Educational Research 8

Paul Smeyers
Marc Depaepe *Editors*

Educational Research: Material Culture and Its Representation

Springer

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Educational Research

VOLUME 8

Aims & Scope

Freedom of inquiry in educational research can no longer be taken for granted. Narrow definitions of what constitutes 'scientific' research, funding criteria that enforce particular research methods, and policy decision processes that ignore any research that is not narrowly utilitarian, in many countries, create a context that discourages scholarship of a more speculative, exploratory, or critical sort.

In this series, internationally leading scholars in *philosophy and history of education* engage in discourse that is sophisticated and nuanced for understanding contemporary debates. Thus social research, and therefore educational research, is again focused on the distinctive nature of what it studies: a social activity where questions of meaning and value must be addressed, and where interpretation and judgment play a crucial role.

This educational research takes into account the historical and cultural context and brings clarity to what actually constitutes science in this area. The timely issues that are addressed in this series bear witness to the belief that educational theory cannot help but go beyond a limited conception of empirical educational research to provide a real understanding of education as a human practice. They surpass the rather simple cause-and effect rhetoric and thus transgress the picture of performativity that currently keeps much of the talk about education captive. The authors are united in the belief that 'there is a place within the social sciences in general', and within the discipline of education in particular, for 'foundational' approaches that enable the systematic study of educational practice from a discipline-orientated approach.

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Educational Research: Material Culture and Its Representation

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Chapter 1
On the Tangible Material Culture of Child-Rearing, Education, and Educational Research

Paul Smeyers and Marc Depaepe

Man and matter: it remains a problematic relationship. Not in the least because man has almost continuously wanted to move away from the materiality of things (including from materiality itself), as well in an historical as in a philosophical sense. A random selection from the abundance of handbooks of the history of psychology (e.g. Leahey 2013; King et al. 2009; Lawson et al. 2006) suffices to see that even long before psychology was shaped as a modern scientific discipline, a search was undertaken to reveal the core or essence of a being human. Often one arrived at the existence of a 'soul', a concept used (amongst others by Plato) since Antiquity which referred to the immaterial carrier of the spiritual component of the self. Obviously this is not the place to offer an analysis of the many debates involving the dichotomisation of body and soul (see the dualism of Descartes), of the Kantian noumenal and phenomenal world and his position concerning the Thing-in-itself (which in principle cannot be known), of idealism and materialism (recall the famous idea of Engels who offered a footing for the Hegelian dialectic in his writing on Feuerbach at the end of classical German philosophy), of idealism and naturalism leading towards realism, of positivism, structuralism—stances which all attacked the supremacy of the autonomous mind or consciousness as the centre of the acting and thinking subject by opening the door for a more pessimistic and fatalistic interpretation of the role of the individual in the society (see the German *Materialismusstreit* in the middle of the nineteenth century).

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That this presented especially problems for the academics in the area of educational theory (Oelkers 2012) is an observation however, which matters when introducing the content of this collection. The idea of the make-ability of the individual and of society was after all the seal of the Enlightenment. It is for this reason that the aforementioned cultural-historical movement had in essence an educational meaning. It shaped the articulation of humanity which enlightened itself as the subject of history. While conversely, the rise of educational theory was most typical for the Enlightenment. Child-rearing and education were called upon to realize the mental revolution (again Kant's wording) which the Enlightenment as an expansion of consciousness gave occasion to (see Herrmann 1993). Though Rousseau's *Emile* may still show some naturalistic features *avant la lettre*, the educational significance was to be found in the construction of a fictitious biography *sub specie educationis*: the embedding in the educational association and of child-rearing and education in a carefully constructed learning environment; the embedding of the natural development in an educationally conceived format of cultural world explorations and experiences of the self; in making acceptable the thesis that the completion of the natural development will be able to stop the degeneration of the culture; and finally the embedding of educational thinking and acting in balancing and anticipating of the possible consequences for the child's later life (Depaepe 1998). In short, through his belief in the make-ability of education, Rousseau believed also unequivocally in the make-ability of man and society. Through education he wanted to overcome utterly the dilemma between nature and culture, man and citizen. And as nature cannot be changed, the educator has to follow its order and attune the things (i.e., the world of one's experiences) to this. Nature formed as it were the regulative principle the educator had to put its mind to. She was the servant of that nature… which contrasted sharply with naturalism in literary works. To give just one example, presumably completely unknown to the international educational community, Cyriel Buysse, who was seen in Flanders—not underserved—as the first representative of naturalism.

Thus, in his short story *Lente*[Spring] from 1907, he lets to spark off the fire of love of one of the old bachelor uncles who lived at their Flemish farm, at the occasion of a visit paid by a second niece from Paris after the decease of a great aunt. This is not at all what Cordilla wanted, an old spinster and sister of the uncle in love who runs the farm firmly. The story ends with an illusion. The niece leaves again for Paris and the colourless drag of daily life resumes again. Here, 'things' (i.e., fate) cannot be changed, at most one can hope that they will settle by themselves, such as expressed by the brother of the uncle in love, a bachelor too: "When Cordilla got into an angry mood, it was better to leave her alone. Things will settle later by themselves" (Buysse 1907, p. 12). The criticism of Buysse's work was in Flanders almost unanimously negative. One reacted with disgust (especially in Catholic circles, but beyond these as well) to his deterministic and fatalistic vision. Buysse, so it was said, slandered his people instead of lifting them up (Vervliet 1982). Such reversal of the ideal of the Enlightenment of the autonomous acting individual was not at all what happened to Rousseau's *Emile*. In almost all appropriations of Rousseau in the context of educational renewal movements of the late

nineteenth century and throughout the twentieth century, the ideal of the natural development of the self got more and more emancipatory characteristics. Empowerment through (self-) education and (auto-)instruction became the new magical word, similar to the impulses of for example the humanistic psychology in the U.S. (amongst others Rogers, Gendlin & Maslow) which was also characterised as Rousseau-like because of an involvement of the often too largely blown up individual. In any case, such educationalizing and/or psychologizing interpretations could hardly bear the idea that the *condition humaine* is determined by structural and even less by material constraints. In the emancipatory stories the belief in an Hegelian dialectic remained slumbering, as if the subject was still capable to 'move mountains' (see Cavanzzini 2013). Even if one could think that the *neurologic turn* of nowadays in the psychological and educational sciences would mark the end of a reflective psychological (or educational) outlook, the psychological or educational element has now been moved from the individual to her material substratum: the brain—yet such a process resembles a 'tragic failure', which at least for educators remains to evoke the role of the free will and of (self-) responsibility (Oelkers 2012). According to Jan De Vos, a philosopher from Ghent, who refers (2011) in this context to Husserl (who coined the term 'tragic failure'), characterizes such (neurological) materialisation of the human sciences as the powerlessness to come to terms with the fact that 'consciousness' is not only an object in the world, but also the subject of this world.

But all of this obviously does not prevent that research in instructional science, partly also as the consequence of technological developments—the computer as a metaphor for the brains, or the other way round—continues without being disturbed. The book by Estrid Sørensen (2009) *The Materiality of Learning* for example is announced with the observation that "the field of educational research lacks a methodology for the study of learning that does not begin with humans, their aims, and their interests" (back cover). This edited collection, number 8 in the series *Educational Research*, does not aspire to develop such methodology. It wants to focus at the complex relationship of the individual and her material culture, not only in the context of child-rearing and education, but also concerning the research into this field. Gudrun M. König writes "*Die Sprache der Dinge ist jedoch mehrdeutig und führt nich zu einfachen, sondern zu vielfachen Kontexten*", in her essay *Das Veto der Dinge* (2012, p. 21).

> Das Veto, die Einsprüche und Widerworte charakterisieren die Dinge als Protagonisten der Kulturanalyse. Im Forschungsprozess können sie eine dynamisierende Funktion einnehmen, denn ihre Exploration erfordert viele Kontextualisierungen. Dien Hinwendung zur Materialität markiert eine Perspektive auf sowie ein Konzept von Kultur, das den spezifischen Informationsgehalt von Dingen nutzt, je nach Fragestellung, Region und Untersuchungszeit aber unterschiedliche methodische Herangehensweisen miteinander kombiniert. Dinge geraten so zu Fenstern in eine verborgene, aber greifbare Geschichte der Kultivierung.

It is this tangible material culture, as a kaleidoscope of aspects, approaches and contexts of scientific practices, which is at the centre of the interest of this book. It is to be hoped that the paradoxical relationship of man as a subject and as an object of education and child-rearing may engender further research into this field.

This is not the first time that the *Research Community* '*Philosophy and history of the discipline of education*',[1] established by the Research Foundation Flanders FWO, Belgium (Fonds voor Wetenschappelijk Onderzoek—Vlaanderen), addresses an area that is central for educational research. In both the first (1999–2003) and second (2000–2008) periods, which focused on '*Evaluation and evolution of the criteria for educational research'*, various positions were scrutinized (see Smeyers and Depaepe 2003, 2006). In the present (third) 5 year period of this *Research Community* (2009–2013), the overall interest is *'Faces and spaces of educational research'*, which is divided into four subthemes (respectively addressed during the conference in 2009, 2010, 2011, and 2012): the ethics and aesthetics of statistics; the attraction of psychology; institutional space; designs, and finally, material culture, and the representation of educational research. The papers published in this volume were first presented at the 2012 *Research Community* conference. Scholars from philosophy and history of education (some of whom are particularly interested in history and philosophy of science), combine their efforts to study 'material culture' as part of both the academic discipline of education and the broader educational context. The chapters in this collection address a variety of topics such as the school desk; paintings, drawings and emblems; numerical logic and visual and literary approaches; name/date and footnote format reference citation. Concerning educational research attention is given to standards for reporting, to the Researcher Development framework, to particular templates in the representation of educational research including to non-representational theory, to arts-based educational research, to the relationship between mathematics and art, to the force of the iconic, to keeping open the possibility of independent thought, and to conversation as related to the construction and representation of research.

The chapter by *Marc Depaepe, Frank Simon, and Pieter Verstraete* focuses on 'Valorising the Cultural Heritage of the School Desk through Historical Research'. From a historical point of view it is not only possible to adopt an innovative approach concerning the way the material culture and representation of educational research are examined, but the historical study itself can also contribute to a revamping of the material scholarly culture and the way it is represented. The latter can be brought forward both by means of research projects being set up with their own intrinsic finality, as well as by projects contemplating an alternative way of disseminating and communicating scientific findings. In this chapter such a thesis is substantiated using the example of the school desk, which is dealt with at different levels of historiography. First, the authors delve into the iconic and metaphorical use of the 'school desk' on covers, in titles, slogans, and so on. These are often historical images that have been extracted from their original context and appropriated in a way that no longer wants to represent traditional or historical practices. Historical research on the educational uses of the school desk, however, can help explain its symbolic value for the present day (which is also revealed by the fact that virtually all education museums include displays of school desks). Second, starting from a

[1] For further information about previous work of the *Research Community* see Smeyers 2008.

recent study on the innovative value of the school desks of Oscar Brodsky, it is shown how alternative paths have to be explored in order to successfully link the long tradition of the uses of the desk with the process of modernization. Up to now—and this is the third issue—the historiography of the school desk has been framed almost exclusively within a Foucouldian paradigm, a research tradition which bears several inconveniences for a dynamic approach towards the historical relationship of the educational actors (teachers and pupils) with the school desk. This resulted, among other things, in the school desk as primarily conceived as a static object, even in the historical study of the educational process. Hence, the fourth section argues for a more dynamic approach. Instead of isolating the school desk as a source for historical research, future-oriented research should contextualize its use, not only against the background of the prevailing educational practices, but also in relation to the existing cultural-historical practices in other social fields. Studies on the 'grammar of schooling' and the 'grammar of educationalization', as have been undertaken in the past by the authors of this chapter, but which are also at the head of various other initiatives, constitute a good starting point for this. The final section discusses to what extent education museums in general and specific exhibition projects in particular can help to realize such a dynamic historical understanding. On the one hand, it is obvious that there exists within the world of education museums a great potential to valorise the cultural heritage of the materialities of schooling in relation to the history of educational practices. On the other hand, however, this 'world' has remained so amateurish and conservative that the danger of a romanticized and nostalgic interpretation is lurking around almost every corner, although one can certainly point to one or two promising initiatives in the direction that the authors have described as desirable.

In the next chapter *Jeroen Dekker* continues with 'Mirrors of reality? Material culture and the significance of images for research into long-term educational processes'. He argues that images can be of major value for research into long-term educational processes working as clues—a concept coined by Carlo Ginzburg—to childhood and education in the past. In this chapter, the question is asked whether or not such images are also mirrors of reality. It seems that while there is always symbolic and moral space between clues and reality, they are not off all reality. Such is shown with the case of Dutch seventeenth century Golden Age paintings, drawings and emblems. It is observed both for paintings and drawings that were intentionally made to represent real people, namely family portraits and children's portraits, as well as for paintings and drawings that were not intentionally made to represent real people but to show patterns of behaviour, or misbehaviour, namely genre paintings and emblem books. The first group of images refers to real families—notwithstanding the fact that sometimes those families remain a mystery, as can be seen with the Rembrandt family portrait—while the second group refers to desired or undesired patterns of behaviour. But the first group could also function as transmitters of—sometimes hidden—educational ambitions and models of behaviour. It is concluded that, because of their great popularity in the seventeenth century, the mentioned images are strong sources for the history of education and childhood. By buying Steen's canvasses or other genre paintings and drawings,

by looking at them when educating their children, by reading emblematic books by Cats, or, for the orthodox-protestants, family advice books by Koelman and Wittewrongel, among others, and by enjoying text and images of those books, the Dutch bourgeois (in its general sense) followed, within a highly visual culture, a self-paid, self-chosen, self-constructed course in educational and moral literacy.

The chapter by *Karin Priem* 'Visual, literacy and numerical perspectives on education: Materiality, presence and interpretation', analyzes how modes of enquiry relate to the materiality of education and educational presence. Presence, according to Hans Ulrich Gumbrecht (2004), implies material or physical evidence in space before interpretation comes to the fore. By concentrating on materiality, the focus is explicitly on what can be seen, observed, and touched. Focusing on sensual perception necessitates reflection on the substantial differences between objects and discourses. This not only includes a reflection on the materiality of cultural representations, such as books, images, and other media, but also on cultural practices as technologies of knowledge- and meaning-making through the handling of things and artifacts. The materiality of education stresses the laboratory of education in the sense that it reveals education as an apparatus, essentially operating within a matrix of time, space, function, form, and interaction. Modes of enquiry, in contrast, refer to interpretation or methodological operations that ultimately process and transform educational manifestations into meaningful cultural representations and social structures. Educational manifestation is subject to visual, literary and numerical transformation. Whereas visual and literary reflections on education are categorized as cultural, artistic or documentary, numerical transformations are referred to as results of research and methods of quantification. The article focuses on how visual, literary and numerical approaches to education relate to and transform educational manifestations in schools at the turn of the twentieth and twenty-first centuries. The paper's central thesis challenges traditional understandings of quantitative educational research. It argues that educational research that follows a numerical logic is in fact highly normative and interpretative, whereas visual and literary approaches to education (e.g. photography and fictional texts) get closer to the education's essence or experience and question norms and emotional conditions of schooling.

Sophie Ward continues this discussion on research by foregrounding 'Education and the 'new totalitarianism': How standards for reporting on empirical studies of education limit the scope of academic research and communication'. Advances in our understanding of human cognition highlight, she argues, the utility of the arts to create an inter-subjective feeling of unity, which arises when our minds attune plastically to each other and jointly attend a single event (Brandt 2006, p. 172), making the arts highly appropriate for empirical studies of the social impact of education. Although guidelines for empirical social science research published by the American Educational Research Association (AERA 2006, 2009) and the UK Research Excellence Framework (REF 2010) make room for diverse methodological forms, they encourage educational researchers to follow the 'logic of enquiry' (AERA 2006, p. 33). Thus, in contrast to the artist's intentional orientation of an audience towards a shared unique instant (Brandt, ibid), AERA (ibid, p. 35)

suggests that evidence should be 'described', rather than experienced. These standards for reporting on empirical social science are modelled on forms of representation of other sciences, and are ostensibly motivated by the benign aim to provide guidance about essential information. This chapter argues that the proponents of scientific standards are in fact serving a socio-political agenda that seeks to atomise society by denying the possibility of collective human experience, e.g. the privileging of description over experience is bound up with the isolation of the learner as an autonomous economic unit in an education marketplace. It argues that efforts to identify standards in the reporting of educational research should be resisted as a manifestation of the 'new totalitarianism' in which oppositional discourses are silenced through the regulation of academic communication. Using the example of UK filmmaking, this chapter demonstrates how the development of the 'new totalitarianism' in academic research is part of wider social changes, and identifies the value of arts-based educational research as a means of resistance to the imposition of market values in education and society.

In 'Materials that shape researchers' *Naomi Hodgson* argues that the centrality of research and innovation in the sustainable development of the knowledge society has led to a policy focus on the roles and responsibilities of the researcher. Drawing on a number of policy documents, an account is given of how the researcher is currently understood. This is placed within the definition of the current governmental order as inscribing an environmental-ecological self-understanding. The discussion of current policy, and a focus on the particular device of the Researcher Development Framework, illustrates how the environmental-ecological self-understanding forms part of a wider governmental rationality, to which a particular understanding of research and the researcher are central.

The chapter by *Paul Smeyers* addresses 'The *Tractarian* template in the representation of educational research' and investigates whether one can ever depart from the picture of logical empiricism. It starts from a discussion of two recent educational research articles and asks whether what is argues for really needs empirical evidence. It characterizes these educational research debates as embracing a weak version of positivism which prioritizes referential meaning in their endeavour to present the 'world-as-it-is'. As such studies come close to a particular reading of Wittgenstein's *Tractatus* it is then investigated in what sense the *Tractorian* picture which gives ammunition to logical positivism/empiricism and or post-positivism can be avoided. But it is also questioned how these studies would do if one really looks at them as examples of the stance of the *Tractatus*. Starting from Wittgenstein's claims and arguments in this work, it is argued that even if one would embrace this stance to justify theoretically what it is that the dominant strand of educational research is doing or can do nowadays, such justification would not work as it would betray what the *Tractatus* makes itself abundantly clear (i.e., the nature of the pictorial form). This prompts the issue whether the limitation that the *Tractatus* sets itself (i.e., that in a proposition a thought finds an expression that can be perceived by the senses) should not be transgressed in a more radical way than its author already does. So how about if we take the nature of the pictorial form seriously and start (in ethics, etc.) from "This strikes me as the right way of putting it".

