Theoretical Foundations of Modern Art and Architecture* (Cambridge: Cambridge University Press, 2003), particularly 8–91.

22 Gottfried Semper, *Der Stil* (1878), I:6, quoted in Schafter, *The Order of Ornament,* 83–4.

23 Semper, *The Four Elements*, 183.

24 Schafter, *The Order of Ornament*, 84.

25 Semper, *The Four Elements*, 183 and 255–6.

26 Hvattum, *Gottfried Semper*, 154–9.

27 Cockerell: 'For the intelligence of ancient buildgs particular attention is required therefore in the observation of these details for in them we shall find more distinctly motives of the art of buildg. & the particr character of the times; in fact in those details the absolute illustration of the period in all respects will be distinctly discerned & exhibited – as we should value a poem, a fable, a history, contemporaneous with the give work as more plainly conveying to us the leading motive and passions of the day so in Sculpture & painting we may equally conceive them, and so from them we may discover the secret springs & motives which incited nations of these great works, and trace an exact parralel [sic] between them & the occasions of their building'. RIBA MS. COC/1/11.i (Box 2).

28 RIBA MS. COC/1/27/i (Box 2).

29 Cockerell: The ornament 'helps to carry out the *geometrical* rigor which gives the peculiar character to our arts in contradistinction to the accidental or the life bearing, the picturesque, which belongs to Painting & to Sculpture, in contradistinction to carving'. RIBA MS. COC/1/73.viii (Box 4).

30 Ibid.

31 RIBA MS. COC/1/26/xxix–xxx (Box 2).

32 RIBA MS. COC/1/57.ii (Box 2).

33 RIBA MS. COC/1/62.iv–v. (Box 4).

34 Cockerell concludes: 'The symbolism of all sculpture should be, if not trite – obvious & plain, so that he that runs may read. when *ever* an explanation is wanted the work has failed – as the work is for all eyes, the most illiterate should be able at once to comprehend the meaning. & purpose of the sculpturesque symbolism'. RIBA MS. COC/1/73.vii (Box 4).

35 Cockerell, RA Archives, Third Lecture, 1843, mis/co 9.

36 Cockerell, RA Archives, Second Lecture, 1843, mis/co 8.

37 Quoted in D. van Zanten, *The Architectural Polychromy of the 1830s* (New York: Garland Publishing, 1977), 16.

38 Ibid., 45.

39 While in France in 1824, Cockerell paid a visit French architect Jacques Ignace Hittorff (1792–1867), who was working on his *Architecture antique de la Sicile* (1827). Cockerell: I 'called on Hittorf rec[eive]d me politely[,] told him it was a great object with me to secure the little merit I had in the discovery of the arch[itectur]e of jup[iter]. Olym[pius]. at Grigenti. he assured me that he had attributed the discovery to me in his work. that he agreed in my view of it etc. etc. satisfied me fully'. (RIBA MS. COC 9/5). Cockerell later worked with Hittorff when both were invited to play a role on the committee that examined the Elgin Marbles in 1837.

40 Cockerell, 'On the Aegina Marbles'. *Journal of Science and the Arts*, 6 (1819): 327–41.

41 Cockerell's scheme for the Ashmolean Museum and Taylorian Institute is discussed by Adrian Forty, '"*Europe is No More Than a Nation Made up of Several Others* …" Thoughts on Architecture and Nationality, Prompted by the Taylor Institute and the Martyrs' Memorial in Oxford', *AA Files*, 32 (1996): 26–37. Cockerell originally used another dark reddish-brown stone in his composition (Whitby stone), making it truly polychromatic. This darker stone was later replaced.

42 RIBA MS, COC/1/62/vi (Box 4). This page is dated 1855.

43 RIBA MS. COC 1/6/x (Box 1).

44 RIBA MS. COC/1/62/v (Box 4).

45 Cockerell: 'We must admit that sculpture & painting are to arch[itectur]e what the human voice & gesture are to the human form – the *parlant & expressive* organ by which its soul is explained & illustrated more familiarly to our senses. We may admire structure & proportions strength & beauty of form but we are in distrust & at a loss to comprehend the intimate spirit of these until we are addressed thro' those more sensitive organs *the sight & hearing* by which nature has enable us to ascertain more clearly & unquestionably the secret springs the sentiments in fact the soul of the object set before us' (my emphasis). RIBA MS. COC/1/76/iii (Box 5).

46 J. Onians, *Bearers of Meaning, the Classical Order in Antiquity, the Middle Ages, and the Renaissance* (Princeton NJ: Princeton University Press, 1988), 147–56.

47 RIBA MS. COC 1/11 (Box 2).

48 W. Durandus, *The Symbolism of the Churches and Church Ornament: A Translation of the First Book of the Rational Divinorum Officiorum*, J.M. Neal and B. Webb, eds (Leeds: T.W. Green, 1843).

49 Schafter, *The Order of Ornament,* particularly 67–72.

50 RIBA MS. COC/1/26/xxi (Box 2). A similar argument is outlined in RIBA MS. COC 1/26 to COC 1/28 (Box 2).

51 RIBA MS. COC/1/34/i (Box 2).

52 Ibid.

53 RIBA MS. COC/1/26/xxxiii (Box 2).

54 RIBA MS. COC/1/34/i (Box 2).

55 Peter Kohane studied Cockerell's conception of ornaments in relation to Cockerell's understanding of the human figure. Kohane's emphasis on the animated figure

intersects with our focus on Cockerell's conception of the 'life-bearing' function of ornaments. See P. Kohane, 'Order and Variety in the Work of Charles Robert Cockerell', *Fabrication*, 10 (1999): 100–114.

56 RIBA MS. COC 1/34/v (Box 2).

57 RIBA MS. COC 1/34/vi (Box 2).

58 DS., 'Dividend Pay and Warrant Office, Bank of England', *The Architectural Magazine*, 3 (1836): 109–12.

59 Ibid., 111.

60 Ibid.

61 Ibid.

62 See Christoph Martin Vogtherr, 'Views and Approaches: Schinkel and Landscape Gardening', in J. Zukowsky, ed., *Karl Friedrich Schinkel, The Drama of Architecture* (Chicago: The Art Institute of Chicago, 1994), 68–83.

63 Alois Riegl, *Late Roman Art Industry*, trans. R. Winkes (Rome: G. Bretschneider, 1985).

64 See Schafter, *The Order of Ornament*, 45–59.

65 Dalibor Vesely, *Architecture in the Age of Divided Representation, the Question of Creativity in the Shadow of Production* (Cambridge MA: MIT Press, 2004), 175–90.

66 In the words of Hannah Arendt, an action is 'concerned with this in-between which varies with each group of people so that most words and deeds are about some worldly objective reality in addition to being a disclosure of the acting and speaking agent'. Hannah Arendt, *The Human Condition* (Chicago: University of Chicago Press, 1989), 182.

6

'The architect's own hand is seen here': Architecture and Representation

> *Great treat at Sir G. Beaumonts, the holy Family of M. Angelo*[1] *more striking in its unfinished state than if entirely completed. the parts of greatest beauty & interest are brought out & wrought with the very soul of love & genius. the inferior are left but sketched or scarcely discernible or in the native rock. the subject seems growing from the marble & emerging into life. it assumes by degrees its shape, features form and unformed mass. as it were you trace & watch its birth from the sculptor's mind as you would an animal in its birth, the chicken breaking thro' its shell. I have seen nothing but this that conveys the idea in the Greek epigram of a sculptor who says I have no merit but discovering the form which lies within the marble. one feels in beholding it to desire still to go on discovering, still to disclose more. It would be a curious metaphysical question to trace the pleasure which derives from an unfinished sketch & which is confessed by all the world – doubtless M.A. knew this well & calculated on the value of his works as not lessened by it. admiration mixed with regret – if 'he had finished it what a fine thing it would have been – was he disgusted with its failure, did he cut too deep or make mistake, did he die prematurely in the progress of the work, was he idle'. he knew the mind would trace the progress of the sculptor's mind with more interest ... [if he entered] into the pursuit with the artist. he sees the unformed rock beside the half finished work, he feels & confesses the difficulty of the art. the contrast convinces him of it, the contrast too gives additional effect to the work. Set a spectator before a finished work, he compares it with its prototype, nature – he finds it inferior – but show him first a wet or plain canvas, let him watch the artist who out of the blank creates a living groupe [sic| & animates a vacancy – he will confess there is merit & his mind enters into the contest or pursuit.*[2]