How would this be different from an expression where it is said that the table stands next to something else? It is argued that what social scientists do is not fundamentally different. In coming to this conclusion it is crucial to appreciate that one pictures facts to oneself, that a picture is a model of reality, which agrees with reality or not, bearing in mind that what is real necessarily refers to 'what is real for us'. Educational research presupposes that what is the case administers a normative background and generates aims which have to be observed and aspired at any cost. The illusion of certainty that these researchers uphold is very attractive, almost irresistible to all those who struggle to decide what to do, but is yet another manifestation of scepticism. It cannot do away with the normative stance they themselves are necessarily embracing as researchers. Their forgetfulness of the pictorial form is at odds with the position they seem to embrace. Of course, it may never be completely or totally possible to diverge oneself from one or other kind of correspondence theory of truth. Once one accepts, however, that there is theoretical knowledge one needs to realize that more is at stake which can no longer be captured by a correspondence theory of truth, and from this it follows that more and different kinds of 'what makes sense to say' have to be 'admitted'. Such broadening can build on a thin conception of meaning (may even always necessarily build at least partly on this), but offers richer perspectives. This rational debate cannot be passed over in silence. But neither can the temptation to ask for evidence—some justice needs always to be done to what is perceived by the senses which can never be completely bracketed.

What is at stake in the previous chapter is taken up differently by *Lynn Fendler* in her 'The Ethics of Materiality: Some Insights from Non-Representational Theory for Educational Research'. She asks why we should we care about materiality. Assuming we are not interested in pursuing ontological debates about the number of angels capable of dancing on the head of a pin, why study materiality? In what ways might materiality be an issue with ethical implications for educational research in history or philosophy? To address aspects of this question, this essay draws on insights from 'non-representational theory', an approach to theorizing that has been developed recently by geographers in the United Kingdom. The basis of non-representational theory is geography's longstanding scientific focus on material things of the world as they exist in space and time. In their attention to space and time, non-representational theories pertain to discussions of materiality. Non-representational theory describes itself as a critical alternative to the two mainstream epistemological positions in educational research, namely social constructivism and logical empiricism. Using insights from non-representational theory, she examines some implications for the current Research Community focus on 'Material Culture and the Representation of Educational Research'. The essay is organized around three issues: the role of the Cartesian subject/object dichotomy in constructing research objects, the privileging of timelessness and concomitant devaluing of the historical in evaluations of scientific knowledge, and the ethical implications of uniqueness in research approaches.

Educational research is of course affected by the economic, institutional and physical contingencies of its time, and in our time it is increasingly driven by them, thus *Richard Smith* argues in 'Mud and hair: an essay on the conditions

of educational research'. Much can be said about this; and perhaps it might be suspected that there is a tendency to ignore or suppress how research, and not only in education, is so affected. Such suspicion however risks feeding the strand in the tradition of thought that urges aspiration to Thought Itself, untrammelled by mundane considerations. Since philosophy is prominent in that tradition it is salutary that increased notice is these days being taken of its own rootedness in the material, including textuality, whose acknowledgement is to various degrees found in the writings of, among others, Montaigne, Descartes and Plato himself—particularly salutary in their cases because the tradition so often places them among advocates of Pure Thought and withdrawal from the world. Both that tradition and the relatively new material drivers of academic research need to be treated with a proper irony. That, more than anything, keeps open the possibility of independent thought.

Maureen Michael and Ian Munday turn to 'Material and aesthetic tensions within arts-based educational research: Drawing woodpath'. Entirely entangled in what people do with things, the study of practice confronts materiality and its representation. In this chapter the authors engage in a dialogue that unpicks theoretical assumptions of representation as they emerge in the materiality of a visual research methodology. Beginning with an observation of artist activity drawing as a research method is positioned congruent with a socio-material understanding of practice. Schatzki's concepts of practice bundles and material arrangements are used to theorize both the observed practice and the emerging art-based methodology. In response to this positioning Schatzki's idea of 'site ontology' reflecting back to Heidegger's notions of 'ready-to-hand' and 'present-at-hand' is examined. How the materiality of the phenomenon of practice is represented (or mis-represented) through the drawings is explored in terms of the aesthetic awareness and unawareness that the act of drawing facilitates. Using drawing as a means to examine the social phenomenon of practice creates a tension between what is observed and how it is represented. Schatzki's collecting metaphors of bundles and arrangements seem not to accommodate this tension preferring instead to hold everything in relation to everything else. The authors, on the other hand, play with the unease between aesthetic experience and material encounter and they look to Heidegger's woodcutting and consequent woodpaths to better understand the usefulness of this tension. The critical dialogue that the drawing 'Things of her practice' initiates recognises materiality as held taut through theory and method. One of the most significant outcomes of this dialogue is an illustration of an approach to educational research that is necessarily unresolved. The drawing is a material representation of practice but it is also materially constituted.

In their chapter, Kathleen Coessens, Karen François, and Jean Paul Van Bendegem, explore how mathematics education is caught by a meritocratic sense of the useful and how it could benefit from a more creative and experiential approach: 'Olympification versus aesthetization: The appeal of mathematics outside the classroom'. The notion of olympification in mathematics education comes to the fore in the analysis of the differences between the measurements of PISA and TIMSS, further detailed by an example of Flanders (Belgium). Besides the observation of the olympification the possibility of another perspective on mathematics education is considered, looking at a way of bringing classroom mathematics in interaction with the material

grounding of mathematics and with other experiences in life. Based on the content analysis of eight international journals concerning mathematical education the extent in which teachers and researchers take care of outside classroom experiences as possible input for a mathematical curiosity and understanding is demonstrated. Focusing on the relation between mathematics and art different examples of mathematics within the arts are briefly explored. Finally, an example is given of how a mathematician can creatively bring mathematics outside the classroom.

In 'Signs of the times: Iconography of a new education', *Paul Standish* revisits his earlier work exploring ideas of Roland Barthes in relation to education. It concerns the way that iconic signs function, as found for example in Barthes' Mythologies. Semiological analysis of this kind provides a rich means of critically considering contemporary educational practice as well as educational research itself. Lynda Stone's work within the work of the Research Community is relevant in some respects to this critique. The discussion examines the extent to which an iconography might be re-appropriated, not merely through a change in the terms and other forms that are current but through a reappraisal of the force of the iconic in contemporary thought and practice. Ironically perhaps, iconography today in its dominant forms hides its iconic nature through a kind of naturalisation. In response to this there may be ways of retrieving a sense of the religious force of the icon in order to disturb this naturalisation. One example of such a strategy is Bill Readings' attempt to reclaim the university from its ruins by way of a reassertion of the 'name of Thought'. Critically insightful as Readings' 'The University in Ruins' is in many respects, his attempt to speak more positively is not entirely convincing. In the light of this relative failure, this chapter advocates a sensitising to signs that does not seek to install them in new iconic roles. This will have a bearing not only on educational practice but on the possibilities of educational research.

Nick Burbules' chapter addresses 'The paradigmatic differences between name/date and footnote styles of citation'. It contrasts two dominant styles of reference citation, name/date and footnote format, and argues that these are not just equivalent alternatives or simple matters of convenience. These two styles reflect different views of knowledge, different rhetorics of academic writing, different notions of scholarly community—and in fact different conceptions of the nature and purpose of citation itself. The heart of the chapter is a taxonomy of at least eight different rhetorical functions that citation serves, and the intellectual and social effects of those different functions.

The final chapter by *David Bridges* takes up 'Conversation—in the construction and representation of research'. Huge importance, he argues, is attached in educational (and other) research communities to the published work; the paper, the monograph, the book; the tangible outcome that you can count and measure, the product, perhaps, of the 'material culture' referred to in the title of this book. This contribution sets out to explore the idea of research as something perhaps less tangible, less material, but still on-going, enduring: a discussion, a conversation, a part of what Michael Oakeshott memorably referred to as the great 'conversations of mankind'. This chapter considers the centrality of conversation as part of the process of research, but also the ways in which the on-going conversation should be seen as what it is all about. In this sense the conversation is not just the means to an end (which is some sort

of product or 'deliverable'), but its sustaining and enriching is itself what matters: it is what it is. Though publications may serve as markers, reminders of particular stages in the conversation, that is all they are, and they are, for the most part, no less ephemeral than the conversation itself. One can attend to the material conditions which favour or facilitate such conversation, but it is remarkably free from dependency on such conditions. More important is the development of a shared language and a disposition to attend to the other as well as a delight in taking part.

References

AERA. (2006). Standards for reporting on empirical social science research in AERA publications. *Educational Researcher, 35*(6), 33–40.

AERA. (2009). Standards for reporting on humanities-oriented research in AERA publications. *Educational Researcher, 38*(6), 481–486.

Brandt, P. A. (2006). Form and meaning in art. In M. Turner (Ed.), *The artful mind: Cognitive science and the riddle of human creativity* (pp. 171–188). Oxford: Oxford University Press.

Buysse, C. (1947, oorsp. 1907). *Lente.* Amsterdam: C. Hafkamp.

Cavanzzini, A. (2013). Le sujet rôde toujours ou comment la dialectique hégélienne peut déplacer les montagnes. *Dissensus. Revue de philosophie politique de l'ULg, 5*, 65–75.

De Vos, J. (2011). *Psychologisering in tijden van globalisering: een kritische analyse van psychologie en psychologisering*. Leuven: Acco.

Depaepe, M. (1998). *De pedagogisering achterna. Aanzet tot een genealogie van de pedagogische mentaliteit in de voorbije 250 jaar*. Leuven: Acco.

Gumbrecht, H. U. (2004). *Diesseits der Hermeneutik. Die Produktion von Präsenz* (J. Schulte, Trans.). Frankfurt: Edition Suhrkamp.

Herrmann, U. (1993). *Aufklärung und Erziehung. Studien zur Funktion der Erziehung im Konstitutionsprozeß der bürgerlichen Gesellschaft im 18. und 19. Jahrhundert in Deutschland*. Weinheim: Deutscher Studien Verlag.

King, D. B., Viney, W., & Woody, W. D. (2009). *A history of psychology. Ideas and context*. Boston: Pearson.

König, G. M. (2012). Das Veto der Dinge. Zur Analyse materieller Kultur. *Zeitschrift für Pädagogik, 52*(Beiheft), 14–31.

Lawson, R. B., Graham, J. E., & Baker, K. M. (2006). *A history of psychology. Globalization, ideas, and applications*. Uppers Saddle River: Pearson.

Leahey, T. H. (2013). *A history of psychology. From antiquity to modernity*. Boston: Pearson.

Oelkers, J. (2012). Die Historizität pädagogischer Gegenstände. *Zeitschrift für Pädagogik, 52*(Beiheft), 32–49.

REF. (2010). *Research excellence framework: Workshops on the impacts of research in the practice-based creative and performing arts, the humanities and social sciences.* Retrieved October 8, 2012, from http://www.ref.ac.uk/media/ref/content/background/impact/workshops_impact_research.pdf

Smeyers, P. (2008). Afterword. In P. Smeyers & M. Depaepe (Eds.), *Educational research: The educationalization of social problems* (pp. 227–237). Dordrecht: Springer.

Smeyers, P., & Depaepe, M. (2003). Introduction. In P. Smeyers & M. Depaepe (Eds.), *Beyond empiricism. On criteria for educational research* (pp. 9–23). Leuven: Leuven University Press.

Smeyers, P., & Depaepe, M. (2006). Introduction. On the rhetoric of 'what works'. Contextualizing educational research and the picture of performativity. In P. Smeyers & M. Depaepe (Eds.), *Educational research: Why 'what works' doesn't work* (pp. 1–16). Dordrecht: Springer.

Sørensen, E. (2009). *The materiality of learning. Technology and knowledge in educational practice.* Cambridge: Cambridge University Press.
Vervliet, R. (1982). Cyriel Buysse tussen historiciteit en actualiteit. Terugblik op een halve eeuw receptie in Vlaanderen. *Ons Erfdeel, 25*, 538–548.

Chapter 2
Valorising the Cultural Heritage of the School Desk Through Historical Research

Marc Depaepe, Frank Simon, and Pieter Verstraete

It is not hard to prove that the subject of the Research Community meeting in 2012 is a hot topic within the international network of historians of education. The fact that both the *Sektion Historische Bildungsforschung in der Deutschen Gesellschaft für Erziehungswissenschaft* and the British *History of Education Society* organised their annual conference about this subject in 2009 speaks for itself. Although there are variations in emphasis between the cultural and social aspects of educational objects the subtitle of the German congress (Priem et al. 2012) on the one hand and the place and the scope in which that materiality is expressed, and the focus of the British organisers (Burke et al. 2010) on the other hand, both approaches are in line with the objectives of the Leuven conference.

From a historical point of view, not only is it possible for an innovative approach to be adapted to the way the material culture and representation of educational research are examined, but the historical study itself can also contribute to a revamping of the material scholarly culture and the way it is represented. The latter can be brought about both by means of research projects being set up with an intrinsic finality, and via projects contemplating an alternative way of disseminating and communicating scientific findings. In our paper we want to substantiate this thesis based on the example of the school desk which we deal with at various 'levels' of historiography.

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2.1 The School Desk as an Icon of and Metaphor for Educational Practices

In the material culture of educational research the school desk is distinctly in evidence as a metaphor for and icon of educational practices. Proof of this can be found in photos and illustrations on the covers of scholarly publications, the use of the word in titles, slogans, and so on. In the Netherlands a popular website (with 4,700,000 members, according to their own figures) has even been named after the school desk (www.schoolbank.nl). It enables people to search for old schoolmates from the same class. It is obvious that such references have an historical dimension. Book covers for example often use 'historical' images that have in fact been extracted from their context and, on being appropriated in this way, actually end up recalling little of that specific past to which they belong, even if they are used for research into the history of education.

There is no lack of examples of this, both within and outside of the historiography of education. If one peruses the history of education in Flanders and the Netherlands it is possible to find several attractive covers with illustrations of school desks, but few (or even none of them) are actually featured in the account told in the book. Titles (literally translated) such as "What was it like at school? Teaching practices in secondary education in Limburg 1878–1970" (Jansenswillen 2009) (see Fig. 2.1); "200 years of poets, thinkers and dreamers" about the creation of the preparatory seminary in Roeselare (Strobbe 2006); "Student teachers between acts and ideals" about the education of teachers in the Netherlands (Van Essen 2006); "Utile Dulci. Learning and reading books for Dutch and Flemish youth" (Bakker et al. 2007); "From convent school to primary school. A historical overview of education in the Netherlands" (Stilma 1995/2002[3]); "Montessori in fascist Italy" (Leenders 1999); "Going to school in times of war. Everyday life during the occupation" (Van de Wijngaert 1988), and "More knowledge, greater opportunity" (Dasberg and Jansing 1978), all make it clear that the school desk iconography on book covers is meant much more as a metaphor for going to school than what they were actually used for. These illustrations, often chosen to sell better, do not refer to the act of teaching in the classroom, either through the school desk or not. That is also the case with the textual metaphor in the title of the work by Jan Briffaerts (2007) "If the Congo wants to sit at school desks", that tries to give a central role to the micro situation of education in the colony.

By way of comparison with more general studies in education that do not aim at direct historical analyses of teaching and learning processes, we refer among others to the Dutch translation of the classic of Edgar Faure et al. (1974), "Learning to live"… where a child at a school desk also serves as the sign for the school. With a little good will one can sum up the lectern that appears on the cover of "Thinking again" (Blake et al. 1998)—to quote our colleagues in educational philosophy—as a sort of school desk. Even if this is possible, which is far-fetched, it illustrates the need of the authors (or is it a kind of fashion?) to grasp at un-modern prints from the

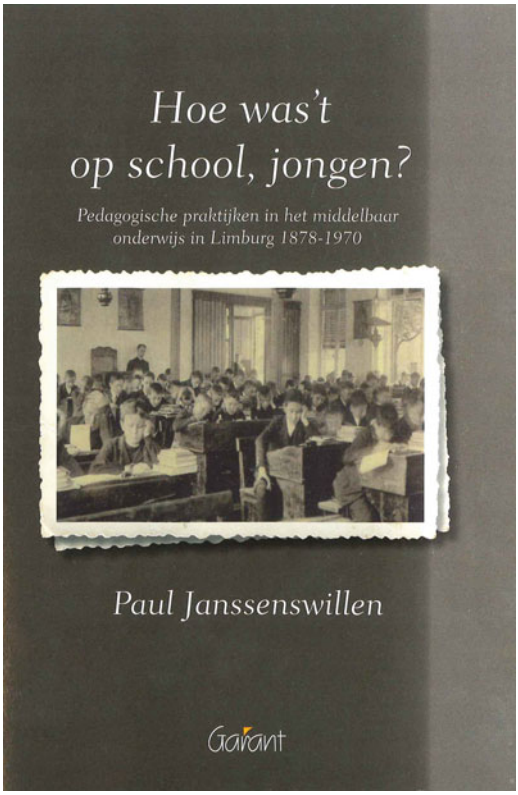

Fig. 2.1 Cover of the book by P. Jansenswillen (2009)

far distant past to refer to modern-day problems. The proof of this is, among others, the artificial construction of a cover featuring a school desk for one of the most recent issues of the trade union magazine *Basis* (20 October 2012). A cover is for historic researchers far from being of little importance as an artefact of the material culture of the past. Hence, that also applies to textbooks, which, just like the school desk itself, are part of the school culture that has established a sort of globalising regime of modernisation in Western society over the past 250 years. This regime is strikingly described by Tyack and Tobin (1994) as grammar of schooling with its own dynamic rules and laws. Less well known, but just as interesting are the ethno-historical analyses of Spanish researchers such as Antonio Viñao (2001), that, in our attempts to complement the grammar of schooling with teaching semantics, we have adopted in part as themes for building up a historical school theory (Depaepe et al. 2008). In order to ascertain the almost universal character of this grammar, a little tour of the website of the Alfa Project Patre Manes is useful. In the historical comparison of European and Latin-American textbooks, the cover, on the basis of our initiatives, plays a central role as a separate subject (see: hum.unne.edu.ar/investigacion/educa/alfa/bib_virtual.htm).

2.2 The Brodsky-Case as a Starting Point for Writing New Histories of the School Desk

But let us get back to the school desk. There are always comments to make about the research and hence about historical educational research into this subject. Clearly, historical research into the use of the school desk in education and teaching can help explain its iconic value for the present day (which is also revealed by the fact that virtually all school museums include displays of school desks). But this assumes another approach than a purely factual or antiquarian one, as well as an approach other than the modernistic account of progress as 'the longer, the better'. The question as to when exactly the 'desk' was introduced is, therefore, by no means the most interesting issue for us here. What is of interest is the relationship linking the long tradition of use of the desk with the process of modernisation (from use in libraries and churches and then the monitorial education system, through to its use in simultaneous teaching—see, among others, the research projects undertaken by Caruso 2008, in which the idea of a Foucauldian 'gaze' plays a central role; for the Foucauldian 'bio-political' context, see his former work, Caruso 2003). Studies on the above mentioned 'grammar of schooling' and the 'grammar of educationalization', such as those that we have undertaken in the past, but which are also at the head of various other initiatives, constitute a good starting point for this.