As a fragment of an unfinished whole, Cockerell's Cambridge University Library would only ever hint at a larger previsioned project. Judging from Cockerell's comment on Michelangelo's *Tondo Taddei*, he actually may have found solace in this fragmentary condition, as the work forever remains to be completed by each different observer through their movements, their unintentional 'pursuit'. Certainly, Cockerell accepted to work on the north wing as a fragment. He recognized the condition of the project as being open and incomplete but still attempted to hint

at the whole through suggested sets of relations – between the building fragments and the surrounding and circumstantial elements, between the different internal spaces (specifically the museum and library), and as importantly, between the observers in movement and the architecture they experienced with each step. Cockerell referred to the 'idea in the Greek epigram of a sculptor who says I have no merit but discovering the form which lies within the marble', and we know that Cockerell understood this merit as not insignificant. In Cambridge, Cockerell seemed to have been driven by a desire to discover the projects that lay within the sites he worked on, as though his architectural schemes were latent, only to be revealed when intentionally sought out. If the library's north wing was undeniably a fragment, Cockerell also valued elsewhere the idea that any architectural creation was necessarily fragmentary. For Cockerell, the definition of architecture necessarily extended a singular building to encompass the ability to stage sets of old and new relations, both internally (programmatically) and externally (in the immediate urban context). The premise that architecture comes from multiple times, which Cockerell grasped during his Grand Tour, thus continued to ground his practice.

Of some 200 drawings that have been preserved of Cockerell's Cambridge Library project, very few involve the representation of the north wing's east elevation on its own. Typically, this wing is represented as an integral element of the quadrangle. In one of the few drawings of the north wing's east façade as a free-standing elevation, Cockerell added this note: 'Cambridge University Library, Study for East front of North wing – the architect's own hand is seen here' (Plate 6). Why 'the architect's own hand'? How did Cockerell consider his hand to be seen, and why was it important enough for him to note this on the drawing itself?

In building only a fragment of an incomplete project, Cockerell was following in Michelangelo's footsteps, an artist who, as Cockerell himself noted, positively accepted and engaged with the unfinished condition of his work. As Cockerell understood the north wing as a fragment of a larger idea, perhaps he believed that the thinking hand drawing the project left a mark in order to highlight what was yet to be completed. In this last chapter, we will look at the impact that architectural representation has on the conception of architecture, and the ways in which the completed building bears traces of the hand and the process through which it came to be. In doing so, we will consider the means of representation insofar as these engage, more or less directly, the architect's hand.

GOD-GIVEN NATURE AND HUMAN-MADE HISTORY

Nineteenth-century British architectural theory begins with the picturesque and ends with ornaments: Archibald Alison (1757–1839), Thomas Whately (1726–72), and William Gilpin (1724–1804) made way for Owen Jones (1809–74), Christopher Dresser (1834–1904), and William Morris (1834–96). Cockerell's theoretical interests follow a similar path from the picturesque to the ornamental. This path likewise marks the development of another influential theoretician: John Ruskin. Between a series of articles on *The Poetry of Architecture* (1837) to *The Stones of Venice* (1851–3), Ruskin moved from a larger concern with the picturesque to focus on the very

materiality of architecture. This shift bears tensions: from the space to be travelled to the frozen moment, one leaves the larger picture to read the tangible detail. In a century dominated by historicism, could this shift reflect different conceptions of human temporality?

When Ruskin turns to the stones of Venice, he reads into these the life and soul of those once invested in carving them. Linking the visible forms to invisible aspects, he argues that in Gothic architecture, the builder's mental and social life is vividly impressed in its carved details. But Ruskin stresses that this expressed character can only be recognized if the spectator knows the craftsmen's language of symbols and associations. In medieval society, the Bible constituted such a language and the Church ruled all aspects of human temporality, from daily life to teleology. By the time Ruskin was writing in the nineteenth century, human temporality was no longer so tightly framed. The Christian understanding of time was being challenged as much by the rise of natural sciences as by the relatively new science of history. Human temporality was now being measured against nature or history. While Cockerell and Ruskin shared a deep interest in the temporal dimensions of architecture, there is a line that continuously distinguishes their respective conceptions of architecture's relation to time. History remains a constant backdrop to Cockerell's search for meaning in architecture; nature is Ruskin's guide.

In 1837, under the name of Kata Phusin, 18-year-old Ruskin published the first of a series of articles in Loudon's *Architectural Magazine*. While Ruskin embraced the picturesque by referring to 'poetry' and 'associations' in his title,[3] his pen name set the tone: Kata Phusin means 'according to nature' in Greek and a reverence to nature is what dominates Ruskin's discussion of architecture from the cottage to the villa. Even as he emphasized ornaments in his later works, nature continued to pervade his writings, and was the dominant element in his definitions of both the picturesque and the ornament.[4] Most significantly, Ruskin considers the eye of the static observer as the prime receptor of architecture. Throughout the essays, he recurrently summons the glance or the eye as the subject of an architecture deemed poetic when in harmony with nature. In contrast to what emerges from Ruskin's essays, Cockerell was weary, and critical, of the two-dimensionality of the picturesque. In the course of his Royal Academy Lectures, Cockerell distinguished between what the static eye could see, and what had to be kinaesthetically experienced. According to the professor, observers derived different associations from a picture than, for example, from the actual experience of a garden. Cockerell argued that there was a fundamental difference between a picture which 'takes one view of a subject' and the actual experience of the subject which has 'many views & must be viewed from all points'.[5] Cockerell advocated that architecture was distinct from the picture in that it did not and could not impose one single way of seeing the subject. Cockerell was interested in harmony insofar as it was discovered through movement.

Cockerell's conceptions of the picturesque were rooted in his earlier readings of Alison and Whately. In diaries he kept through the 1820s, the young Cockerell pondered on the value of the picturesque in architecture. Conceptions of the picturesque were inherently related to theories of association and ultimately bounded by notions of taste. In the first half of the nineteenth century,

taste was typically considered a way of linking a tangible experience with intangible feelings (beauty or the sublime), a means to grasp how architecture could connect 'the physical with the metaphysical'.[6] In a historicist period, the question was then whether the feelings provoked by architecture were received by the senses or created in the mind, and if these could be shared or were strictly personal. If sharing was a possibility, then one had to address how architecture cued the feelings derived by one's actual experience. Recognizing the necessity of reaching a wider public, Cockerell's main concern was how architecture could be enjoyed at the most immediate level of experience. For Cockerell, taste and the picturesque had the potential to safeguard the very possibility of a shared meaning – a 'metaphysical' realm.

Like Cockerell, Ruskin wanted to preserve the metaphysical dimension of architecture, but the two conceived of it in different terms. Ruskin's approach was rooted in his understanding of nature as God's creation, where implicitly, the eye is posited as the subject of architecture:

> *The nobler scenery of that earth is the inheritance of all her inhabitants: it is not merely for the few to whom it temporarily belongs, to feed from like swine, or to stable upon like horses, but it has been appointed to be the school of the minds which are kingly among their fellows, to excite the highest energies of humanity, to furnish strength to the lordliest intellect, and food for the holiest emotions of the human soul. The presence of life is, indeed, necessary to its beauty, but of life congenial with its character; and that life is not congenial which thrusts presumptuously forward, amidst the calmness of the universe, the confusion of its own petty interests and groveling imaginations, and stands up with the insolence of a moment, amid the majesty of all time, to build baby fortifications upon the bones of the world, or to sweep the copse from the corrie, and the shadow from the shore, that fools may risk, and gamblers gather, the spoil of a thousand summers.*[7]

When in harmony with nature, architecture is poetic to the eye, which is the door to the human's mind and soul. In this view of the world, the static eye of the observer holds a similar, if imperfect image, as God who sees the world from a fixed and stable position in eternity. The life and actions of human beings on earth are to be understood within the larger scale of an immutable creation put into motion by God: Ruskin is weary of unworthy architects that may mix 'their incoherent cries with the melodies of eternity, break with their inane laugh upon the silence which Creation keeps where Omnipotence passes most visibly, and scrabble over with the characters of idiocy the pages that have been written by the finger of God'.[8] This religious conception of the universality of the soul was worlds apart from Cockerell's view of humanity as occurring within a living tradition. In contrast to Ruskin, Cockerell saw architecture as set in history:

> *Architecture commences only with recorded time. The very name and title of arche was not dignify the art of building until society has assumed a high degree of cultivation & until history has assumed her office, & until the useful arts & manufactures have been greatly advanced mechanics metallurgy have been long practiced, all the useful arts & the social system has assumed a regular and organized form. Until man has been the garden plant of a thousand years he can hardly be said to entertain the science of arche.*[9]

Reasserting this connection between architecture and history, Cockerell repeatedly described how architecture was aligned with prosaic history.[10] Because human beings are by essence beings in history, Cockerell considered that humans were by nature imitative, that is, imminently defined and affected by what preceded them.[11] In *The Professor's Dream*, he called upon the viewers to explore, uncover fragments, and therefore to investigate the depth of time. Ruskin's model emphasized stability – the cycle of seasons, the succession of generations, the births and the deaths stand for the immutable 'majesty of all time' wherein the life of a human being is but the 'insolence of a moment' – whereas Cockerell considered movement necessary in order to gather information. In effect, Cockerell's search for historical principles implied a willingness to move between different times. A search for the past translated into actual physical mobility, as in the Grand Tour that led the architect from Italy through Greece and Turkey.

In terms of ornaments, the distinction between the life held within or the movement needed without continues to distinguish the conceptions of our two theoreticians. In *The Stones of Venice*, Ruskin praised medieval craftsmen's reproductions of nature in their ornaments. To Ruskin, these crafted ornaments inherently conveyed the life of a past era, and embodied the physical work and labour invested over five centuries before.[12] For example, in his representation of the architrave of the central gate at St Mark's,[13] Ruskin focuses on the animation in the ornaments as derived from nature, and the abilities of the craftsman who could imitate these qualities:

> *It seems to me singularly beautiful in unity of lightness, and delicacy of detail, with breadth of light. It looks as if its leaves had been sensitive, and had risen and shut themselves into a bud at some sudden touch, and would presently fall back again in their wild flow.*[14]

In contrast, Cockerell believed that ornaments came to life through the movement of the observer. In this respect, even though he often derived ornaments from a classical vocabulary, one did not have to be acquainted with symbols to appreciate their signification, revealed through experience. Hence, the reviewer of Cockerell's Dividend Pay and Warrant Office in London marvelled at how details, which on a first – static – consideration appeared misplaced, actually fell into place as he moved about the room and understood its relation to adjoining spaces:

> *[…] although [the intervals between the columns] might be pronounced excessive, and so far faulty, were we to examine the colonnades by themselves, without reference to the other parts of the plan, when we perceive the motive for what has been done (the consistency and harmony arising from the intercolumns corresponding with the compartments formed by the windows, and the regular distribution of each side into six squares), both the eye and the judgment are reconciled to what, under other circumstances, might, not unjustly, be censured as a defect.*[15]

This distinction, between an ornament that withholds time and another that reveals its significance in the time of experience, can be read in the very drawings

Cockerell and Ruskin respectively produced while travelling. Ruskin represented details as though these were picture windows allowing him a peak into another time – a time bound by the frame, whereas Cockerell's sketches often challenged spatio-temporal boundaries.

Privileging nature or favouring history led to fundamentally different notions of temporality, specifically to temporal distinctions between the physical and the metaphysical. These differences necessarily tinted how one conceived architecture, from the definition of morality and the characterization of the picturesque, to the conception of ornaments and the location of meaning in the experience of architecture. While nature ultimately tends to a balance and an inherent movement, history hinges on the search for balance through movement. Indeed, if Ruskin provides a picture that is to be taken at once and set against eternity, Cockerell offers a number of juxtapositions set within different times and discoverable in movements. From nature to human-made history, the role of the human body also shifts. It is not first and foremost the body as figure or type (that is, image) that bridges different times, but rather the body in movement.[16] Not only did Cockerell understand the importance of conceiving architecture as it would be experienced by a moving user, but he also conceived of the human body as the basis for a historical and phenomenological understanding of the world. The comparison with Ruskin reveals further the importance that Cockerell granted to the human being in movement – whether historically through times or phenomenologically in times – in contrast to Ruskin's more traditional view of the human form as God's image. Similarly, time is not considered the image of eternity, but a thick backdrop against which the work forms, and which it, in turn, informs.

What emerges from this parallel reading of Cockerell and Ruskin is that worldviews bring at least two overarching aspects into play. The first is the epistemological ground one considers – whether theological, scientific, progressive, comprehensive or forever shifting. The second is the way this ground informs how meaning is communicated through the building – whether it is symbolic, iconic or indexical, whether it considers a static viewer or a moving visitor. Ruskin's interpretation of architecture was within the constellation of a natural and divine order, wherein the relation of ornament to the world was the pleasure of witnessing divine eternity within time. Conversely, Cockerell was operating within history, composing with historicity, humanity and the human body in movement, and the secular idea of eternity was the historical continuity that formed the common ground for the multiple temporalities against which experiences in time are cast. The body occupies a specific place in these respective larger worldviews: whether as the image of the divine in a God-given world, or as an actor in a human-made history.

FROM GOD'S FINGER TO COMPUTER DIGITS

The metaphysical consideration of what can be known, where knowledge resides and how one may seek it, necessarily informs the conception of architectural representation. The question of what architecture represents, how it communicates and how one may decipher this meaning, ultimately bring us back the role of the

architect's hand. Indeed, whereas Ruskin speaks of the 'finger of God' that drew everything, Cockerell comforts himself in the solace that his own hand 'is seen here'. The architect's representation thus becomes a double index, identifying where a building is situated in the world, as well as the conceiving hand that has placed it there. Cockerell's note about his hand's visibility emphasizes this second relation: the drawing as an indication of the architect's creative act, a document into which we can read backward into the process.

The hand as inherently present appears explicitly in other representations throughout history. From medieval illustrations of God as geometer, to Le Corbusier's hand pointing down at his envisioned the *Ville Radieuse*, the hand becomes a site of investigation in its own right. The question of whose hand it is, necessitates the consideration of how it is represented and what it seeks to communicate, all of which lead to significant ontological observations.

In the *Eadwi Codex* (c.1025), a hand holding what appears to be a compass is represented with a balance that signifies harmony, above a Canon Table. In the *Codex Vindobonensis*, 'The Divine Architect' (c.1250) is shown holding an orb with one hand and applying measure to it with the compass held in his other hand.[17] Even in these crude representations, the hand, the tool and the conception of the world, form a coherent whole that echoes the biblical passage wherein God is said to have created everything in 'measure and number and weight'.[18] Translating this idea from the divine architect to medieval masons, the craft of building becomes endowed with particular importance. Numerous studies on the importance of numbers, geometry and proportions in medieval constructions have revealed these typological links between human and divine constructions. In the *Harleianus 2767*, a medieval version of Vitruvius's text, architecture was described as that which from unformed matter can be 'brought to perfection by using the hands'.[19] In a study of frontispieces from various sixteenth-century architectural treatises, Desley Luscombe notes how there was a shift away from the representation of the mason with 'compass in hand' to the liberal and civic man portrayed by Alberti or Scamozzi. And yet, on the cover of Philibert de L'Orme's *Premier tome de l'architecture* (1567), appear figures that are clearly the result of geometric projections, implying the mastery of mathematics on the one hand, and the use of the compass on the other.

The Christian portrayal of God with compass and scale had less to do with the craftsman than it did with the representation of God as geometer. The perfect circle drawn by the compass symbolically encompassed itself, all other geometrical figures, and the world:[20]

> *Early medieval scholars took gromatic and geometry as symbols of two closely related spiritual subjects: the divine order in the universe (manifested through the image of the orderly delimited field) and the foundations of that order laid down in the act of Creation (revealed through geometry).*[21]

The history of architectural representation involves the development of projective geometry, the increasing use of the axonometry and more recently the development of digital modes of representation. Architectural representation is inherently related to the cultural role of architecture.[22] There is great difference between the theological

promotion of a unified terrestrial realm that awaits and aligns itself to salvation in eternity, and the more recent disconnect with the objects architects create in a plural and fragmented world. As Alberto Pérez-Gomez and Louise Pelletier show in their study of perspective, the shift from Euclidian to non-Euclidian geometry, from situated geometrical constructions to abstract representation, largely rested on the possibility of positing infinity in the world. When Gérard Desargues (1591–1661), and more effectively Gaspard Monge (1746–1818) and Jean-Victor Poncelet (1788–1867), brought the vanishing points (the points located at infinity where two parallel lines can conceptually meet) into the abstract space of the paper, they crossed a boundary that had previously remained sacred, and effectively engaged the possibility of the infinite within the finite world. Until then, only the opposite relation had been possible: that of the location of the finite within the infinity of God. Temporally, this reversal amounted to the positioning of eternity within time. During the Renaissance, the points at which perspectival lines met had been considered to land on a conceptual picture frame, a window that formed a joint between human and divine vision. As such, the architect's operations were still framed against a larger conception of space and time; their work did not stop at the picture frame, which was but one of the elements in a larger apparatus of re-presentation. What Desargues's theories ultimately allowed was the limiting of the system at infinity, that is, editing out the depth of space and time. Whereas time had until then been approached as the image of the eternal, and the finite as an image of the infinite, both time and space could now become self-referential, pointing back to the operations that had brought them into being.