In a recent article, for example, some of us have investigated how Oscar Brodsky (1859–1949)—a Jewish wholesale merchant born in the then Russian harbour city of Odessa—after arriving in Brussels in 1914, precisely operated as a school desk designer and how successful he was in it (Depaepe et al. 2012). This commercial dimension has remained, up to now, largely outside the attention of research in the history of education of school desks. At the basis of the underlying medical and hygienic discourses of the pedagogical opinion makers, shared by the designers, historians of education too quickly assume that the driving force for the commercialization of school desks was their contribution to the disciplining of the bodies of the pupils (see, e.g., Moreno Martinez 2006), the hygienization and medicalization of the eye, and the like. The German ophthalmologist Hermann Cohn, for example, explored already in the second half of the nineteenth century, relationships between myopia, scoliosis, school desks and other materialities of schooling, which created, of course, a possible link between the entrepreneurial discourses of the emerging school desk industry on the one hand and the scientific and medical discourses of the emerging studies in psycho-pedagogy, child-study, and developmental psychology on the other hand (see Dittrich 2009). We are concerned not so much with the disciplining or with the mechanistic image of the body but rather with the industrial standardization of the school desk itself (the cheap '*pret-à-porter*') and the creative competition against it from the introduction of individualized (but also standardized) made-to-measure desk: deluxe *pret-à-porter* for the purposes of New Education (and most probably also sick and poor children, see Fig. 2.2).

On the basis of the sporadic data that we have been able to gather on Brodsky's design of an individualized, foldable school desk, we must conclude however that this 'invention' was not immediately a success. Hardly any of Brodsky's foldable school

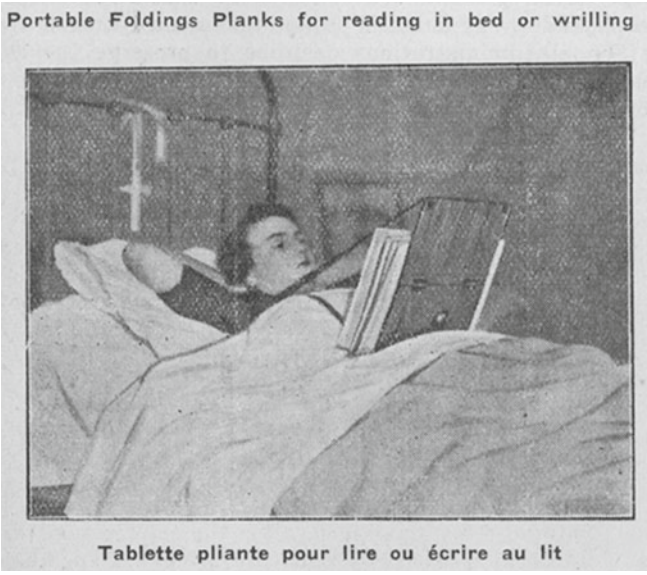

Fig. 2.2 Brodsky's portable folding planks for reading or writing in bed… (Brodsky-folder, c. 1938)

desks were ever sold as far as we know. The most intriguing and at the same time crucial question that arises here is, of course, why? What actually was this reason for this failure? Examples of 'successful' innovations of analogous didactic material seem to us to be a good starting point, for then we can determine precisely how the Brodsky case precisely differed from these success stories: (1) Was it due to the designer himself and the publicity campaign he conducted? (2) Did this campaign make use of another 'discourse'? (3) And because of this, did something go wrong with the marketing or the production? (4) Or did the greatest dissimilarities lie with the designed object itself and its attractiveness for the envisioned market or markets?

In our answer we have speculated on the last point: the specific characteristics of Brodsky's flexible school desk and its attractiveness or functionality for the potential education market. Irrespective of the simple fact that a portable desk weighing 4–5 k would be far too heavy for children (certainly part of the population that were categorised under 'school hygiene', such as children with tuberculosis, under-nourished children, etc.), the characteristics of the object probably also clashed with the cultural customs at home and at school of the time which made the integration difficult in both worlds. Moreover it was also possibly true that the simple cultural phenomenon of 'come in and sit down' existed in both worlds rather than 'look for a place for your foldable desk'. By playing with the possible differences between the culture at home and at school, we came up with a double thesis, the first concerning school practice and the second about what happens at home.

Probably, the so-called 'flexibility', more in particular 'foldability' of Brodsky's school desk, was a bridge too far for the dominant, traditional school praxis. It probably fits with the bombastic rhetoric of reform pedagogy, but that was primarily for

the gallery. Brodsky's flexibility did not fit in directly with the mental structures that existed in wide circles as regards the concept of 'school'. In this sense, they were presumably too 'modern' for the 'modern school', which had, in fact, remained a 'schoolish' school. Possibly, they did anticipate the evolution towards more individuality (and differentiation) in education, but for this the spirit of the time was not yet 'ripe'. From this point of view, Brodsky's designs for a foldable, portable school desk were, presumably, much too early. The individual desk may well seem to be ideal at the level of the 'discourse', but in practice one still preferred the clumsy, standardized, two-seater, which had replaced the long benches of the mutual education—reminiscent of the original church and library benches—in the course of the nineteenth century. To what could the introduction of 'more flexibility' in the mentality of the school staff at the time have served than in the prospect that the benches could thereby be more easily stacked up for cleaning the classrooms?—an argument, moreover, that had not escaped Brodsky himself! Just as the preference for an individualized school desk matched the perspective of increasing hygienization—in the context of modernization, the other was finally a 'rotting bacteria' that had to be avoided—this also matched the increasing privatization of the personal life. The problem was only that this kind of process had not penetrated the schoolish mentality as a revolution but rather as a slow evolution. In short, the innovation proposed by Brodsky was, in our opinion, too little schoolish for the school to be able to succeed.

Even more ironic, perhaps, is the second part of our thesis: the flexibility envisioned by Brodsky might have been too progressive for the conservative and conserving schoolish milieu, but probably it was precisely not progressive enough for the modernizing household. The school and office furniture he extolled, which could also serve outside the school to read, to write, was probably seen by the general public as being much too schoolish and thus also as too much separated from real life to have any chance of succeeding. Who would take a foldable school desk on a trip or to his home? The distance between 'school' and 'life'—which the Belgian reform pedagogues had tried to bridge by means of various designs of the 'school for life'—ultimately remained too great.

From the Brodsky example, it might be clear that historical artefacts and objects should, as such, no longer be regarded as the socially external world of the environment—i.e. purely subjects of the imposition of collective functions by human actors—but as 'mediating agencies' (cf. Actor-Network-Theory). Things 'come to life' in their organizational, social and cultural relationships and, as 'living' entities, they also intervene in these relationships.

2.3 The Weight of the Foucauldian Tradition in School Desk Historiography and Its Inconveniences

The problem, however, is that such biographies of educational materialities have not been written yet. Rather than venturing into such a hybrid approach, present-day research still often sets its sights on one object, one phase of life or on only a few

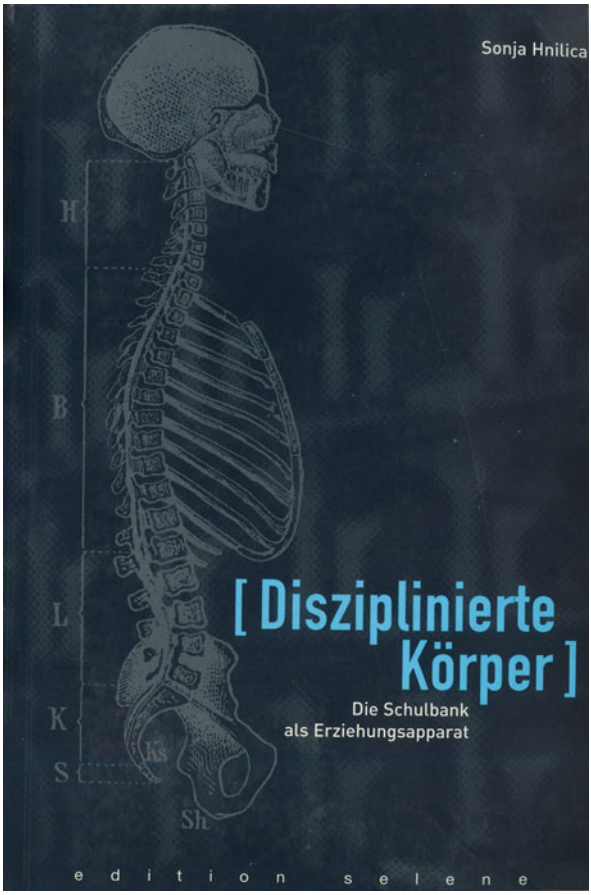

Fig. 2.3 Cover of the book by Hnilica (2003): a skeleton as outcome of the Foucauldian approach?

facets of the object (for example, design, symbolic value, underlying motives or use). In this approach, the object is not regarded as a 'symptom'—being (able to be) everything simultaneously. The complex history of educational materialities is thus reduced to thematic accounts that are easy to digest, often using a highly descriptive style. Then there are the tight straitjackets that seem to constrain each of these authors. Certain frameworks that are placed on the past—'medicalization' and Foucault's 'disciplining concept' to name the most important to which we already have referred earlier in this essay—are omnipresent and have been reworked numerous times, only to be confirmed time and again. A particularly good illustration is the publication entitled, *Disziplinierte Körper: Die Schulbank als Erziehungsapparat* (Hnilica 2003), in which Foucault has the first and last word, figuratively speaking (see Fig. 2.3). Likewise, we could demonstrate here that the designers of school desks held order and discipline in high esteem and that they moved within a scientific discourse. But there is more. It would therefore seem a good idea, in addition, to test some alternative paths.

Focusing on the 'lifecycle' of an object is one of these alternative paths. This biographical approach to objects can be found, for example, in *The Object in Late Medieval and Renaissance Italy*. The authors, Olson et al. (2006), made a distinction between the 'creation', 'the living object' and 'the after-life' of the object, in this case works of art: "Taken as a whole, these phases highlight the processes that impel, impact or impede the dynamic trajectories of objects and inform historians about the cultures they enriched" (p. i). Since objects cannot tell their own biographies we have to put them together. We therefore take it as a challenge for the future to write the biography of the school desk, from intellectual property to thingamajig, subject of debate, factory article, shop item, showpiece at all kinds of conferences, museum piece, furniture in a pub, old junk in the attic, piece of furniture in the kid's corner of a dress shop, second hand article for sale on the internet (www.2dehands.be), or, ultimately… firewood.

It is of course striking that the use of the school desk in the course of this modernization has itself been the subject of 'educationally' oriented research, in particular in the context of school hygiene (at the end of the nineteenth and beginning of the twentieth century). This kind of research was aimed, among other things, at determining the 'optimal' distance between the pupil's eyes and the surface of the desk, so as to optimise the conditions in which pupils learnt to read and write. This stimulated all kinds of practices that would be customary for a long time in the pedagogical regime. It was not only in twentieth century Belgium that many teacher walked around with a graduated ruler, which they regularly pushed under the chin of the pupils to check if the correct distance with the reading or writing sheet was complied with… (see, e.g., Cüppers and Weisgerber 1989, p. 61). Another didactic implication of the research (in this case ophthalmological) into school hygiene was that visually impaired pupils had to sit at the desk at the front of the class (which for that matter ran counter to the custom that had evolved *sui generis*, in churches and in school classrooms, whereby the most successful pupils were seated at the front of the class, echoes of which are still to be found to this day in sayings such as '*een bank vooruit*' (literally, 'one desk ahead'). Here also it seems, once again, that the authors of school histories—often former teachers—are not able to approach the classic element from collective educational memory in a creative and yet scientific manner. In the Flemish book whose main title was "One desk ahead" (Durnez 1989) this ancient educational practice of rewarding behaviour at school and knowledge did not mention this once, let alone contextualise it against the background of the self-developing meritocracy. Just the opposite in fact, the slogan, and the opening sentence, to which no further reference was made, only supports the rather folkloric approach with a large number of nostalgic references to a romanticised educational past, that can be seen in Europe in many amateur museums about education. As far as we know, the same applies also for that other, ancient (?) 'pedagogical' custom of the 'donkey stool' (whether or not in combination with having to wear donkey's ears or a donkey's cap and a donkey's picture around one's neck) to stigmatise pupils as stupid, lazy, and so on. The image of the donkey stool emerges in the literature again as part of the pedagogical iconography in photo books about the history of education (for example Meijsen 1976), as well as on the

cover of research about it, and as a metaphor in the title of the often strongly romanticised stories, memories of one's own educational biography and interviews on the subject (Vanderhaeghen 2011). A good example of such a stereotyping approach of the pedagogical past is, in any case, the very recent "Master, master, master!" (*Meester, meester, meester!*)—a compilation of 'teacher stories' of the old-days by Julien Van Remoortere (2012)—he himself a former teacher who wrote more than 300 books (such as touristic guides, and so on)… which had such nostalgic images of the past engraved in the collective memory; it is not difficult to prove that these are far away from the history of education research. Take for example the simple fact that in Belgium the number of female teachers already at the turn of the twentieth century exceeded the number of male teachers (Depaepe et al. 2006).

The problem with the history of education research of the school desk, however, is that it has in spite of the growing attention paid to the material culture, mainly been viewed until now as part of the intended Foucauldian disciplining and/or normalising paradigms at a more or less scientific level (see Moreno Martinez 2005). The school desk is summed up as an explicit part of the 'materialities of schooling', also given the privileged position of the icon on the cover. The consequences of this have in the meantime been twofold. Firstly the educational and teaching process (including research on it) took on a somewhat negative nuance (as a form of intervention that was mainly directed from the top down and targeted physical control of the pupils). The school desk appeared to be an 'excellent' tool for illustrating that disciplinary approach. This thought was even implicitly adopted in historical educational publications that did not want to follow this Foucauldian 'straightjacket' to the letter, but apparently viewed it as an important source of inspiration in order to elevate the scientific character of their report. The example that we have in front of us is the collection of texts by D'hoker and Tolleneer (1995) about the history of physical education in Belgium and the Netherlands. With the desk of Jacob Happel (1833–1916) at the back of their minds (Velle 1995, p. 116) they did not just present a series of stylised school desks on the cover of their book, but they also called it 'the forgotten body'. From the reasoning and facts stated in the book—the same Happel, a gymnastics teacher of German origin from Antwerp, brought an anti-masturbation school desk on the market—that title is rather cynical, of course. The health discourse about school hygiene, of which the school desk discussion was also part, concentrated on the body, after all. That did not prevent body issues from being suppressed and/or smoothed over in Catholic educational circles in Belgium and Flanders until deep in the twentieth century, to which the title of course refers.

But there is also a second consequence of the Foucauldian approach. Theories on discipline run the danger of presenting the role of civilising people (summarised as disciplining, medicalization, hygienization, etc.) as a passive intervention that overcame or was imposed on students. This resulted in the school desk primarily being conceived of as a static object, even in the historical study of the educational process. Both in space (the classroom) and in time, the desk, as it were, 'stood still'—a shortcoming we have already gone into in previous publications (Herman et al. 2011). In our view, instead of isolating the school desk as a source for

historical research, future-oriented research should contextualise its use, not only against the background of the prevailing educational practices, but also in relation to the existing cultural-historical practices in other social fields. In this respect photos and illustrations of 'school desk pedagogy in action' of course are worth studying, even though they are not so common. As we have witnessed elsewhere (Catteeuw et al. 2005) class photos are usually set up with children in their Sunday best, with nice clothes, their arms cross, passive therefore and staring into the lens in an orderly fashion.

2.4 Plea for a Dynamic History of the Complex Educational Uses of School Desks

We advise, therefore, in the 'historiographical operation' (a concept of de Certeau) not to be pinned down to just one kind of source but to base oneself on a diversity that is as broad as possible. Only in this manner can the limitations and partialities imposed by the documentation used be overcome (Depaepe and Simon 2009). That same remedy also applies for the refinement of the existing Foucauldian interpretation frameworks in respect to the history of the school desk, as well as for the interpretation of the criticism from the New Education movement during the first quarter of the twentieth century, which from time to time can be used as a witness for the prosecution in the case against the school desk. In the Flanders of the 1920s, for instance, educationalists like Edward Peeters and Jozef Verheyen decried these 'torture instruments' and 'tools for suffering' that completely limited the freedom of the pupils (see Depaepe et al. 2000, p. 87). In doing so, they were echoing Maria Montessori (1909), who in her *Method* had called the 'scientific' school desk 'a tool of slavery in the school'. However, this sharp criticism cannot blind us from the fact that this instrument has remained in the classroom until this day and has even continued to constitute the essence of its material culture. At the most, the classic wooden two-seaters of olden times have been replaced with Formica models, individualised or not, tables and chairs for school use which have not drastically changed the lines of pedagogical-didactical negotiation economy in the class. As we have explained in our study *Order in Progress* (Depaepe et al. 2000), this development did not fundamentally affect the basic patterns of classroom pedagogy. On the contrary: by accepting the teacher, pupils acquired knowledge and ability so as to obtain an as favourable position as possible on the social ladder. That was the essence of what the man in the street called 'wearing out the seat of your pants on the school bench'. That that school desk had become a single-seater in the meantime did not in fact make much a difference.

Thus, one possible place we can start from in order to take a more dynamic approach to the school desk are the historical studies that try to open and break through the 'black box' and the 'silences' of the educational behaviour in class. Judging from the title (and again from the iconography on the cover!) there are at least two others, next to *Order in Progress* (Depaepe et al. 2000): the bundles of

documents on the one hand by Grosvenor et al. (1999) and by Braster et al. (2011). Nowhere in any of the articles is there really mention of school desks and while the large number of photos in the documents do show school desks, most class photos reveal nothing about the daily use of the desk—in the sense that they only show a static portrait of the class next to or at their desks. It looks therefore, that we will need here, again and again, to search for other sources for clarification about the daily use of the school desk, autobiographical works for instance. Perhaps the former school teacher Roger Foulon (1985), who recalled a melancholic and romanticised image of 'the most fabulous profession on earth' was not far off the mark when he talked about the 'scholarly liturgy'—whereby the stereotypical layout of desks in the classroom played a cardinal role, which again is reproduced in the photo on the cover.

Iconographic research of photos and illustration of school desks, of which there are many on the internet, are not well catalogued, very much like the studies of school furniture and writing tables in the many education museums (that sprung up like mushrooms at the end of the last century, see Catteeuw 2004). Because anyone who looks closely at the often dilapidated school desks will see the traces of lives: ink spots, graffiti and the such like. Throughout the years, pupils have left carvings on school desks, from hearts to satirical texts and cartoons of certain teachers, to real tirades against the real or alleged educational terror (see www.flickr.com/photos/45005123@N03/7704697558/). One of the most intriguing and striking illustrations that we have found on the internet to date is that of a boy standing on a desk and urinating—the dream of every schoolboy as this piece of art is called! (see tempelderbeeldendekunsten.blogspot.be/2008_04_01_archive.html)—does this refer to the resistance to the reigning educational regime (De Vries 1993) that goes significantly beyond the often innocent graffiti, or is there more going on? Is this a mere psychoanalytical expression of a fundamental disgust with teaching, or did this photo end up on the internet because of its unusual and at the same time shocking character? The 'use' of the school desk by the way is not limited to that one, possible revolutionary moment that is captured on photo, and that takes us back to the temporal dimension of the use of the school desk.