The illustrations of God as geometer were rooted in an understanding of geometry as a form of mediation between the tangible and the intangible. Likewise, the representation of architects and master builders with their tools – compass, scales, even optical devices – participated in the same cosmological understanding of the importance of ratio or proportions as a means to make visible what would otherwise remain hidden. The period in which Cockerell practiced was at the threshold of a significant transformation of this understanding. Nineteenth-century architects were acutely aware of the schism between a new socio-historical interpretation of architecture and its more traditional ground, and a crucial question they faced was how to act when there was no longer a single grand narrative but a plurality of possible histories. The hand is not shown in Cockerell's drawing: it is implied. In searching for it, one encounters the sketches that lightly populate the areas apparently left blank around the featured elevation. By looking above the roof, one's vision must shift: a light sketch represents the central upper window perceived not directly in elevation but perspectively from below, revealing the depth of the wall and the ornamented articulation of the curved frame. At the attic level, on either side of the Venetian window, there are two faint sketches of potential openings into the upper gallery: a circular attempt at the right, a rectangular one on the left. The architect's hand is the inquisitive hand that keeps searching for compositional elements, the hand that points up to the tip of the spire where viewers enjoy an optically rectified view of the window (visitors could only be looking up at it), and entirely neglects the existence of the Old School at the right.

Claiming the visibility of the architect's hand is reminiscent of the easel, the rifle and the dog in *Plate X*. Whereas the presence of these items indicated that the architect was at no great distance, Cockerell's note below the east elevation may simply indicate that 'architecture is near'. The presence of the note may also be the assertion of the poet over the calculative mind, and a vision of a whole that invisibly but fundamentally ties fragments together. In this respect, the drawing bears the trace of Cockerell's hand, the hand that selectively prioritizes one narrative over another. References to the 'architect's own hand' might be used to emphasize the quality of the conceiving mind, a reason that no doubt prevailed for Cockerell, or to assert a distinction between handcraft and mechanized production, even to contrast the physical finger to the divine one or more recently, to the computer digit.

While Cockerell's note did not primarily point to the role of craft, he was aware that new processes of construction had an impact on the architecture of his time. Participating in the 1836 review of the status of Arts and Manufactures, Cockerell warned against the uncritical embrace of mechanical processes:

> *I apprehend that the system of cast-work and mechanical process has displaced the florid and more elaborate style of our ornamental work; and I believe that the attempt to supersede the work of the mind and hand by mechanical process for the sake of economy, will always have the effect of degrading and ultimately ruining art.*[23]

In the same breath, Cockerell was also criticizing the growing tendency of putting design together from books and is warning against the propensity to forget higher art. If the hand of the architect is seen here, then the building represented is indeed architecture. Its presence materializes as but a fragment of a larger whole, given in its details to human perception, playing on relations to spatially adjacent or even temporally remote projects, not content with one single glance but understood as an object of experience unfolding in time – just as the light study above the central window pre-empts a visitor's perception. The architect's hand belongs to the mind that knows that the building will be experienced from below.

To Cockerell's view from below, modernity responded with the view from above. Whether it is Le Corbusier, Ludwig Mies van der Rohe or Filippo Tommasso Marinetti, many twentieth-century architects have been enthralled with a miniaturized universal world they can preside over and possibly improve. Tracing one view in particular, the aerial view, architectural historian Mark Dorrian describes a fascinating history of architectural representation in recent centuries, one that begins with the elevated view of villa owners over their estate in the sixteenth century, moves to the military uses of the oblique image, and continues through the vertical image and the architectural diagram.[24] In passing, Dorian notes Corbusier's approach in his presentation of the *Ville Radieuse*. Showing one of the famous photographs in which Le Corbusier's hand is seen pointing at a section of the model seen from above, he comments on the detached hand and its increased agency as a visualizing power. The hand is becoming that which can make things appear by pointing at them from a position of distance. Le Corbusier's hand here is akin to the earlier discussed finger, the divine hand that puts the world in motion.

Again, the architect's conceptualizing mind defines the frame of reference and delineates the limit of the world the architect is pointing down to. Le Corbusier's time is universal human time on the one hand, but also the progressive time of a modern world, moving towards a better future.

With the decline of this belief in universal progress and the single narrative arose another view: the view from within. Responding to the lack of common reference outside, some architects choose a frame of reference from within a project itself. Paradigmatic of this tendency is the work of Peter Eisenman. Whether in *House X*, which emerges out from a series of transformations represented in axonometric drawings, or in the intervention as Castelvecchio, Verona, which relies on a view from above and the mapping out of abstract axes, Eisenman's drawings reflect his idiosyncratic approach to the transformation of space, and symbolize the self-reflective processes that led to their existence. In these projects characterized by abstract axes and recorded series of transformations, time is self-reflexive, internal, and built into the different translations and rotations that make up the chronology of the project. Eisenman's projects speak to the possibility of a finite totality that carries its temporalities internally. In his essay 'Trace Elements', Stan Allen approaches Eisenman's work through the concept of the index, suggesting that rather than operating at a symbolic or iconic level, Eisenman implicitly works with the viewer's discovery of a reconstructed relation between a signifier and a signified that hinges on cues embedded in form.[25] While Eisenman's plans are ichnographic traces of movements, they do not point to an actual material presence, but rather to abstract processes of transformations orchestrated by the architect. In this respect, the index points back to the movements of the creative process; an abstract movement in a timeless field that gains precedence over the very elements that initiated the various movements. As Allen argues: 'For Eisenman, design is the inscription of meaning into, or onto, the work by means of a series of more or less rigorous operations carried out by the designer'.[26] The index here points back to itself, 'to the structure of representation', and as Allen suggests, the deciphering work to be undertaken by the viewer locks the experience in a limited present.[27] Ultimately, Eisenman's representation of abstracted lines replaces the spatio-temporal complexity of the site and becomes the virtual site of intervention, wherein the ocular and rational view from above prevails over the sensual and heuristic experience.

Eisenman does not simply shift the reference from the transcendental to the internal, he also completely challenges the traditional role of geometry. No longer a mediating device, his projects emerge from an idiosyncratic process that retains its secrets. Very little then separates his approach from the one embodied in computer digits. Perhaps the greatest distinction lies in the conscious play that Eisenman stages within but also in isolation from the lived world, whereas much digital computation today attempts to translate the world, representing it first in algorithms and matrices which, when put in motion, can match reality and predict and alter its potential futures. Computational representations send us back not to God's finger, nor to the architect's hand, but to digits.[28] It is ironic that the dexterity of our hands and fingers, the most sensitive and precise motors of our tangible encounter with the world, should be at the root of this new digital world.

These disparate examples reveal how architects' representational approaches necessarily carry a certain way of reframing architecture's place in the world. Whether it is a compass dragged across a church floor, a pencil traveling across a sheet, or a pixel's position shifting across a screen, different tools, representational forms of intentions inherently carry their temporal *episteme*. Indeed, Antoine Picon recently remarked on the impact the Internet has had on the conception of architecture, referring to the idea of frozen time on the one hand, but also to the frame by frame strategic projection on the other. Looking at digital architecture, insofar as it is characterized by what he refers to as the 'temporal structure of the internet experience', Picon asserts that, 'we are indeed in the middle of a dramatic redefinition of the relation of architecture to time and history'.[29] With respect to digital architecture and the way it is informed by the temporality of the Internet, as well as the extent to which this is then reflected by the actual constructions of these digitally-conceived projects, Picon points to the paradoxical relation between the forms that are constantly seen changing on the screen – the events – and the fixed moment that the final project ultimately represents – frozen in time. While Le Corbusier operated in progressive time in the search for a universal utopia, many architects today choose to operate in an eternal, everlasting present. Unlike even the work of Eisenman, which points back to its own internal temporality, Picon characterizes the production of these architects by their oblivion to their own forces of generation, like the Internet, and an unknown relation to historical precedents or even processes of construction.[30] Ultimately, what Picon describes is a contemporary context that hinges on a 'suspension of historical time'.[31]

The ways in which architects represent projects, whether in an abstract space, from below, above, perspectively or axonometrically, can already inform the ways in which the buildings will be conceived and perceived in time. Part of this impact directly results from the implied temporal stance, whether the temporal dynamic be limited to the scope of a single project, mediated by nature, cast against eternity or history. For Cockerell, this epistemological ground was history, with its complex cultural genealogies and dense webs of embedded temporalities.