Why has the traditional school desk found a permanent place in the education museum, which, in view of our digression about the lack of dynamism in the study of the object, must also be taken literally. Is the school desk doomed to disappear? Is it because it looked as though it might disappear, that people are now attaching value to it again? That there is a reversal in the trend to transform its use as an everyday object into split-wood or sawdust? Is it for this reason that the school desk has been given a new status, as a museum object? But how is the school desk now presented in this digital age? As a static element? We will come back to this later, but first we would like to indicate that there are other possible destinies for the school desk in the afterlife than museums. Discarded school furniture is sent to low budget countries (Romania for instance, see De Cock 2012) as an act of philanthropy, stories of which appear in reports in newspapers sometimes. It is also important to note—in the light of what we just said—that the school desk is used in these countries within the mental limits and presentations of traditional school settings.

Fig. 2.4 A school desk, repainted in charming pink colour, ready to be sold for an afterlife at home, retrieved November 2012 from: www.2dehands.be/business-industrie/kantoor-winkel/schoolbanken/

To put it in the terms used in our research, within the rules of the grammar of schooling and grammar of educationalization, which we have been able to confirm with images about Congo (Depaepe 2012). Another alternative is of course the second hand sales of school benches, which is apparently rampant on the internet (see, for example, Fig. 2.4). In many cases, the desks are used in a domestic context.

This 'new' setting is interesting of course because it inevitably evokes the link between school and home life—probably one of the most important paradoxes within a historic theory about school (see Depaepe et al. 2008). In any event, we know from historic literature that the use of the school desk in school did not always correlate with its use at home, certainly not in the subjective perception of the individual child or pupil. In this respect the testimony of no other than Walter Benjamin (from around the Berlin period at the beginning of the twentieth century) is particularly revealing:

> The doctor discovered I was nearsighted. And he prescribed not only a pair of glasses but a desk. It was very ingeniously constructed. The seat could be adjusted to move toward or away from the slanted desktop that served as a writing surface; in addition, there was a horizontal bar built into the chair back that provided comfortable support, not to mention a little bookrack which crowned the whole and which could slide back and forth. It was not long before the desk at the window had become my favourite spot (…) The desk thus bore a certain similarity to my school bench. But it has this advantage: it was safely hidden away there, and had room for things my school bench knew nothing about. The desk and I were united against it. And hardly had I regained my desk after a dreary day at school, then it gave me new strength. There I could feel myself not only at home but actually in my shell—

> just like one of those clerics who are shown in medieval paintings, kneeling at their prie-dieu or sitting at their writing desk, as though encased in armor. In this burrow of mine, I would begin reading (…) I sought out the most peaceful time of day and this most secluded of all spots. I would then open my book to page one with all the solemnity of an explorer setting foot on a new continent. (Benjamin 2006, pp. 148 & 151)

For more than one reason this quotation is an interesting one. First of all, it gives a negative vision on school, and therefore also on the school desk, interpreted as an instrument of the then dominant repressive discipline in everyday school life. Benjamin, as so many did before him and after him, had a bone to pick with school and is pleased having undermined each afternoon the prevailing school authority; again it illustrates how important school is in one's life, but also how important it is to find in the private sphere a spot for its own personal development. The effects of self-development are in no way the simple translation of what education curriculum builders had in mind by stipulating the subject matter of the school disciplines. Moreover, Benjamin's reference to medieval paintings, the clerics, kneeling, and writing at desks, make us aware of associations between visual modes. Images are not hermetically sealed in a singular discourse, but are contextualized and made to resonate with broader social, cultural and educational issues.

2.5 Education Museums and Exhibition Projects: Allies or Enemies for Such an Approach?

It may meanwhile have become sufficiently clear: teachers and pupils, the daily actors of the classroom, did something with the school desk and the school desk probably did something with them as well. To further clarify this, school or education museums are undoubtedly suitable partners, not only in heritage and remembrance education, but even in the development of new insights in the history of education itself. To our mind, the historiography of education can take another step forward in the light of the subject matter raised here, in particular if more modern forms of production and communication of scholarly work are developed, which, unlike the customary publications, contain real representation. We are thinking, for example, of specific exhibition projects being devised, either in cooperation with museum pedagogy or as stand-alone initiatives. As we have already said, it is impossible to imagine the school museums without the school desk. Nevertheless that desk, as an icon of the educational past, is generally very 'mute' in that setting, too. This applies right through to the catalogue as we can see from the iconography of the Ypres museum guide (the cover as well as on the inside, see *Guide* 1999; and see also: www.schoolreis.be/schoolreis/onderwijsmuseum.html).

Exhibition projects aimed at resolutely bringing the dynamic of the school desk into museums can therefore be considered as a new finality for scientific research. And provided we also manage to represent the various different layers and contexts inherent in the interpretation of the history of the school desk (and its educational use) properly and effectively (for example inter- and hyper-textual, and inter- and

hyper-visual), those museological projects will undoubtedly also contribute to modernising the material culture (and representation) of scientific research. Unfortunately, such projects have not as yet taken root to any great extent within the current context of the international historiography of education, although we can certainly point to some promising initiatives in this direction.

Judging from the websites in question, it would appear that initiatives on the Iberian peninsula take the lead, even though elsewhere in Europe there are some interesting virtual projects underway. In terms of the school desk itself, the production of the Italian documentary *Tra Banchi e Quaderni* (2007) might have been a step in this direction. But it remains very much the question whether the makers intended it like this. In fact, there, too, the desks 'stand still' and the design of the school museum project may be called conservative, if not old-fashioned. Only the professional camera work and the suggestive music bring the dead object to life again to a certain extent. Certainly, it is in this direction of 'evocation' from the 'living' past—in making the 'intangible' educational heritage 'tangible' (see Yanes Cabrera 2007)—that we want to move by creating pedagogic museology (or even museum pedagogy) for school museums. However, there is still a long way to go. In this world, in which change is generally rare, where amateurs like former teachers and retired policy makers decide on things with good intentions, a large backlog has accumulated in the specialised fields of museum architecture and design. Particular when we compare their often dilettante and nostalgic approach with projects set up professionally and underpinned scientifically, such as Bruno Latour's exhibition on political objects and the *res publica*: '*von Realpolitik zur Dingpolitk*' at the *Zentrum für Kunst und Medientechnologie* in Karlsruhe, in 2005 (www.bruno-latour.fr/node/333; Latour and Weibel 2005). During our search for examples that approach history of education exhibitions on this philosophy, the infectious attempts of some Spanish and Portuguese colleagues (e.g. from Lisbon, Madrid and Seville; see, resp., Mogarro 2010; www.ucm.es/info/muscosio/; www.museopedagogicoandaluz.com/museo.php) are already attracting attention, amongst which—in connection with school furniture and school desks—the virtual museum in Murcia (www.um.es/muvhe/user/acerca.php), which definitely deserves to be mentioned. At the theoretical level, it tries to relate to the research by Antonio Viñao (2012), who, by studying the material and immaterial pedagogical culture, tries to build a bridge between memory and heritage.

This is undoubtedly much more relevant that playing the role of the nostalgic school (and, even though not in old clothes, sitting at old school desks—the so-called 'historical teaching'!), a situation we once came across in school museums in Germany (see, for example, www.das-schulmuseum.de/20-0-HISTORISCHER-UNTERRICHT.html). On that same website, one can see a picture with the minister of the *Bundesland* in question (Nordrhein-Westfalen) sitting at a school desk. That underlines once again the iconic role of the school desk in the educational memory of the masses, but probably also that policy-makers are more easily inclined to go along with popular, nostalgic discourses about education museums than the scientific ones. In any case, at the opening of the municipal education museum of Ypers, in 1990, the prominent guests, including the minister, insisted, for the sake of press photographers, also on sitting at the school desks (copy in personal documentation, see Fig. 2.5).

Fig. 2.5 Opening of the Ypres School Museum, 1990 (Archives of the *Stedelijk Onderwijsmuseum* in Ypres)

One boost to the development of this expertise certainly exists in allowing exhibition projects to be counted as a Master's thesis. Although the theoretic possibility (in art education, etc.) exists, we have not yet come across this in academic educational circles. And yet this would be an ideal possibility for creating a bridge between the academic world and the public world. In terms of the history of education, this would enable us to scan alternative ways of finding out about the past: heritage, collective memory, tradition. History would thus be brought a lot closer to the public (driven by the public as it were), but also we do not want to affect our scientific content. That is not about pedagogic nostalgia for the mission that was prevalent at the end of the nineteenth beginning of the twentieth century of uplifting the population, but about valorising our expertise. With the ultimate goal moreover of having a positive impact on research and education. We will thus be also competing with non-academic presentations of the past. It is not obvious at first sight where we should start: should we integrate them into a scientific account? Or should we seek conflict? Or should we learn to live with these 'paradoxes' of historic representation? In any event it seems worthwhile discovering more about these new challenges. They force us to continue to think about how we present the past: as history 'for' the people, or as history 'with' and 'by the people' (Hamilton 2011)?

Within a digital landscape that is transforming our sense of time and space, the question 'what is history for' is more pressing than ever because numerous artefacts and testimonies of the past seem to be just a click away on the internet. But it remains, for our part, an illusion to think that history is something which exists outside us, even if such fragmentation of the historical knowledge in a chronological and antiquarian acts and facts history usually suits the neo-liberally inspired policy and opinion makers. This is because the present is increasingly advancing in our society, one reason for that being the fear of an uncertain future which is of course

caused by us (see the book of Hartog 2012[2]). A striking element of this current presentism is the *perpetuum mobile*: we are continuously in movement, in transformation; our projects stay unfinished, we are busy, too busy—work in progress, as it is known—a flexibility that betrays fear of ageing and tries to ignore the time dimension of life completely. Especially in such a context, it should become clearer than ever that a historic researcher does not so much work on a (dead) past, but rather on a (fully alive) time, and this category inherently includes the focus on the interplay of past, present, and future (Bantigny 2013).

References

Bakker, N., Braster, J., Rietveld-van Wingerden, M., & Van Gorp, A. (Eds.). (2007). *Utile dulci. Leer- en leesboeken voor de Nederlandse en Vlaamse jeugd. Jaarboek van de Belgisch-Nederlandse Vereniging voor de Geschiedenis van Opvoeding en Onderwijs 2006*. Assen: Van Gorcum.

Bantigny, L. (2013). Historicités du 20e siècle. Quelques jalons sur une notion. *Vingtième siècle. Revue d'histoire, 117*(1), 13–25.

Basis. Ledenblad van het COV. Verbond van de christelijke onderwijzers (2012, October 20). *119*(15), p. 1.

Benjamin, W. (2006). *Berlin childhood around 1900* (H. Eiland, Trans.). Cambridge, MA: Harvard University Press. (Original: *Berliner Kindheit um Neunzehnhundert. Gießener Fassung*, 2000)

Blake, N., Smeyers, P., Smith, R., & Standish, P. (1998). *Thinking again. Education after postmodernism*. Westport: Bergin & Garvey.

Braster, J., Grosvenor, I., & del Mar del Pozo Andrés, M. (Eds.). (2011). *The black box of schooling. A cultural history of the classroom*. Brussels: Peter Lang.

Briffaerts, J. (2007). *'Als Kongo op de schoolbank wil'. De onderwijspraktijk in het lager onderwijs in Belgisch Congo (1925–1960)*. Leuven: Acco.

Burke, C., Cunningham, P., & Grosvenor, I. (2010). "Putting education in its place": Space, place and materialities in the history of education. *History of Education, 39*, 677–680.

Caruso, M. (2003). *Biopolitik im Klassenzimmer. Zur Ordnung der Führungspraktiken in den Bayerischen Volksschulen (1869–1918)*. Weinheim: Beltz Verlag.

Caruso, M. (2008). Order through the gaze: A comparative perspective of the construction of visibility in Monitorial Schooling (German States—Spain, approx. 1815–1848). *Encounters on Education, 9*(Fall), 147–172.

Catteeuw, K. (2004). "Hoe oud het nieuwe en hoe nieuw het oude is". Schoolmusea in België, van 1848 tot 2003. In M. D'hoker & M. Depaepe (Eds.), *Op eigen vleugels. Liber Amicorum prof. dr. An Hermans* (pp. 237–248). Antwerp: Garant.

Catteeuw, K., Dams, K., Depaepe, M., & Simon, F. (2005). Filming the black box: Primary schools on film in Belgium: A first assessment on unused sources. In U. Mietzner, K. Myers, & N. Peim (Eds.), *Visual history. Images of education* (pp. 203–231). Oxford: Peter Lang.

Cüppers, C., & Weisgerber, B. (1989). *Fibel, Schrift und Schule. Wie Kinder lesen und schreiben lernten*. Bergisch Gladbach: Bergischen Museum für Bergbau, Handwerk und Gewerbe.

D'hoker, M., & Tolleneer, J. (Eds.). (1995). *Het vergeten lichaam: geschiedenis van de lichamelijke opvoeding in België en Nederland*. Leuven: Garant.

Dasberg, L., & Jansing, J. W. G. (1978). *Meer kennis meer kans. Het Nederlandse onderwijs 1843–1914*. Haarlem: Fibula-Van Dishoeck.

De Cock, T. (2012). Schoolbanken krijgen tweede leven in Roemenië. *Het Nieuwsblad*. Posted on October 12, 2012 at: http://www.nieuwsblad.be/article/detail.aspx?articleid=BLTDE_20121012_006

De Vries, G. C. (1993). *Het pedagogisch regiem: groei en grenzen van de geschoolde samenleving*. Amsterdam: Meulenhoff.

Depaepe, M. (2012). *Creating cultural hybridity through the schooling and the educationalization of a Congolese elite?* Paper presented at ECER, Network 17, Cádiz.

Depaepe, M., & Simon, F. (2009). Sources in the making of histories of education: Proofs, arguments, and other reasonings from the historian's workplace. In P. Smeyers & M. Depaepe (Eds.), *Educational research: Proofs, arguments, and other reasonings* (pp. 23–39). Dordrecht: Springer.

Depaepe, M., et al. (2000). *Order in progress. Everyday educational practice in primary schools—Belgium, 1880–1970*. Leuven: Leuven University Press.

Depaepe, M., Lauwers, H., & Simon, F. (2006). The feminization of the teaching profession in Belgium in the nineteenth and twentieth centuries. In R. Cortina & S. San Roman (Eds.), *Women and teaching. Global perspectives on the feminization of a profession* (pp. 155–183). New York: Palgrave.

Depaepe, M., Herman, F., Surmont, M., Van Gorp, A., & Simon, F. (2008). About pedagogization: From the perspective of the history of education. In P. Smeyers & M. Depaepe (Eds.), *Educational research: The educationalization of social problems* (pp. 13–30). Dordrecht: Springer.

Depaepe, M., Simon, F., Herman, F., & Van Gorp, A. (2012). Brodsky's hygienische Klappschulbank: Zu leicht für die schulische Mentalität? *Zeitschrift für Pädagogik, 52*(Beiheft), 50–65.

Dittrich, K. (2009). *Der Augenarzt Hermann Cohn und der transnationale Austausch über Schulbänke auf Weltausstellungen des 19. Jahrhunderts*. Paper presented at the "Jahrestagung der Sektion Historische Bildungsforschung in der Deutschen Gesellschaft für Erziehungswissenschaft: Die Materialität der Erziehung—Zur Kultur- und Sozialgeschichte pädagogischer Objekte". Marbach am Neckar, 19 bis 21. September.

Durnez, J. (1989). *Een bank vooruit … en bord afvegen. Schoolmeesters en schoolleven in Vlaanderen*. Antwerp: Standaard Uitgeverij.

Faure, E., et al. (1974). *Leren om te leven. De wereld van het onderwijs vandaag en morgen* (F. Oomes & J. Tielens, Trans.). Utrecht: Uitgeverij Het Spectrum. (Original: *Apprendre à être*. Paris: Unesco, 1972)

Foulon, R. (1985). *Le maître d'école*. Brussels: P. Legrain.

Grosvenor, I., Lawn, M., & Rousmaniere, K. (Eds.). (1999). *Silences and images: The social history of the classroom*. New York: Peter Lang.

Guide of the Municipal Education Museum of Ypres. (1999). Ypres: Stedelijke musea.

Hamilton, P. (2011). *The changing role of memory and history in public life*. Keynote at the conference "Le passé et nous. De la conscience historique au XXIe siècle". Quebec, 29 septembre au 1er octobre. vimeo.com/29900350

Hartog, F. (2012). *Régimes d'historicité. Présentisme et expérience du temps*. Paris: Editions du Seuil.

Herman, F., Van Gorp, A., Simon, F., & Depaepe, M. (2011). The school desk: From concept to object. *History of Education, 40*, 97–117.

Hnilica, S. (2003). *Disziplinierte Körper: Die Schulbank als Erziehungsapparat*. Vienna: Edition Selene.

Jansenswillen, P. (2009). *Hoe was't op school, jongen? Pedagogische praktijken in het middelbaar onderwijs in Limburg 1878–1970*. Antwerp: Garant.

Latour, B., & Weibel, P. (Eds.). (2005). *Making things public. Atmospheres of democracy*. Karlsruhe/Cambridge: ZKM. Center for Art and Media/The MIT Press.

Leenders, H. (1999). *Montessori en fascistisch Italië. Een receptiegeschiedenis*. Baarn: Uitgeverij Intro.

Meijsen, J. H. (1976). *Lager onderwijs in de spiegel der geschiedenis. 175 jaar nationale wetgeving op het lager onderwijs in Nederland 1801–1976*. 's-Gravenhage: Staatsuitgeverij.

Mogarro, M. J. (2010). Cultura material e modernização pedagógica em Portugal (séculos XIX–XX). *Educatio Siglo XXI, 28*(2), 89–114.

Montessori, M. (1909). *Il Metodo della pedagogia scientifica applicato all'educazione infantile nelle Casa dei Bambini*. Loescher: Citta di Castello.

Moreno Martinez, P. L. (2005). History of school desk development in terms of hygiene and pedagogy in Spain (1838–1936). In M. Lawn & I. Grosvenor (Eds.), *Materialities of schooling: Design, technology, objects, routines* (pp. 71–95). Oxford: Symposium Books.