RETRIEVING THE RETRIEVING HAND

Hands figure prominently in Le Corbusier's work, whether it is the finger pointing at a model, the hand placing a unit in the model of a larger building, or the Open Hand at Chandigarh. Le Corbusier's *Poème de l'angle droit*, section F3 includes the following:

> *It is open since / everything is now available /graspable / It is open to receive / Open also so that every single person / can thereby take / the waters flow / the sun illuminates /the complexities have woven their paths / liquids everywhere / Tools in hand / The hand's caresses / The life that we taste by / hands' kneading / the sight that is in / touching. --- Open hand I received / open hand I gave.*[32]

Le Corbusier's hand senses the flow – the flow of time, of choices, even of nature. The poem's passage also stresses the necessity to draw from this flow – literally

to draw (*disegnare*) upon it. After the flow comes the drawing and geometry: the tracing of the right angle. Le Corbusier, like Cockerell, posits the necessary choices that mark the architectural process of tracing and selecting from the fluidity of existing conditions – the larger history that unfolds, and perhaps also the local history of the project doomed to remain but a fragment of an incomplete whole. Like Ruskin's medieval builders, Le Corbusier also reasserts the importance of geometry. Lineaments, proportions, right angles and, more generally, ratio, form part of the work of human reason, as it operates and discerns an order in the incessant flow. Referring back to the figure of the Tabernacle, Le Corbusier inscribes his approach to architecture within a long tradition of understanding the creative act as a mediation between the changing and the unchanging.

The geometry that emerges in nearly all these examples – whether in the form of proportions, algorithms, relations, or ratios – is surprisingly absent from Cockerell's theorization on representation. What he does refer to are the laws of optics, perspectives and scales, three notions that inevitably imply a viewer in movement. It is clear from Cockerell's drawings and writings that if geometry was uncontestably an element of design, Cockerell prioritized the actual experience of a building:

> *At all events he will admit that his orthography or geometrical elevation is only the foundation of his work that it is a convention a means only to an end. but that the perspective, or scenography is the reality. for him elevation can only be seen as represented at an infinite distance – & when near it is another creature, scarcely recognizable.*[33]

Discussing the importance of perspective as a means to account for the situated presence of a moving observer, Cockerell explained how:

> *The upper portions diminish & become foreshortened according to the proximity of the spectator those below are enlarged- & practicaly [sic] we find we can neither trust a perspective to build form, nor ~~a geometric~~ an Elevation, alone. both must be carefuly [sic] ~~designed~~ calculated & compared, from the point of view which is the most proper & important – the drawings themselves should be looked at from a corresponding distance by scale.*[34]

Whether he was discussing plans, elevations, perspectives or models, Cockerell constantly reminded his students that these representations are but moments in the life of a building. In doing so, he drew attention to the architect's own ambition, which is not revealed in the execution of the drawings or models as artefacts in and of themselves, but through the involved study of all available means that will lead to a building that will acquire a life of its own. In the passage above, he exhorts students to move between the use of perspective drawings (for viewpoints and consideration of foreshortening) and elevation drawings (for proportions and geometrical relations). He echoes this advice when he reminds them to consider their projected buildings not as isolated constructions but as integral pieces in a larger composition:

> *[…] we must have regard the comparative size of the surrounding buildings. & the lines & character of the surrounding buildings. which should all be drawn to the scale of your design in juxtaposition. ~~and further your design should be~~ so that your relative forms & sizes should be effective & harmonious with them. Design like proportion is relative. a Building looking well in one situation may be lost in another. Half the felicity of a design arises form its peculiar position & surrounding scenery.[…].*[35]

These comments all stress the importance of the building insofar as it is but a fragment of a larger ensemble. In this respect, it is not the building in its physical materiality that preoccupied Cockerell, but the invisible relations that it participated in. The most important aspect of architecture was invisible, and resided in the space between buildings, in the relations between times, and in the experiences of its visitors. Thus, even a carefully balanced internal geometry failed if it did not touch its users. Ornamentation, the 'parlant and expressive organ' of architecture, was called upon to communicate the true motives of the construction. Wall panelling was employed to 'give the eye the power of receding & culminating to a centre',[36] whereas sculpture and painting rendered buildings familiar to the human senses:

> *We may admire structure & proportions strength & beauty of form but we are in distrust & at a loss to comprehend the intimate spirit of these until we are addressed thro' those more sensitive organs the sight & hearing by which nature has enable us to ascertain more clearly & unquestionably the secret springs the sentiments in fact the soul of the object set before us.*[37]

From the consideration of geometry and proportions that permeates architectural discourse on representation, Cockerell summarized the issue by referring to an experience unfolding in time. The role of the architect is to reveal, in time, the underlying geometry, offering a glimpse of wholeness based on a situated sensual experience.

While there are not many hints that can lead us to understand clearly why Cockerell noted that his hand appeared in the project, there are strong indications that this may have partly been related to the fragmentary nature of the project. In this scenario, Cockerell composed with co-extent times – projected future, aborted future, existing pasts (now erased), and those that remained. The strong juxtapositions with adjacent buildings, the friction this allowed with the proximity of two spaces fighting for their times, point to Cockerell's willingness to engage with the complexity of the time the building's fragment engaged. Internally and programmatically, he also left traces of the history of the project's development: over the numerous years from the first competition to the final construction, some of the programmatic requirements were dropped, others added, a few replaced. But in the form of the building itself, as well as in his final written description of the project, Cockerell refers to the spaces, which, at one time, were to have form part of the project. Vertically, the somewhat static dichotomy between discovery and accumulation was to echo what would have suggested a vital oscillation between discovery and rediscovery, between museum and library, between the schools below and the library above. These elements lie just beyond the surface

of the elevation drawn by Cockerell, expressing the acceptation that the project may yet reveal the hand of the architect that chose, traced, drew, the hand that kneaded and caressed, the hand that received and offered. Beyond these educated speculations, what is certain is that Cockerell's inscription on the drawing indicates his belief in the communicative role of drawings, and by extension, architecture.

NOTES

1 Cockerell is referring to Michelangelo's *Tondo Taddei*, now in the Royal Academy of Arts in London.

2 Watkin, *Life and Work of C.R. Cockerell*, 97–8. Noted by Cockerell in 1823.

3 John Ruskin, 'The Poetry of Architecture; or, The Architecture of the Nations of Europe Considered in its Association with Natural Scenery and National Character', *Architectural Magazine* (1837–8).

4 Ruskin most vividly expressed his views on ornaments in *The Stones of Venice* (London: Smith, Elder, and Co, 1851) a few years after touching on the topic in the *Seven Lamps of Architecture* (New York: Dover Publications, 1989).

5 This is noted while discussion Uvedale Price (1747–1849). Cockerell, RIBA Archives, COC 9/6, 88–9 (inserted page, November 1825).

6 Cockerell writing in reference to the Edmund Burke. RIBA Archives, COC 9/6, 88–9 (inserted page, November 1825).

7 Ruskin, *The Poetry of Architecture*, Project Gutenberg ebook #17774, released 16 February 2006, www.gutenberg.org/1/7/7/7/17774/, 67–8.

8 Ibid.

9 Cockerell, RIBA Archives, COC 1/1/iv (Box 1).

10 Cockerell, RA archives, mis/co 2, Second Lecture, 1842.

11 Cockerell, RA Archives, mis/co 9, Third Lecture, 1843.

12 See for example, the difference between 'living' and dead handiwork in *The Seven Lamps of Architecture*, 51, and the description of the life of the ornaments in relation to the pleasure that craftsmen took in creating them, paragraph XXIV of the 'Lamp of Life'.