Moreno Martinez, P. L. (2006). The hygienist movement and the modernization of education in Spain. *Paedagogica Historica, 42*, 793–815.
Olson, R. J. M., Reilly, P. L., & Shepherd, R. (2006). *The biography of the object in Late Medieval and Renaissance Italy*. Malden: Blackwell Publishing.
Priem, K., König, G. M., & Casale, R. (2012). Die Materialität der Erziehung: Kulturelle und soziale Aspekte pädagogischer Objekte. Einleitung zum Beiheft. *Zeitschrift für Pädagogik, 52*(Beiheft), 7–13.
Stilma. (1995/2002). *Van kloosterklas tot basisschool. Een historisch overzicht van opvoeding en onderwijs in Nederland.* Nijkerk: Uitgeverij Intro.
Strobbe, J. (2006). *200 jaar dichters, denkers en durvers. Het Klein Seminarie van Roeselare. Biografie van een college*. Tielt: Lannoo.
Tra banchi e quaderni. (2007). (Cd-disc of the exhibition). Macerata: Università di Macerata.
Tyack, D., & Tobin, W. (1994). The "grammar" of schooling: Why has it been so hard to change? *American Educational Research Journal, 31*(3), 453–479.
Van de Wijngaert, M. (Ed.). (1988). *Schoollopen in oorlogstijd. Het dagelijkse leven van middelbare scholieren tijdens de Duitse bezetting (1940–1944)*. Brussels: UFSAL/Navorsings- en Studiecentrum voor de Geschiedenis van de Tweede Wereldoorlog.
Van Essen, M. (2006). *Kwekeling tussen akte en ideaal. De opleiding tot onderwijzer(es) vanaf 1800*. Amsterdam: Uitgeverij SUN.
Van Remoortere, J. (2012). *Meester, meester, meester. Verhalen van meesters en juffen van toen*. Tielt: Lannoo.
Vanderhaeghen, J. (2011). *Van ezelsbank naar schrijfsalon*. Gent: OCB vzw.
Velle, K. (1995). Het lichaam in de geschiedschrijving van de Nieuwste Tijd. In M. D'hoker & J. Tolleneer (Eds.), *Het vergeten lichaam* (pp. 103–124). Leuven: Garant.
Viñao, A. (2001). Do education reforms fail? A historian's response. *Encounters on Education, 2*(Fall), 27–47.
Viñao, A. (2012). La historia material e inmaterial de la escuela: Memoria, patrimonio y educación. *Educação, 35*(1), 7–17.
Yanes Cabrera, C. (2007). Pedagogical museums and the safeguarding of an intangible educational heritage: Didactic practices and possibilities. *Tidskrift för Lärarutbildning och Forskning/ Journal of Research in Teacher Education, 14*(4), 67–80.

Websites (Retrieved November 2012)

http://hum.unne.edu.ar/investigacion/educa/alfa/bib_virtual.htm
http://viemo.com/29900350
http://tempelderbeeldendekunsten.blogspot.be/2008_04_01_archive.html
http://www.bruno-latour.fr/node/333
http://www.das-schulmuseum.de/20-0-HISTORISCHER-UNTERRICHT.html
http://www.museopedagogicoandaluz.com/museo.php
http://www.schoolbank.nl
http://www.schoolreis.be/schoolreis/onderwijsmuseum.html
http://www.2dehands.be
http://www.ucm.es/info/muscosio/
http://www.um.es/muvhe/user/acerca.php

Chapter 3
Mirrors of Reality? Material Culture, Historical Sensation, and the Significance of Images for Research into Long-Term Educational Processes

Jeroen J.H. Dekker

3.1 Introduction: Clues, Sources, and Questions

It is only through *spie*, clues or traces, that we can get insight into education and childhood in the past; direct observation of the past, or experimental research, as is now the standard method for the majority of research in the social and behavioural sciences, are out of question: the past is gone and could only be recalled by examining and interpreting its clues or traces (for the illusion of direct contact with the past through the historical sensation, see below). Carlo Ginzburg injected new life into this way of looking at history in 1986 in his *Miti Emblemi Spie. Morfologia e storia* by referring to the late nineteenth century art historian Giovanni Morelli. Morelli, confronted with the fact that many paintings did have inexact attributions, decided to examine trivial details, as for example fingernails, or shapes of fingers and toes, to make new identifications. In other words, he decided to concentrate on clues. This method became famous by Arthur Conan Doyle in his creation of Sherlock Holmes, but could be very useful to the historian's craft too. According to Ginzburg: "The art connoisseur resembles the detective who discovers the perpetrator of a crime (or the artist behind a painting) on the basis of evidence that is imperceptible to most people" (Ginzburg 1989, pp. 97–98; Ginzburg 1986, p. 160; cf. Ankersmit 1990, pp. 50–51, 57). Indeed, when using material culture such as paintings for the history of education and childhood, examining clues is the only way of getting insight into that history.

It is true that, when for example using the method of oral history, the resulting memories of the actors of the historical process could give the historian the illusion of directly approaching the past. But oral history is not 'the voice of the

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past', as was enthusiastically propagated by its second founding father—after Herodotus of Halicarnassus, from the fifth century BC and author of *The Histories*-, P. R. Thompson, in 1978 (Thompson 1978). The memories resulting from oral history, how valuable they could be, are also characterized by problems of remembering and forgetfulness. Moreover, they tell us the story of how former actors, looking back, are now experiencing and interpreting that specific period in their life on which the oral history interview was focused (Norrick 2005; Atkinson and Delamont 2006). As a result, the personal life cycle is colouring the memory of a specific period and of specific experiences in the past in a way that is almost impossible to estimate by the researcher. Moreover, the method of oral history has as a matter of fact a rather limited time span.

The method of historical survey, i.e. asking a specific group of people, for example professionals, to fill in a questionnaire about their experiences in the last decades, seems to have even more reliability problems. The results of using this method could result in rather limitedly reliable memories over a time span of no more than approximately 5 years, as we experienced recently in a study on the history of child protection after the Second World War, carried out for the Samson-commission on child abuse in child protection settings on request of the Dutch government (Dekker et al. 2012b; Hamilton and Shopes 2008; Howarth 1998; Lewin 2002; Sommer and Quinlan 2002; Yow 2005).

Thus, clues for historical research should be observed with scrutiny and by doing classic source criticism. In order to elicit those clues historical information, in other words in making sources out of clues, they should be posed by good questions that enable the historian to eventually tell stories of children, parents, educators, of their ideas, feelings, emotions, and behaviour in the past. Marc Bloch, the famous co-founder of the French Annales group of historians, emphasised in his *Apologie pour l'histoire*, written in 1941, a brilliant introduction into the historian's craft, the necessity of asking sources good questions to do historical research adequately. Bloch also emphasizes the difficulty of finding good sources: "C'est une des tâches les plus difficile de l'historien que de rassembler les documents dont il estime avoir besoin" (Bloch 1974, p. 66). That raises the question which clues or traces or sources are appropriate to make it possible for us to approach education and childhood in the past. Are there weak and strong sources for the history of education and childhood?

In the next section, this issue of weak and strong sources will be addressed (2). Then the focus will go to the significance of material culture for the historical sensation of the discovery of childhood in the past. We first focus on a specific part of that material culture, namely paintings produced to represent real people with both the intention of being mirrors of reality and of transmitters of patterns of behaviour (3). That brings us to a debate between art historians and iconographers on the relationship between paintings and reality in Dutch sixteenth and seventeenth century art (4). The focus will then turn to images explicitly produced to transmit moral and educational messages and patterns of behaviour, namely genre paintings and emblem books (5). It will be concluded that both categories of images are image based symbol systems that can be used as clues and sources in educational

research in its search of a complex educational reality in which real people and the need for patterns of behaviour are dominant (6).

3.2 Strong Sources Developing Out of Weak Sources

This section turns to a specific category of sources or traces from material culture, namely images, in particular paintings and drawings, produced in great numbers in seventeenth century Dutch Golden Age. Until far into the twentieth century, images were considered as very weak sources for historical research. As a result of the development of source-criticism, images were considered as highly inferior to written sources that were considered as reliable, as for example medieval charters, looked at as the backbone of historical research. Only with such sources the historical reality could be approached, so was the positivistic Rankian-like *was eigentlich gewesen* [what really happened] tradition of historical research, inspired by the famous nineteenth century German historian Leopold von Ranke (1795–1886) (Von Ranke 2011; cf. Ankersmit 1990, pp. 221–223). Only sources that could tell the historian what really did happen in the past were strong sources: they were mirrors of reality. Many other written sources, such as belles-lettres and the stories on the lives of the saints, were not. And because those sources did not reflect reality, they were considered as weak and unreliable; they were not helping us to approach reality. This image of inferiority was even more applicable to non-textual sources like paintings and drawings.

The French Annales School revolution in historical sciences, starting in the 1920s at the new university of Strasbourg, was, in transforming and innovating economic, social and cultural history, also decisive in upgrading many sources that for many decades were categorized as weak sources. The ambition of the founders of the Annales School,[1] the historians Marc Bloch and Lucien Febvre, was to integrate historical and social sciences. In posing new questions to history, often developed in close cooperation with the emerging social sciences, they upgraded many sources that until then were considered as weak. A famous example forms the stories on the lives of saints. For the innovative Annales historians, a medieval text on the life of a saint did not have to contain a completely true-to-life story to be a very important source. It is true that traditional source-criticism, contrasting the often occurring inconsistency of important facts in the saint's life by alternative and according to them reliable and strong sources, resulted in the rejection of those stories of the saints as reliable sources. But with new questions posed to those sources, there was no reason now to reject them as unreliable or weak. On the contrary, medieval texts on the lives of the saints now were upgraded to core sources for answering new questions in an innovative and emerging research domain, namely *histoire des mentalities*. The historical attention now moved from telling a story on

[1] Named after their journal *Annales Économies Sociétés Civilisations* (with some variations in its title over time).

the real life of the saints to why and how saints played such a big role in the *mentalités* of medieval culture, and why so many people worshipped the saints, with as a result their life stories becoming holier and holier. Because of posing new questions, many other earlier considered weak sources were upgraded and turned out to become strong ones, so enlarging the variety of sources to be used.

But not all of them. The *Annales* School, both in its first and in its second generation with Fernand Braudel and Emmanuel Le Roy Ladurie, remained largely neglecting the importance of that other important source for cultural history, including the history of education and childhood, namely images.

The famous exception with major impact on the history of education and childhood was the outsider Philippe Ariès (1914–1984) with his *L'Enfant et la vie familiale sous l'Ancien Régime*, released in 1960, published in 1962 in English as *Centuries of Childhood*, and, according to Robert Woods, "highly influential not only in France but also, after translation, among a wide international audience" (Woods 2006, p. 10; Dekker and Groenendijk 2012; Dekker et al. 2012a; Frijhoff 2012). The book became famous with its historical explanation of the existence of the modern family with its concentration on preparing children for adulthood and its affectionate parenting style, and with the coining of the concepts of 'le sentiment de la famille' and 'le sentiment de l'enfance' as explanatory concepts for that birth, or rebirth, from the late middle ages. Being influential for historians and social scientists, this book became a founding text for the emerging discipline of history of education (Dekker and Groenendijk 2012). Although Ariès was apparently an Annales-like historian and got a professional formation as a demographic historian at the Sorbonne, he was no formal member of the *Annales* group until his appointment in 1978 when aged 64 as a director of studies at the École des Hautes Études en Sciences Sociales (E.H.E.S.S.), the successor of the Sixth Section of the École Pratique des Hautes Études (Burguière and Todd 2009; Alten et al. 1986; Born 1964; Hutton 2004). Ariès called himself a 'historien du dimanche' and managed for many decades a tropical fruit trade information centre (Dekker and Groenendijk 2012). His appointment at the E.H.E.S.S. in 1978 was his late acceptance by the French historic academic establishment and the recognition of the importance of his studies on the history of the life cycle, including those on childhood and the family. His ideas culminated in the five-volume *Histoire de la vie privée* (1985–1987), edited by Ariès and Georges Duby. This creative and innovative outsider among the French historians built his 1960 classic study about the history of childhood, the family and schooling on a series of sources, with images, in particular paintings, and also medieval sculpture. According to the art historian Francis Haskell, "Philippe Ariès was far more aware than any of the *Annales* historians of the significance of figurative sources" (Haskell 1993, pp. 496–497, n. 21; Dekker and Groenendijk 2012).

But Ariès would long remain the exception to the rule. Images remained neglected as sources for cultural history in France and elsewhere for many years to come. In the late 1980s, this changed, with for example Simon Schama's study on Dutch civilisation in the seventeenth century. His idea of the Dutch Republic as a 'Republic of Children' was mainly based on an interpretation of genre paintings and

a series of genre drawings. According to him, "the Dutch were indeed fixated on their children to a degree and in a manner arrestingly unlike those of other European cultures", with their civilization offering "the first sustained image of parental love that European art has to show us" (Schama 1987, pp. 486, 541; cf. Dekker 2009b; Dekker and Groenendijk 1991; Bedaux and Ekkart 2000). Schama seems to consider Dutch seventeenth century paintings as mirrors of reality, or at least traces directly connected with reality. And indeed, those paintings were regarded by art historians as realistic, descriptive and concerned with everyday life far into the nineteenth century: they were true-to-life. In more recent research on the history of Dutch childhood, more emphasis was laid on both hidden and overt educational and moral messages in those paintings (Dekker 2006, 2010).

The seventeenth century Dutch paintings and drawings on education and childhood can be distinguished, according to the point of view of the painters and the customers, in two main categories, i.e. paintings intentionally made to represent real people, namely family portraits and children's portraits, and images made intentionally to show patterns of behaviour, namely genre paintings and emblem books, relying on the combined strength of text and image. At first sight, they have a different relationship to reality, namely to real people in the case of non-fiction portrait paintings, and to models of behaviour or misbehaviour in the case of fiction genre paintings. But both categories of paintings, notwithstanding their seemingly different intended relationship with reality, are also transmitters of educational ambitions and of models of behaviour. Moreover, both categories contribute to the emergence of historical sensation.

3.3 Material Culture and the Historical Sensation: Real People or Mystery Guests?

Using material culture as clues for the history of education and childhood could contribute to the historical sensation in a special way because of the illusion of direct contact with the past. Before giving an example of such historical sensation for the history of education and childhood, we first address briefly the concept of historical sensation, coined by Johan Huizinga (1872–1945) in his essay entitled 'The task of the history of culture' [De taak der cultuurgeschiedenis] from 1929 (Huizinga 1950, or. 1929). According to Huizinga:

> There is in all awareness a most momentous component, that is most suitably characterized by the term historical sensation. One could also speak of historical contact. […] This contact with the past, that is accompanied by the absolute conviction of complete authenticity and truth, can be provoked by a line from a chronicle, by an engraving, a few sounds from an old song. […] Historical sensation does not present itself to us as a re-living, but as an understanding that is closely akin to the understanding of music, or, rather of the world *by* music. (translation by Ankersmit 2005, pp. 120–121)

As a matter of fact, the direct contact with the past resulting from that historical sensation eventually remains an illusion. But, as Willem Frijhoff concluded in his

essay on the historian's discovery of childhood, we historians do need that illusion, that historical sensation, that direct contact with the past, while at the same time always being aware that we "only see the child of the past well if we manage to keep a closely guarded distance" (Frijhoff 2012, p. 28).

For Huizinga, historical sensation is the result of "what happens between the historian and the past" (Ankersmit 2005, p. 121). Huizinga emphasized that such historical experiences could be provoked normally by "relatively uninteresting objects that the past has left us". So, a remnant of a toy emerging out of an archeological site could serve as clue to the history of childhood in the middle ages. As a result of such research, we now know that toys for children were a normal part of children's life in the Netherlands in the Middle Ages and that a specific children's culture was not developing only after that time (Willemsen 1998, pp. 295–298; Willemsen 2000a, b; Dekker and Groenendijk 2012). But also master pieces of art could give such a moment of historical sensation on the subject of children playing, as shows the famous painting on the panel *Children's Games* from 1560 by the Flemish painter Pieter Brueghel (1525–1569) in the Kunsthistorisch Museum in Vienna. The challenge in using this source is to differentiate between the various meanings of such paintings, including a compendium of children's plays, a reference to allegoric stories, and a representation of the popular proverb 'it is children's play' to show an Erasmian satirical way of putting human life into perspective (Dekker 2006, pp. 30–36; Durantini 1983, pp. 179, 181–183; Brown 1984, p. 152; Snow 1983, pp. 27–60; Schotel 1968, ch. 9; Peeters 1966, p. 113; Manson 1998; Hindman 1981).

As Frank Ankersmit remarks, when looking at such master pieces of art instead of "relatively uninteresting objects that the past has left us", the burden of numerous interpretations already made makes much more difficult an open way of getting direct contact with the past, than by looking at ordinary pieces of art or even a remnant of children's toys. Yet, also Ankersmit admits that it is possible "to scrape off the crust of interpretation sedimented on the great work of art and to experience it as if a whole civilization saw it for the first time", for example with this piece of art by Brueghel (Ankersmit 2005, p. 127). By the way, it was Huizinga himself who got one of his most influential historical sensations when visiting the Flemish primitives exhibition in Bruges in 1902, looking at pieces of art by Van Ecyk, Van der Weijden and Van der Goes, in other words looking at master pieces of art (Ankersmit 2005, p. 126). That visit eventually resulted in his most famous book, *The Waning of the Middle Ages* (Huizinga 1955, or. 1919).

We now look at another master piece of great value for the history of education and childhood, *Portrait of a Family* from c. 1668 by Rembrandt van Rijn (1606–1669), an oil painting on canvas of 126×167 cm in the Hertzog Anton Ulrich-Museum in Braunschweig. This painting might also provoke a historical sensation for the historian of childhood and the family and provoke the illusion of direct contact with the people represented on the canvas. Rembrandt's *Portrait of a Family* from 1668 depicts real people: a father, a mother and their three children, together as a close-knit group. We seem to have direct contact with them when looking at the picture. The parents present themselves through the hand of the painter as the successful

founders of a happy family: family happiness in an early modern European family, thus several centuries before the recent focus on the child's happiness as main educational goal (Stearns 2010). Notwithstanding the solemn atmosphere on the canvas, in particular in the presentation of the father, also the world of the child is shown with two children joking together and with the smallest sitting on his mother's knee.

The painting contains, apart from representing a real family, a moral message. When focussing on that message, the seemingly direct contact disappears and is transformed into another approach, that of keeping "a closely guarded distance" (Frijhoff 2012, p. 28). For interpreting that message is only possible by interpreting other sources and other texts on the painting and on the educational culture of the seventeenth century Dutch Republic. That message is symbolized by the basket with fruit or flowers in the hands of one of the girls. That basket refers to both a fertile marriage and a good upbringing. Together with trained dogs, fruit and flowers formed the most frequently used educational metaphors in the incidental elements of sixteenth and seventeenth-century family portraits. The canvas expresses a double identity, that of the family and that of the individuals who make up the family. The parents are proud; the children are happy and cheerful. Rembrandt glorified "in radiant colours the happiness of a family linked by ties of deep affection" (Haak 1969, pp. 326–327; cf. Dekker 1996, pp. 167–170; Schwartz 1984, p. 342; Tümpel 1986, pp. 418 and 337; Gerson 1968, pp. 452 and 507; Leymarie 1976, p. 142; Schama 1999, pp. 663–664; Frijhoff and Spies 1999, pp. 519–521; Bedaux 1990, pp. 71–108; Bedaux 2000, p. 21; Brown et al. 1991; van de Wetering and Bruyn 1982–2011).