13 Ruskin, *The Seven Lamps of Architecture*, Plate 1, Figure 2.

14 Ruskin, *The Seven Lamps of Architecture*, 81.

15 D.S., 'Dividend Pay and Warrant Office, Bank of England', 100–12.

16 See Kohane 'Order and Variety'.

17 Represented in Nigel Hiscock, *The Wise Master Builder*, *Platonic Geometry in Plans of Medieval Abbeys and Cathedrals* (Aldershot: Ashgate, 2000). See also Eugeny A. Zaitsev, 'The Meaning of Early Medieval Geometry: From Euclid and Surveyor's Manuals to Christian Philosophy', *Isis*, 90:3 (1999): 522–53; 536.

18 Wisdom, 11:20.

19 Vitruvius, *De architectura …*, *Harleanus 2767*, I, I, 1.

20 Zaitsev, 538.

21 Zaitsev, 552.

22 See for example the work of Alberto Perez-Gomez, Louise Pelletier, Hubert Damish, and Robin Evans.

23 Cockerell, 'Reports from Committees: Fifteen volumes', vol 3, Arts and Manufactures; Joint stock Banks. Session 4 February–20 August 1836, vol. IX, 1836. par. 1432.

24 Mark Dorrian, 'The Aerial View: Notes for a Cultural History', *Strates*, 13 (2013): 2–18.

25 Stan Allen, 'Trace Elements', in Cynthia Davidson, ed., *Tracing Eisenman* (New York: Rizzoli, 2006).

26 Stan Allen, 'Trace Elements', 59.

27 Allen, 'Trace Elements', 62. Further on, Allen asks: 'If process is still important in architecture today, why not *understand* process as the unfolding life of the building and its site over time? […] It is a process that unfolds in a complex interaction with the messy and unpredictable forces of life itself. Less narrative, less history; more atmosphere, more effect'. (64).

28 From the classical Latin *digitus*, meaning finger (*OED*).

29 Antoine Picon, 'Digital Architecture and the Temporal Structure of the Internet Experience', in Leslie Kavanaugh, ed., *Chronotopologies* (Amsterdam: Rodopi, 2010), 223–40; 224.

30 Picon, 227–30.

31 Picon, 230. He refers to the discourse on post-criticality, namely to Robert Somol and Sarah Whiting 'Notes around the Doppler Effect and other Moods of Modernism', *Perspecta*, 33 (2002): 72–7.

32 'Elle est ouverte puisque / tout est présent disponible/ saisissable /Ouverte pour recevoir / Ouverte aussi que pour chacun / y vienne prendre /Les eaux ruissellent / le soleil illumine / les complexités ont tissé / leur trame / les fluides sont partout. / Les outils dans la main / Les caresses de la main / La vie que l'on goûte par / le pétrissement des mains / La vue qui est dans la / palpation. --- Pleine main j'ai reçu / Pleine main je donne'. The poem continues by mentioning the tracing of a right angle. On a / avec un charbon / tracé l'angle droit / le signe / Il est la réponse et le guide / le fait / une réponse / un choix / Il est simple et nu / mais saisissable / Les savants discuteront / de la relativité de sa rigueur / Mais la conscience / en a fait un signe / Il est la réponse et le guide / le fait / ma réponse / mon choix'. Le Corbusier, *Poème de l'angle droit*. 'F3, La main ouverte'. My translation in the text.

33 Cockerell, RIBA Archives, COC/1/73.ii (in Box 4).

34 Cockerell, RIBA Archives, COC/1/73.iii (in Box 4).

35 Cockerell, RIBA Archives, COC/1/73.iv (in Box 4).

36 Cockerell, RIBA Archives, COC/1/73.vi (in Box 4).

37 Cockerell, RIBA Archives, COC/1/76.iii (in Box 5).

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Epilogue: The Architect's Feet? On Giants's Toes and Boot Scrapers

Cockerell's work on Cambridge Library's north wing represented at once a great opportunity to envision an important ensemble, and the potentially frustrating experience of only being able to realize a very small fragment of a much greater whole. While this building's fragment is not necessarily comparable to the fragment of a sculpture, both elicit a consideration of part and whole, of the fragment in relation to its larger context. In many ways, this was Cockerell's art all along. As a Grand Tourist, he pieced together fragments of the Niobe group so that in turn, this newly formed fragment could be related to a larger building, ornamenting its pediment. *Plate X* spoke to the temporary encounter, a moment in time measured against the ruined temple and the possibility of restoration. Likewise, the incomplete projects of Elmes and Basevi represented fragments to be completed, wherein isolated parts had to be understood insofar as these too participated in a larger whole. The presentation drawings produced for the project in Liverpool as well as the Cambridge University Library again brought into play the relations of part to whole, laying out fragmented elements that spoke of larger visions. At both ends of the spectrum, the 'Bassae capital' and *The Professor's Dream*, respectively part and whole, hint at the bearing of phenomenological considerations of an architecture to be experienced in time together with a larger temporal and historical *episteme* against which architecture is inevitably cast. In all these endeavours, there is the constant desire to envision a part in relation to an existing whole, or a potential whole from the present fragment.

There is yet another scenario in which Cockerell's work as an architect called upon the ability to navigate between the fragment and the whole. Commenting on his work as Surveyor of St Paul, a task in which he succeeded Sir John Soane, Cockerell included a strange remark:

> *All my life I have desired to achieve something grand – but never have succeeded, except once, in the scraper of the north door of St.Paul's which I put up. I hope you will do me the honour to look at it.*[1]

In Watkin's monograph on Cockerell, he described this comment as Cockerell's 'idea of a joke'. While Watkin may well be right, it is also possible that Cockerell was being sincere, and that the comment should be read in the context of his other statements, such as, 'we must needs carry that profession out in all detail as well as in its Principles', or, when urging the following of nature's example, 'harmony in the whole, harmony in the parts even to microscopic observation'.[2] In yet another instance, Cockerell drew attention to a less glorious dimension of architectural constructions, the watercloset, to make a point about the importance of models:

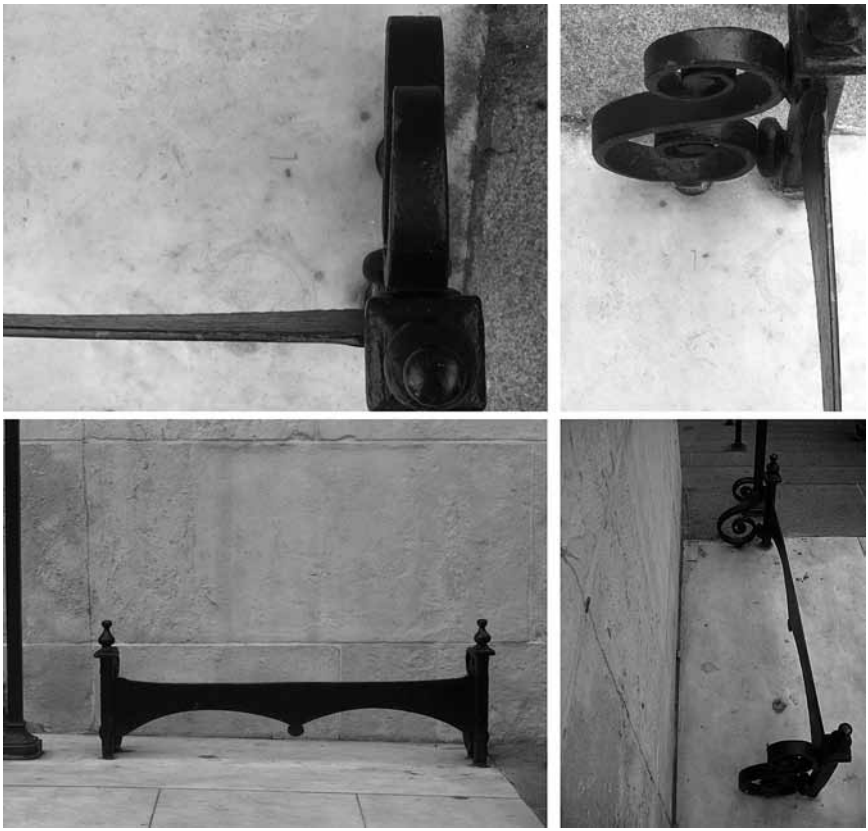
> *lastly the model [scaled models] should be consulted, & if poss[e] the models of the surrounding buildings. but then such rough & inexpensive models as will be guided to the Professor but not pretty toys to gratify the amateurs. […] for many things may be dispensed with when we see the whole before us. in fact I never designed a watercloset without a model.*[3]

From the infinitely small to the infinitely large, Cockerell's suggestion that even a boot scraper was a worthwhile detail to design has been echoed in works by numerous likeminded artists and architects. Between Cockerell's comment on the scraper at St Paul's, and his note on his façade drawing for Cambridge University Library, we can decipher his ideas on a building's legibility, and also consider its cultural significance as expressed by Hugo in *Notre-Dame de Paris*. Indeed, after describing the façade of Notre-Dame in detail,[4] Hugo writes:

> *And what we here say of the façade must be said of the entire church; and what we say of the cathedral church of Paris, must be said of all the churches of Christendom in the Middle Ages. All things are in place in that art, self-created, logical, and well proportioned. To measure the great toe of the foot is to measure the giant.*[5]

Hugo points to reciprocity between the part and the whole, between the face and the building, the building and its context, the context and its time. Operating at different scales, the boot scraper and the Cambridge library façade likewise point to this reciprocity, both referring back, although in different ways, to the larger context within which they operate. At St Paul's, the cathedral's boot scraper becomes a humble gesture to the architecture of Wren, just as a quiet façade becomes a reverential bow to the complex spatio-temporal site within which it rises, just as a building harks back to both recorded and unwritten histories.