But this happy family has remained a mystery. Our direct contact with those members of a family in the past through the working of the historical sensation turns out to become a contact with members of an anonymous and mysterious family. Art historians have done their best to find out which family is on the canvas, but all suggestions concerning the identity of the persons are purely speculative. Rembrandt's customer has remained in obscurity until now, as is often the case with his and other painter's pieces of art (Dekker 1996). But no doubt with this painting Rembrandt intended to represent a real family. It is neither a genre painting nor a historic painting, based on classic or bible stories, a genre well-known to Rembrandt too, but a family portrait of people of his time. Apart from that, this family portrait is doing more than representing members of the family. It also transmits educational and moral message: these are well-educating educators and well-educated children. In other words: it is about real people and about patterns of behaviour. This was not exceptional for portrait and family paintings, a genre that from the sixteenth century became popular in European culture.

The first generation of family paintings in the sixteenth century was, according to the art historian Jan Baptist Bedaux, deeply influenced by Psalms 1 and 128, 1–3, from the Old testament, with metaphors on women as fertile grapevines and children as olive branches: '1. Blessed are all who fear the Lord, who walk in his ways. 2. You will eat the fruit of your labour; blessings and prosperity will be yours. 3. Your wife will be like a fruitful vine within your house; your sons will be like olive shoots

around your table'. Referring to those texts, several art historians consider fruit as a symbol of fertility visible in the offspring present in the painting. The paintings show the self-presentation of proud citizens together with their offspring. The image they want the painter to weave in the canvas is that of pious founders and heads of family. Moreover, they want to transmit the message that good education and good educators—indicating themselves—are necessary (Bedaux 1990, pp. 83–132).[2] The seeds of this focus on individual people lie in the portrayals of individual emotions in twelfth-century French sculpture. As painting in Europe had traditionally dealt almost exclusively with Christian themes, individualization began within the major Christian iconography themes like the Holy Family and the Madonna. In their secularized versions, as was the case with the Rembrandt family portrait, those themes soon dominated educational themes in paintings.[3]

But seventeenth century family portraits were not only the transformation of the religious holy family model. Although inspired by that model, the origins of Rembrandt's secular *Portrait of a Family*, as was the case with most Dutch family portraits in that period lay also in the Renaissance need among princes and merchants to proudly express their individual identity no longer inside Christian iconography but inside their family and their progeny, often around the table,. Rembrandt's painting is a ripe example of this trend in Flanders, Germany, Italy, and the Dutch Republic, among other countries (Dekker 2006, pp. 86–94).

With reference to the reality of Dutch seventeenth century painting an international controversy originated. The issue at stake between art historians was if those paintings were telling a true-to-life story and thus mirrors of reality, or should be considered as symbolic systems and complex structures full of hidden codes.

3.4 Paradigm Change: From True-to-Life Mirrors of Reality to Hidden Messages, and from Decoding Symbols to the Reality of Symbols

The seventeenth century Dutch images at stake, depicting everyday life, including education and childhood, were exceptional in quantity and quality. Looking at the reality by looking at paintings or other images was fundamental for the Dutch bourgeois mentality. The Dutch Republic was a bourgeois, and not an aristocratic society as pointed out by Huizinga in his classic study on Dutch civilisation in the seventeenth century (1968; 1976). As a consequence, the ownership of paintings, drawings and engravings was no privilege of the elite. Paintings were normal

[2] Art historians such as De Jongh (1986), referring to a bunch of grapes in the *Family Portrait* from 1678 by Emmanuel de Witte (cf. Steingräber 1986, p. 571, and Alpers 1983, pp. 379–386), consider the fruit as a symbol of chastity, an interpretation rejected strongly by Bedaux (1990).

[3] Rembrandt made various paintings on those subjects too, e.g. *The Holy Family*, suggesting a very homely atmosphere, in many ways similar with that in the *Portrait of a Family*, namely *The Holy Family with the Curtain*, 1646, Staatliche Kunstsammlungen, Kassel (Haak 1984, p. 297, Haak 1969, p. 195; Tümpel 1986, p. 245).

furniture for the broad middle-class with foreign visitors even surprised to see even the walls of farmhouses hung with paintings (Frijhoff and Spies 1999, pp. 496, 637 [note 60]; De Vries and Van der Woude 1995, pp. 147 & 701; Loughman and Montias 2000; Montias 1982, 2002; De Jongh and Luijten 1986). Characteristic for the Dutch art market was its main customer: the broad middle-class. It is true that also the Stadhouder's court, the cities, the boards of orphanages, and the Protestant churches commissioned painters to work for them. But those customers together were much less important than the broad bourgeoisie (Frijhoff and Spies 1999, pp. 497, 504–505). As a result, painting was a flourishing economic sector, with ca. 1650 approximately 700 painters, a good working art market and a production of ca. 70,000 paintings each year, both highly and modestly priced (Israel 1995, pp. 48, 98, 548, 873; De Vries and Van der Woude 1995, p. 404; Luijten et al. 1993).[4]

Paradoxically, its producing emerged in the wake of a large-scale destruction of art. During the *Beeldenstorm* of 1566, the iconoclastic fury and destruction of religious art, adherents of Calvinism used Old Testament texts to justify the destroying of the major part of Dutch religious art. In the abundant art production after this iconoclasm, daily life replaced religious life as main topic on the Dutch canvasses with children, family life and parenting coming into prominence. Educational topics were a major theme for genre painting that transmitted messages on patterns of parental and child behaviour and on the necessary virtues. They were also popular in many family and child-portraits representing familial and parental pride and parental affection.

The majority of this huge production of paintings was, according to the art historian Bruyn, regarded as realistic, descriptive and concerned with everyday life until the 1930s. For, so was the opinion, Dutch painting in the late sixteenth century, after the *Beeldenstorm* of 1566, adopted "a new style … that was more true-to-life" and with "greater emphasis on everyday subjects and motifs" (Bruyn 1993, p. 112). This paradigm of paintings as mirrors of reality started to change from the 1930s. Decisively was the publication of *Studies in Iconology* from 1939 by Erwin Panofsky. According to Francis Haskell, from then paintings were increasingly regarded as transmitters of messages in code form. As a result, "even images formerly assumed to depict only what could have been seen by an 'innocent eye' were in fact the products of conscious or unconscious manipulation: Dutch genre scenes and still lives, for instance" (Haskell 1993, p. 5; cf. De Jongh 1996, p. 40; De Jongh et al. 1976; Panofsky 1972; Dekker et al. 2000). Haskell referred to scholars like Panofsky and De Jongh. The emerging new iconography regarded Dutch genre paintings, notwithstanding their realistic magic, as complex symbol systems, to be analysed through the newly developed decode methods of iconology in order to understand the languages hidden in the various layers of those paintings. This Kuhnian-like revolution of looking at paintings continued for many decades.[5]

[4] Van der Woude (1997, p. 239) estimates the production of paintings during the Republic on between five and ten million pieces.

[5] It is not suggested here that art history as a whole was transformed into iconology. E.g. E.H. Gombrich with his bestseller *The Story of Art* and his four volumes *Studies in the art of the Renaissance*, remained a classic historian of art.

But from the 1980s, this new paradigm was questioned too. Was every sixteenth and seventeenth century painting that complex? Was every apparently realistic element a symbol for another initially invisible layer of meaning? Researchers such as Svetlana Alpers who emphasized the visuality and the visual competence of Dutch seventeenth century culture and its descriptive art in contrast to narrative Italian art, Mary Durantini who focused on the child in Dutch Paintings, and Jan Baptist Bedaux again placed emphasis on the realistic aspects of these paintings, although no longer with an 'innocent eye' of the nineteenth century. Bedaux, who as a student was introduced in the Panofsky inspired Dutch iconographic approach by De Jongh and who together with him organised successful exhibitions on Dutch art built on that Panofsky inspired approach, eventually lost his faith. He changed into an opponent of the approach in which he was raised academically, joined the new 'realistic' paradigm, and gave his dissertation a title which symbolized the change of paradigm: *The Reality of Symbols* (Alpers 1983, p. 11; De Jongh et al. 1976; Bedaux 1990, pp. 112–113; Gombrich 1985, or. 1966; Durantini 1983; Hecht 1992; Dekker 1996, pp. 159–160; Sutton 1984, n. 49; Sutton et al. 2009; De Jongh and Luijten 1986, p. 71. Cf. Frijhoff and Spies 1999, pp. 458, 100–102; Bedaux 2000, pp. 19–22).

Core issue in this paradigm change in art history and iconology is the relationship of seventeenth century art with reality. Images on real people, such as the Rembrandt family portrait, indeed could be used as clues to reality—even if the persons in this case remained mysterious. But those images also refer to patterns of behaviour by their symbols as for example fruit.[6] That second significance aspect of portrait paintings for historians of childhood and education, namely referring to patterns of behaviour, was central in another important seventeenth century category of images that were not produced with the intention of representing real people, but of working as transmitters of moral and educational messages, namely genre paintings and emblematic books. In the next section, the focus will turn from the mystery real people of the family portrait by Rembrandt to the patterns of behaviour and the moral and educational messages in genre painting and emblem books.

3.5 Material Culture and the Historical Sensation: Genre Painting and Emblem Books as Transmitters of Educational Messages

The sources now addressed, genre paintings and emblem books, belong to the category of fiction insofar as they do not intend to represent real people. But those sources, as is the case with other fiction sources too, can be of great value for the history of educational behaviour and of childhood. Those sources, as for

[6] For the rest, those symbols, for the contemporaries to be decoded by using Ripa's *Iconologia* from 1611 and translated in Dutch in 1644, lose part of their strength in the seventeenth century and became increasingly aesthetic details instead of important symbols.

example belles-lettres expose general patterns of behaviour, including parental and children's behaviour. People reading them or looking at them could recognize their own behaviour in those patterns, or they could see how their own behaviour differed positively of the bad behaviour shown in paintings, emblem books, or belles-lettres (Sturkenboom 1998, pp. 84 (n. 202), pp. 86, 88; Jouhaud 1994; Chartier 1989a, b; Dane et al. 2006). In the seventeenth century, two sets of fiction, namely genre painting and emblem books, turned out to become very popular. They served as transmitters of educational messages for contemporaries. But they also can serve as clues to childhood, parenting and education for historians of education now: because of their high popularity and success, they can show us the preferred patterns of behaviour of that period of history, as well as the patterns of behaviour that should be avoid, as was the successful strategy of master genre painter Jan Steen.

3.5.1 Genre Paintings as Clues to Parental and Children's Behaviour in the Past

Indeed, Dutch genre painting provides us both with models of preferred human behaviour and of misbehaviour. This makes genre painting a wonderful clue to parental and children's behaviour in the past and of the educational ambitions behind the preferred patterns of behaviour. The best example of seventeenth century Dutch genre painting is Jan Steen (1626–1679), the ironic moralist (Chapman et al. 1996; Frijhoff and Spies 1999, p. 515; Bok 1996, pp. 25–37; De Jongh 1996; Westermann 1996). The topic of the canvas *The Merry Family ('As the Old Sing, so Pipe the Young')* from 1668 in the Amsterdam Rijksmuseum and one out of a series of paintings by Steen on this subject is the strong belief in the impact of parenting (Chapman et al. 1996, p. 172; Durantini 1983, pp. 59–61; Brown 1984, pp. 83–88; cf. Palacios 1996, pp. 79, 94). In the Dutch Republic parents were approached by moralists, medical doctors and by the clergy with educational messages, creating a republic of educators, by Schama even interpreted as a children's Republic (Dekker and Groenendijk 1991). This focus on the belief in the impact of parenting and consequently on parent's responsibility was widely present in moralistic advice literature, in emblematic books, in genre painting, and in various personal documents (Becchi 1998, p. 66; Roberts 1998, pp. 84–87). The moralist Jacob Cats, on whom more right away, formulated this belief as follows: "When the youth is no good, do not blame the youth. The father himself, who did not educate them better, deserves punishment" (Cats 1665, Vol. III, p. 173; Vol. V, p. 55; cf. Frijhoff and Spies 1999, pp. 464–466). The impact of parenthood was clearly formulated in the well-known proverb *As the Old Sing, so Pipe the Young*. The proverb formed the basis of Cats' child-rearing advice and was frequently referred to in his work (Gruschka 2005).[7]

[7] An example is Emblem IV, 'Amor, formae condimentum' in Cats *Sinne- en minnebeelden* (Images of Passions and Love) (Cats 1996, vol. I, p. 56).

The proverb also inspired many painters, with Jacob Jordaens (1593–1678) from the southern Netherlands being one of the first. But Jan Steen (1626–1679) became its most famous interpreter.[8] In his many genre paintings, he always emphasized the contrast between good and bad behaviour, along with its consequences for the education of the children. This is also the case in his representation of the proverb 'As the Old Sing, so Pipe the Young'. The children on the canvas mimic the bad habits of their parents and other adults, including various meanings of 'piping'. Children are depicted with wind instruments, as well as smoking and drinking, with some of them drunk, while their parents and other adults sing, play the violin, drink and incite the children to even worse behaviour. To make the message of the painting even more explicit, in the version mentioned Steen included the text of the proverb attached to the chimney. The message could not be clearer: bad habits, learned in infancy and transmitted by parents to their children, will continue throughout life: blame the parents, not the children.[9] Steen's paintings show a strong belief in the impact and responsibility of parents, and in the necessity of educational literacy (Dekker 2008). This genre painting shows didactically outworked patterns of desirable behaviour to be made reality by following them, or shows, in the case of most of Steen's paintings, patterns of non-desirable behaviour that should just not be followed. Genre painting was highly popular in the Northern Netherlands and was produced in great numbers. Yet, it was small beer compared with the enormous success of moralistic emblem books on education and childhood.

3.5.2 Emblem Books on Education and Childhood

The messages on education and childhood of genre painting and emblem books are similar in many ways. The example of the proverb *As the Old Sing, so Pipe the Young* makes that clear. The proverb dominates many paintings by Jan Steen but also many emblems by the moderate Calvinist moralist and pragmatic politician, Grand Pensionary Jacob Cats (1581–1660). Together, genre paintings and emblem books became the most popular transmitters of educational ambitions in the seventeenth century in Holland. Today, they can be used in educational research as excellent clues to the cultural history of childhood and education, not at least because those books belonged to the top bestsellers in the Republic. Cats' emblematic books were after the Bible and Thomas à Kempis' *De Imitatione Christi* the most popular books in the Republic, with almost every middle-class family possessing at least one of his works. As a result, great numbers of people were influenced by the patterns of behaviour presented by those emblems, consisting of an image,

[8] See Schelte à Bolsward, *So D'oude Songen, Soo Pepen De Jongen*, engraving, 33.3 × 45.5 cm (Amsterdam: Rijksprentenkabinet, Rijksmuseum). See De Jongh and Luijten (1986, pp. 253–256 and n. 12) on Cats and Jordaens.

[9] Cf. also Jan Steen, *Soo voer gesongen, soo na gepepen*, *c*.1663–1665, oil on canvas, 134 × 163 cm (The Hague: Mauritshuis (Chapman et al. 1996, pp. 172–175).

a caption and a text. Therefore, the success of those emblem books in the seventeenth century makes them strong sources for historians today.

This success was not because of the topics dealt with. Those topics, such as what constituted a good marriage, the necessity of good family life for an adequate educational environment, the various duties of parents in their role of father and mother, the religious focus of their educational ambitions, finally how to reach adulthood in a proper way, were to be found in all child rearing and family advice books published in the Dutch Republic. Those advice books included voluminous works by orthodox-Calvinist authors and clergymen such as Jacobus Koelman and Petrus Wittewrongel (Groenendijk 1984, 2005; Groenendijk and Roberts 2004). Their books covered an important but relatively small niche in the advice book market. They were read by a limited number of readers with the same orthodox religious persuasion and with eagerness to read about desirable behaviour in doctrinally written instructional advice books (Dekker 2009a). The reason why Cats by treating the same subjects could cover much more than a small niche in the advice book market seems therefore not due to the topics he addressed, but to three other reasons, namely his Christian-humanist framework of thinking, his attractive writing style, and his putting in the power of images (cf. Freedberg 1989).

Christian-humanistic principles were behind Cats's ideas on the family, childhood and education. This could seem at first sight surprising, for Cats was a convinced and pious Calvinist who, at an advanced age, even moved in the direction of the Further Reformation. That orthodox branch of Dutch Calvinism focused on saturating daily life with Calvinist patterns of behaviour; the emblem books Cats wrote did have the same intention (Dekker 2006, 2009b; Groenendijk and Roberts 2001; Groenendijk 1984). But for Cats being a pious Calvinist was compatible with being a Christian-humanist moralist in the tradition of the Catholic Erasmus. Following that tradition life should, according to Cats, be lived according to the three Christian virtues of faith, hope and love, and according to the four cardinal virtues of wisdom, justice, fortitude, and temperance. Teaching those virtues, trying to apply them in educational practice so that up growing children should live according to them when becoming adults should be the main focus of all education. In emphasizing the importance of living according to those virtues, he, at least in his emblem books, avoided any use of doctrinal Calvinistic formulas. As a result the oeuvre of this pious Calvinist became not only attractive to other pious Calvinists, but also acceptable and even attractive to a much broader readership. This readership spanned the various religions of the Republic's religiously divided house, even including Catholicism. For all inhabitants of that house were in search of an attractive educational discourse attuned to their various moral values (Dekker 2009a; MacCulloch 2003; Knippenberg 1992).

Alongside his Christian-humanism was, secondly, his writing style a main reason for his success. He wrote with easy-to-learn and didactically intended rhymes and also adapted his writing style to his various reader's public. For readers who had no knowledge of Latin or of other languages except Dutch, he wrote his Dutch-language *Houwelick* (*Marriage*) from 1625 (Cats 1993). This book, probably his most popular one, was intended for mothers or mothers-to-be: a Dr Spock

avant-la-lettre. For readers mastering more languages he wrote books such as the *Spiegel* (*Mirror*), which contained more than 1,600 proverbs in Dutch, Italian, French, German, Greek, Latin and even Turkish, and *Sinne- en minnebeelden* [*Images of Passions and Love*]. Those books were intended for educated fathers (Dekker 2009b, pp. 54–57).