In the eighteenth and nineteenth centuries, architects turned to ancient times to measure and study the buildings of the past. Searching for immutable and long-lasting principles, they checked their measurements and discoveries against classical texts, with copies of Pausanias and Vitruvius in hand. They hoped history might reveal the path to build the architecture of the future. Today, this approach seems to be reversed, as architects do not turn to the past in a search for immutable values, but monumentalize the present in an attempt to exert some control over a future that remains ever so ephemeral. If nineteenth-century architects were acutely aware of their position in history, today's architects are first and foremost aware of their subjective experience of time. The first ground of reference becomes



7.1 C.R. Cockerell, Boot scraper, St Paul's Cathedral, London (photographs by the author)

human temporality, and only upon this accepted subjectivity can the notional possibility of a shared world be considered. Cockerell's work is particularly interesting as it points to a hinge between these two positions, measuring history against historicity and vice versa.

Today, it is often by appealing to the ephemeral, to the mortal heart and the immediate encounter, that architecture can open the subjective experience back onto history. Only by upholding human temporality as a first principle can individuals be repositioned into a larger historical framework. For example, in a short text published in 2000, the architects Herzog & De Meuron argued for a phenomenological conception of architectural stability. Isolating stability from Vitruvius's triad of *firmitas*, *venustas*, and *utilitas*, they placed it in a class of its own, 'a special case, an absolute value that can not be achieved, that will remain a dream and is interesting only as such'.[6] Reluctantly locating the grounds of *firmitas* in the plastic polymers that constitute buildings, they searched for durability in the expression of sensual moments made tangible: 'the touch of two bodies, the building volume and our own body, being touched in our own body and soul. […] In other words, a messenger mediating between the house and the observer'.[7] Their practice is exemplary in that it has been founded on the exploration of materiality together with perception, where the buildings do indeed mediate between an embodied temporality and a way of inhabiting the world. At Eberswalde Library,

a palette of concrete and frosted and clear glass onto which a set of photographic images is etched becomes their means of alluding to a larger historical framework. Commissioned by the state of Bradenburg in 1994, the library displays on its walls 15 photographs selected by Thomas Ruff, each repeated 66 times around the building. Varying from technological, political, and historical index, the images selected invite further reflection on history, science, or politics.[8] The images were transferred to the building using an old technique of *sgraffito* to engage the viewers physically as well as psychologically. Moving alongside the building, a passer by may be compelled to reflect on the significance of the images after being puzzled by the shifts between the opaque and translucent surfaces or the represented skies lying low at ground level. A larger historical perspective is cued by the puzzling experience of the very materiality of the building itself.

More recently, in collaboration with Chinese artist Ai Wei Wei, Herzog & de Meuron conceptualized their project for the seasonal Serpentine pavilion around the recovery of the foundations of preceding pavilions that had been built over the past 12 years. They engaged in what might constitute an archaeological investigation of the site. Indeed, like Cockerell at Agrigento, their pleasure in recovering these traces may have been very close to that of creating a work anew, the two activities closely overlapping. Part architects, part archaeologists, they dug out this young ground as though they were grand tourists looking at 1,000-year-old sites. While the project thus acknowledged that history always precedes us and that architecture never takes form on a *tabula rasa*, it also expressed a contemporary shortsightedness with regards to history, as well as a certain sense of the acceleration of time.

In both these projects, visitors are confronted by shifting epistemological frameworks through traces that are revealed and built as index. These works, like most of Cockerell's oeuvre, are indexical. Time is not inscribed in the durability of the stone but in the traces left by formwork in the concrete that viewers question; time is not preserved in the random repetition and application of an ornament but in the moment that one pauses, surprised by the unexpected; time is not reducible to a single comprehensive history but is made alive every time a passer-by actively seeks or speculates meanings that may evade them now but which are no less relevant.

This indexical conception of architectural communication may represent one way of claiming a ground for meaning in a world where relativization of signification is celebrated. Given the plural and fragmented nature of the modern world, it is important to address the question of architectural meaning in conjunction with the ends of architecture, which necessarily lie beyond the architecture itself. The consideration of architecture as a significant and representative art is tied with the problem of representation itself:

> *'Representation' is a much-used term in the human sciences, and has been for a long time. No doubt this is because of its ambiguity. On one hand the 'representation' stands in for the reality that is represented, and so evokes absence; on the other, it makes that reality visible and thus suggests presence. Moreover, this opposition can easily be reversed: the representation is present in the former case, even if only as a surrogate; in the latter case it ends up recalling, in contrast to itself, the absent reality that it is intended to represent*.[9]

That representation would both evoke absence and makes this absence visible through some 'standing-in' presence is also suggestive with respect to architecture: architecture's representative function inherently implies that the experience of architecture is itself a sort of search. What does architecture, as a physical presence, stand for? What was intended, and how can it be recalled? How is this physical reality made present to the individual experiencing it?

Cockerell thought he should have been an 'architect in time'. Concluding *In Search of Lost Time*, Marcel Proust referred to 'giants in time'.[10] Both artists allude to the power of their art to capture something of the ineffable. Northrop Frye writes that rare ecstatic moments in Proust's telling of his long story are what enable 'him to look at men, not as living from moment to disappearing moment, but as 'giants immersed in time".[11] One can hold this image up to Proust's description of his own old body, as he stands on shaky legs that seem to him to be growing longer even as they weaken with age, 'as though men were perched upon living stilts which keep on growing, reaching the height of church-towers, until walking becomes difficult and dangerous and, at last, they fall'.[12] These are also the shaky legs of his story that enable him for a moment to stand as though he is out of time, as he describes men 'as monsters occupying a place in Time infinitely more important than the restricted one reserved for them in space …'[13] Indeed, these strangely weak and stretched out legs stand for Proust's long unfolding story: though written by him about his time, it is the medium that enables him to somehow transcend himself and his time, to stand like a giant, 'immersed in Time'.

Beyond the consideration of architecture itself as a representation – the petrifaction of historical time – it is imperative to foreground the multi-dimensional interplay between time and architecture in order to challenge the current emphasis on the self-referencing of both architecture and subject. Responding to Baudelaire's belief that 'La forme d'une ville change, hélas, plus vite que le coeur d'un mortel',[14] it has been argued that architecture is asked to hold time not by its supposed stability, but by building time itself.[15] This points to a renewed definition of the epistemological dimension of architecture. Considered epistemologically, architecture is a process of building interactions, that is, it involves the collection, recollection, and reconstruction of potential interactions. In temporal terms, this means that architecture is built against a certain conception of time: its construction is directly informed by its relation to a temporal conception that can range from the valuation of the monumental to the celebration of the ephemeral. When building time, architects take a specific view on time that their architecture ultimately frames.[16] According to Maurice Merleau-Ponty, if time flowed like a river, its flow would appear differently to someone on the shore compared to another riding a boat with or against it:

> *Time is, therefore, not a real process, not an actual succession that I am content to record. It arises from my relation to things. Within things themselves, the future and the past are in a kind of eternal state of pre-existence and survival; the water which will flow by tomorrow is at this moment at its source, the water which has just passed is now a little further downstream in the valley. What is past or future for me is present in the world.*[17]

Time is not an abstract continuum, it is constantly defined and redefined through different relations and shifting perspectives on the world. Epistemologically, architects thus construct specific views on time, whether in a church's articulation of the complex relation between mortal time and divine eternity to reflect a Judeo-Christian understanding of time, or in the attempt to bear witness to that which will be forgotten and yet remain with humanity as unforgettable, such as in buildings like Holocaust memorials.[18]

Conversely, phenomenology only applies to architecture after a project has been monumentalized, when the built architecture occupies a space in time. Only from then can architecture be lived and experienced, experiences that necessarily unfold in time. The phenomenology of architecture belongs to the realm of lived experiences. 'Paris change!' Baudelaire admits, 'but nothing in my melancholia has changed! New palaces, scaffoldings, blocks, old towns, all is becoming allegory for me, and my dear memories are heavier than stones'.[19] In this unexpected *revirement*, Baudelaire suggests that any sense of durability is to be reached interiorly and subjectively rather than outside in the material world of things. Baudelaire thus emphasizes what could be described as the life of the things or moments human beings hold in their memory once these have been experienced, a life that may even outlive these things themselves. Thus phenomenology also implies a specific response to the world. Time is not singular: whether conceived through epistemological interactions or as the motor of the phenomenological encounter, it inherently carries resonances that hark back to history as well as to the depths of personal memory.