There is a third reason for his success. Unlike his many colleague family and education advice book writers, Cats did not limited himself to words. He was aware of the power of images. In combining word and image, not made by himself but by Adriaen van de Venne, he made use of the already existing and popular genre of emblems. In estimating the educational literacy of his readers, Cats adopted and adapted the framework of a specific genre of emblem books, *ars amatoria* in the style of Dutch writers such as Daniël Heinsius (1580–1655) and Pieter Cornelisz. Hooft (1581–1647) (Van Stipriaan 2002, p, 129). This turned out to become a successful strategy for his moralistic and didactic mission (Dekker 2009b).

Perhaps the best example of this adaption and adaptation of the *ars amatoria* into a moralistic emblematic style is his voluminous *Images of Passions and Love* consisting of 52 emblems. The main message of this emblem book is that fathers and mothers should be conscious of the fact that for the sake of their family chastity, the girl's main asset, should be preserved during the period of coming of age. In making this book he used a scheme of the life cycle which was already a classic in ancient times (Van Vaeck and Verberckmoes 1988). He transformed this scheme into a model for teaching moral literacy during the coming of age. While the phase of youth was a phase of learning and of trial and error, in particular in moral issues, it was only during adulthood that a human being could reach the phase of the 'natural human being' and could possess a well-developed social competence. But, as a matter of course in Reformation Europe, also this life phase was seen as no more than a transition phase that led to the final, highest phase of life: passing away and leaving all earthly things in the hope to be ultimately admitted to heaven (Cats 1996, vol. 1; Nevitt 2003, pp. 225–226).

Each emblem in *Images of Passions and Love* has the same structure of three succeeding parts that follow the above sketched life cycle. In the first part, the reader is seduced in the style of the *ars amatoria* and is entertained by an explicitly erotic story. In that phase of the life cycle, a period of trial and error, seduction was not the problem. That was chastity. Thus, the play of seduction was only allowed between youngsters with a marriage in mind, rather than with pleasure as such (Cats 1996, vol. 1, pp. 138–143 and vol. 2, p. 363). And it was the responsibility of the parents to teach their sons and daughters to curb licentiousness before marriage (Roberts 2012).

In the second part of the emblem, the reader is confronted with a dramatic change of style and topic. Now, the story is about the many risks of the same behaviour that was so seductively described in the first part. Emphasis is now on the dangers of the loss of virginity and of female virtue (Groenendijk and Roberts 2001, p. 82; Nevitt 2003, pp. 8, 18; Dekker 2008, pp. 148–151). In most emblems, the image represents this second and warning part. This second part also offers advice on how to follow the path of virtue and to remain virginal and to live *Like a Virgin*, and that not in the

Emblem 25 *Qui captat, capitur*, or 'Who chases is caught', from Cats's *Sinne- en minnebeelden* [Images of Passions and Love] (Source: Cats 1665)

sense of the song by Madonna from 1984. In all emblems, Cats shows in a very didactic way how things could go wrong. One of them is Emblem 25, entitled 'Qui captat, capitur', or 'Who chases is caught'**.** This emblem shows a blackbird, symbol of a lustful boy, stuck in an oyster shell, symbol of the seductive girl. This awkward situation was as a matter of course not the blackbird's intention, for this symbol of the lustful boy has become the prisoner of the seductive girl. But having the blackbird as her prisoner makes the oyster not happy at all. For eventually there are no winners. It is true that the oyster has a prisoner, but she cannot get off from the boy. The message is for both the boy and girl to not end up in such an awkward situation (Cats 1996, vol. 1, pp. 180–185, vol. 2, pp. 439–445).

It is to be seen in this emblem, and in the other ones too, that Cats plays two different roles: that of a connoisseur of the *ars amatoria* and that of the teacher of moral literacy. In the first part of every emblem in *Images of Passions and Love*, Cats wrote as a connoisseur of the *ars amatoria*, inspired by Ovid's *Ars Amatoria*. He seems to understand how difficult it is for young people to preserve their chastity and he does not condemn the imperfections of the young because of this period of life being a period of trial and error. He even seems to encourage youth to enjoy that phase of life, which he considered to be unique and to be over too quickly, quoting one of his favourite proverbs, *Quand on est jeune, on aime en fol*, or 'When young, one loves foolishly' in Emblem I, *Quod perdidit, optat* (Cats 1996, vol. 1, p. 39, vol. 2, p. 160; cf. Roberts 2012). After the seduction in the first part and the moral warning in the second, the third and last part of the emblem is about life after death. It deals with the final goal of life, namely being admitted to heaven. So, the emblem transforms into a journey from all too earthly pleasures to a heavenly destination (Cats 1996, vol. 2, pp. 56–75, 79–88).

Cats transformed the emblematic tradition into a highly successful vehicle for teach ing about parenting and about coming of age. Being a wealthy man, he put his own money in his first emblematic book, *Silenus Alcibiadis* from 1618. This turned

out to be a good investment, for because of the success of this book, he was soon earning money from the next ones, such as *Images of Passions and Love* (including *Silenus Alcibiadis*), *Marriage* [Houwelick] and *Mirror of the Ancient and New Time*. His books became long-standing bestsellers with several tens of thousands of copies being sold (Cats 1996, vol. 2, pp. 8 and 11; Jansen 1999; Dekker 2006, pp. 146–153). Cats' successful strategy was based on the belief that people had to be seduced to pursue chastity and frugality through their very enjoyment of his texts and images. He became the most successful author because he wrote books that were acceptable and attractive to both Protestants and Catholics and that avoided the very doctrines so characteristic of the doctrinal instructional advice books by clergymen such as Koelman and Wittewrongel. Moreover, he ingeniously combined word and image in the context of a visual culture, an image culture *avant la lettre*.

With the images of his emblems Cats as a matter of fact did not intend to show mirrors of reality. His intention was to construct effective transmitters of moral messages that should turn out into real change of behaviour. For the historian of education and childhood, his emblems are valuable clues and sources to the desired patterns of behaviour in the seventeenth century. Because of their popularity and their position on the book market as best- and long sellers they are strong clues.

3.6 Conclusion: Images as Clues to Transmitters of Educational Ambitions

Images can be of major value for research into long-term educational processes, or, for the history of education and childhood. They are potentially strong sources in working as clues to childhood and education in the past. They give us even the illusion of direct contact with the past. But notwithstanding the fruitfulness of this historical sensation that occurs when looking at them, they are no mirrors of reality. Yet, they are not off all reality. Dutch seventeenth century Golden Age paintings, drawings and emblems, looked at as clues and sources, can bring us to some educational reality. This is true both for paintings and drawings that were intentionally made to represent real people, namely family portraits and children's portraits, and for paintings and drawings that were not intentionally made to represent real people but to show patterns of behaviour, or misbehaviour, namely genre paintings and, narrowly related each other, emblem books. But family and portrait paintings could function as transmitters of—sometimes hidden—educational ambitions too. They show us both real people and models of behaviour. Both sets of images when used as clues and sources for the history of education and childhood tell us stories about educational ambitions and send us messages on desired and undesired patterns of behaviour.

Perhaps surprisingly, messages of undesired patterns of behaviour, with the most explicit and didactically structured moral warnings, seem to be the most popular ones in Dutch seventeenth century visual culture. By buying Steen canvasses or

other genre paintings and drawings, and by looking at them when educating their children, by reading emblematic books by Cats, or, for the orthodox-protestants, the family advice books by Koelman and Wittewrongel, among others, and by enjoying the text and images of those books, Dutch burghers—and the Republic did have a historically exceptional broad bourgeoisie—followed a self-paid, self-chosen, self-constructed course in educational and moral literacy in a strongly visual culture.

References

Alpers, S. (1983). *The art of describing*. Chicago: The University of Chicago Press.

Alten, M., Bidaud, A., et al. (Eds.). (1986). Braudel dans tous ses états. La vie quotidienne des sciences sociales sous l'empire de l'histoire. *Espaces Temps,* no. 34/35, 1–111.

Ankersmit, F. R. (1990). *De navel van de geschiedenis. Over interpretatie, representatie en historische realiteit*. Groningen: Historische Uitgeverij Groningen.

Ankersmit, F. R. (2005). *Sublime historical experience*. Stanford: Stanford University Press.

Ariès, P. (1960). *L'Enfant et la vie familiale sous l'Ancien Régime*. Paris: Librairie Plon.

Ariès, P. (1962). *Centuries of childhood. A social history of family life*. New York: Knopf.

Atkinson, P., & Delamont, S. (2006). *Narrative methods: Vol. III. Oral history and testimony*. London: SAGE Publications.

Becchi, E. (1998). Humanisme et Renaissance. In E. Becchi & D. Julia (Eds.), *Histoire de l'enfance: Vol. 1. De l'antiquité au XVIIe siècle* (pp. 160–199). Paris: Seuil.

Bedaux, J. B. (1990). *The reality of symbols. Studies in the iconology of Netherlandish art 1400–1800*. 's-Gravenhage: Gary Schwarz/SDU.

Bedaux, J. B. (2000). Introduction. In J. B. Bedaux & R. E. O. Ekkart (Eds.), *Pride and joy. Children's portraits in the Netherlands 1500–1700* (pp. 11–31). Gent: Ludion and Abrams.

Bedaux, J. B., & Ekkart, R. E. O. (Eds.). (2000). *Pride and joy. Children's portraits in the Netherlands 1500–1700*. Gent: Ludion and Abrams.

Bloch, M. (1974). *Apologie pour l'histoire ou métier d'historien*. Paris: Armand Colin.

Bok, M. J. (1996). Het leven van Jan Steen. In C. H. Perry, W. T. Kloek, & A. K. Wheelock Jr. (Eds.), *Jan Steen. Painter and storyteller* (pp. 25–37). Amsterdam: Rijksmuseum.

Born, K. E. (1964). Neue Wege der Wirtschafts- und Sozialgeschichte in Frankreich. Die Historikergruppe der 'Annales. *Saeculum, 15*(3), 298–308.

Brown, C. (1984). *…Niet ledighs of Ydels…'. Nederlandse genreschilders uit de zeventiende eeuw*. Amsterdam: J.H. de Buss.

Brown, C., Kelch, J., & van Thiel, P. (Eds.). (1991). *Rembrandt: De meester & zijn werkplaats*. Amsterdam: Rijksmuseum.

Bruyn, J. (1993). A turning-point in the history of Dutch art. In G. Luijten, A. van Suchtelen, R. Baarsen, W. Kloek, & M. Schapelhouman (Eds.), *Dawn of the Golden Age, Northern Netherlandish art 1580–1620* (pp. 112–121). Amsterdam: Rijksmuseum.

Burguière, A., & Todd, J. M. (2009). *The Annales school: An intellectual history*. Ithaca: Cornell University Press.

Cats, J. (1665). *Alle de wercken*. Amsterdam: Schipper.

Cats, J. (1993). *Huwelijk* (A. A. Snekker & B. Thijs, Ed.). Amsterdam: Querido.

Cats, J. (1996). *Sinne- en minnebeelden* [Images of passions and love] (H. Luijten, Ed., 3 Vols.). The Hague: Constantijn Huygens Instituut.

Chapman, H.P., Kloek, W. T., & Wheelock, A. K., Jr. (Eds.). (1996). *Jan Steen. Painter and storyteller*. Amsterdam: Rijksmuseum.

Chartier, R. (1989a). Le monde comme représentation. *Annales E. S. C, 6*, 1505–1520.

Chartier, R. (Ed.). (1989b). *Les usages de l'imprimé (XV^{e}-XIX^{e} siècle)*. Paris: Fayard.

Dane, J., Ghonem-Woets, K., Ghesquière, R., Mooren, P., & Dekker, J. J. H. (2006). For religion, education and literature: A comparative study of changes in the strategy and profile of

traditionally religious publishing houses in Belgium and the Netherlands in the twentieth century. *Paedagogica Historica, 42*, 707–727.
de Jongh, E. (1986). *Portretten van echt en trouw. Huwelijk en gezin in de Nederlandse kunst van de zeventiende eeuw*. Zwolle: Waanders.
de Jongh, E. (1996). Jan Steen, dichtbij en toch veraf. In C. H. Perry, W. T. Kloek, & A. K. Wheelock Jr. (Eds.), *Jan Steen. Painter and storyteller* (pp. 39–51). Amsterdam: Rijksmuseum.
de Jongh, E., & Luijten, G. (1986). *Mirror of everyday life. Genreprints in the Netherlands 1550–1700*. Amsterdam: Rijksmuseum.
de Jongh, E., Bedaux, J. B., Hecht, P., et al. (1976). *Tot lering en vermaak. Betekenissen van Hollandse genrevoorstellingen uit de zeventiende eeuw*. Amsterdam: Rijksmuseum.
De Vries, J., & van der Woude, A. (1995). *Nederland 1500–1815. De eerste ronde van moderne economische groei*. Amsterdam: Balans.
Dekker, J. J. H. (1996). A republic of educators. Educational messages in seventeenth-century Dutch Genre painting. *History of Education Quarterly, 36*(2), 163–190.
Dekker, J. J. H. (2006). *Het verlangen naar opvoeden. Over de groei van de pedagogische ruimte in Nederland sinds de Gouden Eeuw tot omstreeks 1900*. Amsterdam: Bert Bakker.
Dekker, J. J. H. (2008). Moral literacy: The pleasure of learning how to become decent adults and good parents in the Dutch Republic in the seventeenth century. *Paedagogica Historica, 44*, 135–149.
Dekker, J. J. H. (2009a). Beauty and simplicity. The power of fine art in moral teaching on education in 17th century Holland. *Journal of Family History. Studies in Family, Kinship, and Demography, 34*(2), 166–188.
Dekker, J. J. H. (2009b). Woord en beeld: Jacob Cats en de pedagogische cultuuroverdracht in de zeventiende eeuw. In J. W. Steutel, D. J. de Ruyter, & S. Miedema (Eds.), *De gereformeerden en hun vormingsoffensief door de eeuwen heen* (pp. 47–65). Zoetermeer: Meinema.
Dekker, J. J. H. (2010). *Educational ambitions in history. Childhood and education in an expanding educational space from the seventeenth to the twentieth century*. Frankfurt am Main: Peter Lang.
Dekker, J. J. H., & Groenendijk, L. F. (1991). The republic of god or the republic of children? Childhood and child-rearing after the reformation: An appraisal of Simon Schama's thesis about the uniqueness of the Dutch case. *Oxford Review of Education, 17*, 317–335.
Dekker, J. J. H., & Groenendijk, L. F. (2012). Philippe Ariès's discovery of childhood after fifty years: The impact of a classic study on educational research. *Oxford Review of Education, 38*(2), 133–147.
Dekker, J. J. H., Groenendijk, L. F., & Verberckmoes, J. (2000). Proudly raising vulnerable youngsters. The scope for education in the Netherlands. In J. B. Bedaux & R. E. O. Ekkart (Eds.), *Pride and joy. Children's portraits in the Netherlands 1500–1700* (pp. 43–60). Ghent: Ludion and Abram.
Dekker, J. J. H., Kruithof, B., Simon, F., & Vanobbergen, B. (2012a). Discoveries of childhood in history: An introduction. *Paedagogica Historica, 48*(1), 1–9.
Dekker, J. J. H., Amsing, M., van der Bij, I., Dekker, M., Grietens, H. W. E., Harder, A., Koedijk, P. C. M., Parlevliet, S., Schreuder, P., Talhout, M., & Timmerman, M. C. (2012b). Jeugdzorg in Nederland, 1945–2010. *Resultaten van deelonderzoek 1 van de Commissie-Samson: Historische schets van de institutionele ontwikkeling van de jeugdsector vanuit het perspectief van het kind en de aan hem/haar verleende zorg* (I Text, 413 pp.; II Appendices, 219 pp.). Groningen: Rijksuniversiteit Groningen.
Durantini, M. F. (1983). *The child in seventeenth century Dutch painting*. Ann Arbor: UMI Research Press.
Freedberg, D. (1989). *The power of images: Studies in the history and theory of response*. Chicago: The University of Chicago Press.
Frijhoff, W. (2012). Historian's discovery of childhood. *Paedagogica Historica, 48*(1), 11–29.
Frijhoff, W. T. M., & Spies, M. (1999). *1650. Bevochten eendracht*. The Hague: SDU.
Gerson, H. (1968). *Rembrandt paintings*. London: Weidenfeld and Nicolson.
Ginzburg, C. (1986). *Miti emblemi spie. Morfologia e storia*. Torino: Giulio Einaudi editore s.p.s.
Ginzburg, C. (1989). *Clues, myths, and the historical method.* Baltimore: The Johns Hopkins University Press. (Enlarged English version of *Miti Emblemi Spie*)

Gombrich, E. H. (1985). *Norm and form. Studies in the art of the Renaissance I*. Oxford: Phaidon Press. (Originally published in 1966)
Groenendijk, L. F. (1984). *De Nadere reformatie van het gezin. De visie van Petrus Wittewrongel op de christelijke huishouding*. Dordrecht: J.P. van den Tol.
Groenendijk, L. F. (2005). *Jong gewend, oud gedaan. Protestantse moralisten over de opvoeding van het jonge kind* (Inaugural lecture). Amsterdam: Vrije Universiteit.
Groenendijk, L. F., & Roberts, B. (2001). Vader Cats: een piëtistisch pedagoog. *Pedagogiek, 21*(1), 79–82.
Groenendijk, L. F., & Roberts, B. B. (Eds.). (2004). *Losbandige jeugd. Jongeren en moraal in de Nederlanden tijdens de late Middeleeuwen en de Vroegmoderne Tijd*. Hilversum: Verloren.
Gruschka, A. (2005). *Der heitere Ernst der Erziehung. Jan Steen malt Kinder und Erwachsene als Erzieher und Erzogene. Eine Entdeckungsreise durch die Bildwelten Jan Steens und seiner Zeit*. Wetzlar: Büchse der Pandora Verlag.
Haak, B. (1969). *Rembrandt: His life, his work, his time*. New York: Abrams.
Haak, B. (1984). *The Golden Age. Dutch painters of the seventeenth century*. New York: Harry N. Abrams.
Hamilton, P., & Shopes, L. (Eds.). (2008). *Oral history and public memories*. Philadelphia: Temple University Press.
Haskell, F. (1993). *History and its images: Art and the interpretation of the past*. New Haven: Yale University Press.
Hecht, P. (1992). Dutch seventeenth-century genre painting: A reassessment of some current hypotheses. *Simiolus. Netherlands Quarterly for the History of Art, 21*(1/2), 85–95.
Hindman, S. (1981). Pieter Bruegel's children's games, folly, and chance. *Art Bulletin, 63*, 447–475.
Howarth, K. (1998). *Oral history. A handbook*. Stroud: Sutton.
Huizinga, J. (1919). *Herfsttij der middeleeuwen. Studie over levens- en gedachtenvormen der veertiende en vijftiende eeuw in Frankrijk en de Nederlanden*. Haarlem: H.D. Tjeenk Willink.
Huizinga, J. (1976). *Nederland's beschaving in de zeventiende eeuw. Een schets*. Groningen: Tjeenk Willink. (Originally published in 1941)
Huizinga, J. (1950). De taak der cultuurgeschiedenis. In *Verzamelde Werken 7: Geschiedwetenschap, Hedendaagsche Cultuur*. Haarlem: Tjeenk Willink. (Originally published in 1929)
Huizinga, J. (1955). *The waning of the Middle Ages. A study of the forms of life, thought and art in France and The Netherlands in the fourteenth and fifteenth centuries*. Harmondsworth: Penguin. (Originally published in 1919)
Huizinga, J. (1968). *Dutch civilisation in the seventeenth century: And other essays*. New York: Harper & Row. (Originally published in 1941)
Hutton, P. H. (2004). *Philippe Ariès and the politics of French cultural history*. Cambridge, MA: University of Massachusetts Press.
Israel, J. I. (1995). *The Dutch Republic. Its rise, greatness, and fall, 1477–1806*. Oxford: Clarendon.
Jansen, J. (1999). The emblem theory and audience of Jacob Cats. In J. Manning, K. Porteman, & M. van Vaeck (Eds.), *The emblem tradition and the low countries* (pp. 227–242). Turnhout: Brepols.
Jouhaud, C. (1994). Littérature et histoire. *Annales, Histoire Sciences Sociales, 49*, 271–457.
Knippenberg, H. (1992). *De religieuze kaart van Nederland. Omvang en geografische spreiding van de godsdienstige gezindten vanaf de Reformatie tot heden*. Assen: Van Gorcum.
Lewin, R. (2002). Each of us sees history through our own eyes. *The Oral History Review, 29*, 47–51.
Leymarie, J. (1976). *Dutch painting*. Geneva: Skira.
Loughman, J., & Montias, J. M. (2000). *Public and private spaces. Works of art in seventeenth century Dutch houses*. Zwolle: Waanders.
Luijten, G., van Suchtelen, A., Baarsen, R., Kloek, W., & Schapelhouman, M. (Eds.). (1993). *Dawn of the Golden Age, Northern Netherlandish art 1580–1620*. Amsterdam: Rijksmuseum.
MacCulloch, D. (2003). *Reformation. Europe's house divided 1490–1700*. London: Allen Lane/ Penguin Books.
Manson, M. (1998). La poupée et le tambour, ou de l'histoire du jouet en France du XVIe au XIXe siècle. In E. Becchi & D. Julia (Eds.), *Histoire de l'enfance en occident* (Vol. 1, pp. 432–464). Paris: Seuil.