If there remains a possibility to understand human actions within a larger history, it is to be founded upon subjectivity, understood in all its temporal depth.[20] Rather than a fixed framework within which the eternal and the temporal can be categorized and specified, Merleau-Ponty emphasizes the fundamental axis of time, which reasserts the necessary pull of the eternal in the modern world. Even within this conception, time must be considered as what becomes and never is, as that which will never be complete:

> *It is indeed true that I should be incapable of perceiving any point in time without a before and an after, and that, in order to be aware of the relationship between the three terms, I must not be absorbed into any one of them: that time, in short, needs a synthesis. But it is equally true that this synthesis must always be undertaken afresh, and that any supposition that it can be anywhere brought to completion involves the negation of time.*[21]

We can gather some extraordinary examples of these quests in time from other creative fields such as filmmaking and art. In cinema, the oeuvre of Andrei Tarkovsky and Chris Marker are but expressions of a quest for time undertaken in time, and Andy Goldsworthy also made a lifework of this quest, exploring the continuity in a series of small transformations that inevitably occur in the course of a single day (as the night frost thaws in the morning, as the tide draws in and out), over the course of different seasons throughout the year, or across invisible yet significant divisions in time such as the shift from the second millennium to the third.[22]

Notwithstanding the very different means employed, all of these works operate as a renewed questioning of human temporality in practices that inherently value time itself as a matter to work with, within, and against.

In architecture, the work of Peter Zumthor gravitates about a sense of eternity. Zumthor explicitly describes architecture as a temporal art, likening the architectural operation to the staging of a play or the performance of a musical score: 'My experience of [architecture] is not limited to a single second'.[23] For example, at the Thermal Baths at Vals, Zumthor directs users through the space, seducing them with mass, light, views, even sound, all of which offer indications of a direction to follow, the freedom to choose one's path, a possibility to linger, and opportunities for relief. Zumthor's buildings operate in tension between the phenomenal and the epistemological, appealing both to personal historicity and relocating this within a larger history. Positively anchored in the present and calling upon the direct involvement of the users, his buildings also emerge as spectres of eternity, hinting at a dimension that we might still consider to be shared, because they disrupt, contribute to, and recede in the atmosphere of time.

In all these works, we can sense the continued search for a rich time understood epistemologically and considered phenomenologically. We can appreciate the interplay by architects marked by their time who are attempting to transcend a single time. We are reminded of Cockerell's wish to be an architect in time:

> *The architect adds the substantial & enduring merit of utility, to the glory of beauty of fine arts & transcend them all therefore in importance his works are calculated to outlive all the other productions of the arts. and they are the real monuments of the age in which he lives, the books, in which are recorded (to those who can read) the intellectual & the moral character of the age in which he lives. He then is the true historian of his times; &, whatever is magnanimous or ostentatious & hollow, in the day in which he labors, shall be indelibly graven in the works of his day.*[24]

In the course of my research on Cockerell, I visited St Paul's Cathedral and did Cockerell the honour of looking at the boot scraper to the right of the main entrance. I saw what appeared to be a simple, insignificant piece of metal. It stood unused that day, as the tourists flocking into the cathedral sported more or less clean footwear. When I visited Peter Zumthor's Sumvitg chapel years later, my eyes instantly locked onto another insignificant piece of metal: a steel boot scraper positioned very simply on the concrete steps leading up to the small church. A group of architectural students filed quickly into the space, and it became obvious to me that only a few had noticed the scraper, which was no doubt likely used by members of the small community the chapel serves. A simple scraper for a simple church, in a small community humbled by the majestic Alps that extend all around. To notice the scraper, and stop to clean one's boots, extends respect to this larger landscape. And so we are back to the relation between part and whole, between a face and a building, the building and its context, the context and its time; between a nineteenth-century architect's drawings and architectural meaning, between contemporary architecture and its footings.

7.2 Peter Zumthor, Boot scraper, Sumvitg Chapel, Switzerland (photographs by the author)

NOTES

1 Watkin, *C.R. Cockerell*, 131.

2 Cockerell, RIBA Archives, COC/1/62.iv–v (in Box 4).

3 Cockerell, RIBA Archives, COC/1/73.iv (in Box 4).

4 Hugo refers to the facade as a 'vast symphony in stone, so to speak; the colossal work of one man and one people, all together one and complex, like the Iliads and the Romanceros, whose sister it is a prodigious product of the grouping together of all the forces of an epoch […] a sort of human creation, in a word, powerful and fecund as the divine creation of which it seems to have stolen the double character–variety, eternity'. Hugo, 152.

5 Hugo, 152.

6 Herzog & de Meuron, 'Firmitas', *A+U*, Special Issue, Herzog & de Meuron (2002): 120. See also our discussion in Anne Bordeleau, 'An Indexical Approach to Architecture', *Footprint*, 3 (2008): 79–95.

7 Herzog & de Meuron, 'Firmitas'.

8 Gerhard Mack and Valeria Liebermann, *Eberswalde Library, Herzog & de Meuron* (London: AA Publications, 2000), 31.

9 Roger Chartier's definition of representation as introduced in Carlo Ginzburg, *Wooden Eyes*, trans. Martin Ryle and Kate Soper (London and New York: Verso, 2000), 63.

10 Marcel Proust, *Time Regained,* trans. Stephan Hudson (London: Chatto and Windus, 1931), 276.

11 Northrop Frye. 'Giants in Time' in *The Educated Imagination* (Bloomington: Indiana Unviersity Press, 1971), 47.

12 Proust, *Time Regained,* 276.

13 Ibid.

14 'The form of a city changes, alas, faster than a mortal's heart'. Baudelaire, 'Le Cygne', *Les fleurs du mal,* (Paris: Édition Garnier Frères, 1959).

15 See texts by Hilde Heynen and Mark Wigley in *The Journal of Architecture,* 4:4 (1999); see also Wolfgang Sonne in *Daidalos*, Special Issue: Memoria (1995): 58.

16 Merleau-Ponty, *Phenomenology of Perception*, 411.

17 Merleau-Ponty, *Phenomenology of Perception,* 412.

18 I am positing the relation between the forgotten and unforgettable as in Agamben's sense. See Giorgio Agamben, *The Time that Remains,* trans. Patricia Dailey (Stanford: Stanford University Press, 2005).

19 The second part of 'Le cygne' opens with 'Paris change! mais rien dans ma mélancolie – N'a bougé! palais neufs, échafaudages, blocs – Vieux faugbourgs, tout pour moi devient allégorie, – Et mes chers souvenirs sont plus lourds que des rocs'. (Baudelaire, *Les fleurs du mal,* 119).

20 Merleau-Ponty, *Phenomenology of Perception,* 398.

21 Merleau-Ponty, *Phenomenology of Perception,* 415.

22 See Andy Goldsworthy, *Time* (London: Harry N. Abrams, 2008); Catherine Lupton, *Chris Marker, Memories of the Future* (London: Reaktion Books, 2006); and Andrei Tarkovsky, *Sculpting in Time* (Austin: University of Texas Press, 1987). For a study of these works, see Anne Bordeleau, 'Monumentality and Contemporaneity in the Work of Tarkovsky, Goldsworthy, and Zumthor', to appear in *Chora 7* (Montreal: McGill-Queen University Press, 2014).

23 Peter Zumthor, *Atmosphere, Architectural Environments, Surrounding Objects.* (Basel: Birkhaüser, 2006), 41.

24 RIBA Archives, COC/1/73.ix (in Box 4).

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