Montias, J. M. (1982). *Artists and artisans in Delft. A socio-economic study of the seventeenth century*. Princeton: Princeton University Press.
Montias, J. M. (2002). *Art and auction in 17th century Amsterdam*. Amsterdam: Amsterdam University Press.
Nevitt, H. R., Jr. (2003). *Art and the culture of love in seventeenth-century Holland*. Cambridge: Cambridge University Press.
Norrick, N. R. (2005). Talking about remembering and forgetfulness in oral history interviews. *The Oral History Review, 32*, 1–20.
Palacios, J. (1996). Proverbs as images of children and childrearing. In P. Hwang, M. Lamb, & I. Sigel (Eds.), *Images of childhood* (pp. 75–98). Mahwah: Lawrence Erlbaum.
Panofsky, E. (1972). *Studies in iconology. Humanistic themes in the art of the Renaissance*. New York: Harper & Row. (Originally published in 1939)
Peeters, H. F. M. (1966). *Kind en jeugdige in het begin van de moderne tijd (ca. 1500-ca. 1650)*. Hilversum: Paul Brand.
Ripa, C. (1611). *Iconologia* (Photomechanical reprint 1976 of the original edition from Padua, 1611). New York: Garland.
Ripa, C. (1644). *Iconologia, of uytbeeldingen des verstands*. Amsterdam: Dirck Pietersz Pers.
Roberts, B. B. (1998). *Through the keyhole. Dutch child-rearing practices in the 17th and 18th century. Three urban elite families*. Hilversum: Verloren.
Roberts, B. B. (2012). *Sex and drugs before the rock 'n' roll. Youth culture and masculinity during Holland's Golden Age*. Amsterdam: Amsterdam University Press.
Schama, S. (1987). *The embarrassment of riches. An interpretation of Dutch culture in the Golden Age*. London: William Collins.
Schama, S. (1999). *Rembrandt's eyes*. London: Allen Lane/The Penguin Press.
Schotel, G. D. J. (1968). *Het Oud-Hollandsch huisgezin der zeventiende eeuw*. Leiden: Sijthoff. (Originally published in 1903)
Schwartz, G. (1984). *Rembrandt. Zijn leven, zijn schilderijen*. Maarssen: Gary Schwarz.
Snow, E. (1983). "Meaning" in *Children's games*: On the limitations of the iconographic approach to Bruegel. *Representations, 1*(2), 27–60.
Sommer, B. W., & Quinlan, M. K. (2002). *The oral history manual*. Lanham: AltaMira Press.
Stearns, P. N. (2010). Defining happy childhoods: Assessing a recent change. *The Journal of the History of Childhood and Youth, 2*(1), 165–186.
Steingräber, E. (1986). *Alte Pinakothek München*. München: Edition Lipp.
Sturkenboom, D. M. B. (1998). *Spectators van hartstocht. Sekse en emotionele cultuur in de achttiende eeuw*. Hilversum: Verloren.
Sutton, P. C. (1984). *Masters of seventeenth-century Dutch genre painting*. London: Weidenfeld & Nicolson.
Sutton, P. C., Vergara, L., & Jensen Adams, A. (2009). *Love letters. Dutch genre paintings in the age of Vermeer*. London: Francis Lincoln.
Thompson, P. R. (1978). *The voice of the past. Oral history*. Oxford: Oxford University Press.
Tümpel, C. (1986). *Rembrandt*. Amsterdam: Mercatorfonds.
van de Wetering, E., & Bruyn, J. (Eds.). (1982–2011). *A corpus of Rembrandt paintings. Stichting Foundation Rembrandt research project* (5 Vols.). The Hague: Nijhoff. (From 2005: Dordrecht: Springer)
Van der Woude, A. M. (1997). De schilderijenproductie in Holland tijdens de Republiek. In A. Schuurman, J. de Vries, & A. van der Woude (Eds.), *Aards geluk. De Nederlandse en hun spullen van 1550 tot 1850* (pp. 223–258). Amsterdam: Balans.
van Stipriaan, R. (2002). *Het volle leven. Nederlandse literatuur en cultuur ten tijde van de Republiek (circa 1550–1800)*. Amsterdam: Prometheus.
van Vaeck, M., & Verberckmoes, J. (1988). *Trap op trap af. Zeventiende-eeuwse presentaties van feest en vermaak in en rond het kasteel*. Leuven: Peeters.
von Ranke, L. (2011). *The theory and practice of history* (Edited with an introduction by G. G. Iggers). London: Routledge.

Westermann, M. (1996). Steens komische ficties. In C. H. Perry, W. T. Kloek, & A. K. Wheelock Jr. (Eds.), *Jan Steen. Painter and storyteller* (pp. 53–67). Amsterdam: Rijksmuseum.

Willemsen, J. M. F. (1998). *Kinder delijt. Middeleeuws speelgoed in de Nederlanden*. Nijmegen: Stichting Nijmeegse Kunsthistorische Studies.

Willemsen, A. (2000a). Images of toys. The culture of play in the Netherlands around 1600. In J. B. Bedaux & R. E. O. Ekkart (Eds.), *Pride and joy. Children's portraits in the Netherlands 1500–1700* (pp. 61–72). Ghent: Abrams.

Willemsen, J. M. F. (2000b). Out of children's hands. Surviving toys and attributes. In J. B. Bedaux & R. E. O. Ekkart (Eds.), *Pride and joy. Children's portraits in the Netherlands 1500–1700* (pp. 297–303). Ghent: Abrams.

Woods, R. (2006). *Children remembered. Responses to untimely death in the past*. Liverpool: Liverpool University Press.

Yow, V. R. (2005). *Recording oral history. A guide for the humanities and social sciences*. Lanham: AltaMira Press.

Chapter 4
Visual, Literary, and Numerical Perspectives on Education: Materiality, Presence, and Interpretation

Karin Priem

This chapter analyses how different modes of enquiry relate to the materiality of education and educational presence. Presence, according to Hans Ulrich Gumbrecht (2004), implies material or physical evidence or 'being' in space before interpretation comes to the fore. Modes of enquiry, in contrast, refer to interpretation or methodological operations that ultimately process and transform educational manifestations[1] into meaningful cultural representations and social structures. Educational manifestation is subject to visual, literary, and numerical transformation. Whereas visual and literary reflections on education are categorized as cultural, artistic or documentary, numerical transformations are referred to as results of research and methods of quantification. The chapter focuses on how visual, literary, and numerical approaches to education relate to and transform educational manifestations in schools at the turn of the twentieth and twenty-first centuries. The research questions addressed are:

- How can the materiality of education be related to educational presence?
- How can we describe intellectual operations as means of giving shape and meaning to priors of education?
- How do the different media and approaches in educational research relate to educational presence?
- What are the social and political implications of interpretation in educational research?

The chapter's central thesis challenges traditional understandings of quantitative educational research. It argues that educational research that follows a numerical

Many thanks to Rita Casale, who has shared her knowledge and expertise on Martin Heidegger's work, and to Geert Thyssen for helping to sharpen my argument.

[1] I here use the term 'manifestation' to sidestep the Gumbrecht's distinction between 'presence' and 'culture' or 'interpretation'.

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logic is in fact highly normative and interpretative, whereas visual and literary approaches to education (e.g., photography and fictional texts) get closer to education's essence and question norms and conventions of schooling.

4.1 Materiality of Education and Educational Presence

This chapter will discuss the relation between the materiality of education and educational presence. Focusing on materiality implies a certain distance to constructivist and discourse-oriented approaches in research.[2] Material culture studies were partly established to bring back matters of factual truth and substance to the research agenda. By concentrating on materiality, the focus is explicitly on what can be seen, observed, and touched. Focusing on sensual perception and seeing as a way of knowing, materiality studies necessitates reflection on the substantial differences between objects and discourses. This not only includes reflection on the materiality of cultural representations such as books, images, and other media, but also on cultural practices as technologies of knowledge- and meaning-making through the handling of things and artefacts. The materiality of education stresses the laboratory of education in the sense that it reveals education as an apparatus, essentially operating within a matrix of time, space, function, form, and interaction. Within this matrix, it is usually said that things become meaningful and gain symbolic value. It might therefore be useful to reflect about the relation of meaning-creation and material culture inside and outside of educational settings.

In a 1999 article, Käte Meyer-Drawe described things as a "challenge", as "the other in the education process" (1999, p. 329). In her view, there is a kind of interaction between things and human beings: things provide stimulation, which, however, can only become manifest through people and their actions. Cultural studies scholars examining artefacts have confirmed this link between things, or artefacts, and human action, although with varying emphasis. For Jean Baudrillard (2005), objects in traditional milieus display above all a fixed emotional value and, through their specific placement, represent moral convention and personify the social order and permanence of human relationships. In contrast, he interprets the multi-functionality and mobility of modern objects, which have emancipated themselves from ritual, ceremonial, and ideology, as evidence and representations of the mobility and reciprocity of human relationships. If one follows this argument, objects, depending on their shape, functionality, and the human action referring to them, are able to either represent an authoritarian, particular moral code or display egalitarian, even universal traits and evoke corresponding behavior. Drawing on Hannah Arendt, Mihaly Csikszentmihalyi (1993, p. 23) argues that things play a major role in the development of personal stability, since objects that connect past and present

[2] Combining material culture studies and discourse theory can nevertheless be very fruitful, as is shown by Ian Grosvenor and Martin Lawn in *Materialities of Schooling: Design, Technology, Objects, Routines* (2005, pp. 8–11). Another example is Priem et al. (2012).

provide continuity to a human life. This continuity refers, above all, to those objects that represent values such as friendship and close human relationships (ibid., p. 28). The value and meaning of things thus goes far beyond their materiality and function. Things are codes of emotional contexts (see Heubach 1987, p. 18), things and people are "linked by shared (hi)stories" (Schapp 1976), and as bearers of meaning, things represent social and cultural rationales (see, e.g., Sahlins 1976). In an essay on material culture, Gudrun M. König (2003) has pointed out that the meaning of things and artefacts piles up 'on their backs' in the form of sediments and layers and can therefore work in multiple ways. The meanings of things are thus subject to historical change, they orchestrate human action in a number of ways, and they are always newly attributed to things.

In addition, and this is of major importance in educational contexts, physical objects and artefacts can be related to cultural practices such as counting, reading, writing, and drawing and to epistemological issues of knowledge and meaning-creation. Roger Chartier and Guglielmo Cavallo (1999) have pointed out that reading is a practice for taking possession of books as objects containing texts and generating meaning in the process. The formal and physically organized structure of texts influences the reading process as well as the meaning the reader ascribes to the text. In addition, the connection between material culture and knowledge production becomes apparent in the frequent use of thing-related metaphors. Hans Blumenberg (1986) has persuasively argued for the close metaphorical linkages between objects and knowledge. On the whole, meaning is dependent on physical and organizational forms, cultural practices and techniques as ways of handling things and artefacts and metaphorical patterns within a social matrix.

By way of preliminary summary, we can say that things are closely interwoven with sensual perception and stimulation, cultural practices, techniques for gaining knowledge, and the creation of meaning. The next step of this chapter therefore will be focusing on the question of how and if these qualities of materiality can be related to or analytically distinguished from each other.

In his 2004 book on the "*Production of presence*", Hans Ulrich Gumbrecht, a scholar of Romance studies and professor of comparative literature at Stanford University, asks how we can refer to material objects, artworks, texts etc. without making use of interpretation or discourse- and constructivist-oriented approaches. He therefore introduces the term 'presence', or 'production of presence', to stress the tangibility and proximity of things and material objects in time and space beyond interpretation and the assignment or construction of meaning. According to Gumbrecht, interpretation, while inevitable, reduces and ignores the substance of materiality, sensual perception, and culturally unfiltered stimulation and therefore needs to be challenged by alternative epistemological concepts. For the same reason Gumbrecht refutes discourse- and constructivist-oriented methodologies. Instead he aims for a concept that is much more complex than mere reflection on the construction or extraction of meaning. As a result Gumbrecht feels obliged to go back to Martin Heidegger's *Sein und Zeit* (*Being and Time*, originally published in 1927). Even though he explicitly refuses to be labelled as a '*Heideggerianer*', he is attracted to Heidegger's work because of the German philosopher's anti-metaphysical position, which, according to Gumbrecht,

is based on the assumption of (thing-related) substantial 'being' ('Sein') in space as a horizon of potential cultural manifestations and meanings. Gumbrecht here claims to have discovered similarities to his own intellectual engagement and to how he would like to define the term 'presence'. The quality of what Heidegger describes as 'being' or 'Sein' makes it possible to sometimes avoid the level of culture and therefore provides access to a materiality and epistemology beyond interpretation. Materiality beyond interpretation implies materiality beyond order or power of discourse and meaning. Two different analytical ways to reflect on the materiality of education might therefore be adequate: (1) things as culturally unfiltered objects and artefacts; (2) things as cultural objects and artefacts with layers of meaning which represent the order of discourse in a constructivist sense.

Things, objects, and artefacts therefore have to be analysed on two levels: within the cultural matrix and as a material presence before subjecting them to interpretation. As part of the social and interpretative matrix they represent cultural rationales and the order of discourse, and stabilize existing formula, whereas their presence, physical body, form, and juxtaposition with other things, objects, and artefacts have a stimulating effect on how we create and review knowledge and meaning.

The second section of this chapter will concentrate on visual aspects and the question of how the materiality of education is visually displayed and transformed.

4.2 Visual Aspects: Education on Display

Visual aspects of education involve images as cultural objects and different techniques transforming educational manifestations into pictorial displays, visual graphics, structures, and models (see Daston and Gallison 2002, 2007; Rheinberger 2009) many of which are used in science-oriented approaches to education and learning. Photographic images are created through technical devices and chemical processing or by electronic means, sometimes (as in the case presented here) within an artistic and documentary context. For this section, I have chosen to focus on photographic images as objects, more specifically on the work of the Belgium photographer Marc Steculorum and his photo-documentary book *Schoolblues*, which was published in 1998 by the Provincial Museum of Antwerp. Steculorum's artistic project was funded by government institutions, including the Antwerp County Council, the Belgian Ministry of Finance, and the Flemish Ministry of Culture. The book contains an autobiographically inspired short story entitled "Crisscross Memories" by the popular Belgian novelist Herman Brusselmans and 44 black-and-white photography prints, which are listed numerically while at the same time providing information about the events and places of exposure. All photos were taken during the 1997/98 school year. The quality of the prints suggests that the photographer used a traditional analogue small-format camera. In this case natural daylight is captured onto photographic film, a procedure usually completed in a darkroom where the film is developed, projected on light-sensitive paper and soaked in chemical liquids and water. Photographic images thus emerge by means of instruments and techniques of image making, film processing,

projection on light-sensitive paper and its chemical treatment. A major problem related to this has to do with the objectivity of photographic depiction, the way educational materiality is perceived and shaped through the eye of the camera. By continuously examining issues of vision and depiction, photography itself is constantly reflecting on its objectivity (see Konersmann 1999). The ongoing modification of, and invention of new, optical instruments subject visual perception to constant critical evaluation. Most photographers openly use this reflective approach. Similar to experimental research that uses microscopes in laboratories (see Fleck 1947/1983), the photographer's eye isolates and fixes its object of study in order to strip the make-up from reality and to expose the object of study to attentive perception, to paraphrase Walter Benjamin (1931/1980, p. 37). Gombrich (1982, p. 37) uses the term 'visual discoveries' to describe what might result from this process as we sometimes "recognize pictorial effects in the world around us, rather than the familiar sights of the world in pictures". Seen against this background, school photography constitutes a practice that examines school life by visually questioning and reviewing interpretations of educational manifestations. Roland Barthes (1980/1985, pp. 97, 117, 126) in his reflections on photography describes the medium as a verification of presence in the sense that what we find depicted in photography provides evidence of past material existence through the use of technical and chemical means. Photography in his opinion is rather contingent and enigmatic, it thereby displays material evidence beyond meaning and interpretation, and consequently is able to challenge interpretation and meaning. Thus, photography is able to surprise the viewer (often by baffling details) and Barthes refers to this unique quality as 'punctum' (e.g., p. 36). In sum, analogue photography is a medium, which (unlike texts) distinctly refers to material existence (and presence) in past situations; if this were not the case, the image could not have been fabricated. Although this does not, of course, imply absolute rigor and objectivity, it also does not mean that photography is a deceptive illusion.

From a larger sample of school photographs taken by Marc Steculorum, I have selected four images to demonstrate the importance of the camera as an instrument to record and observe school.

The first photograph (Fig. 4.1) shows an open window offering a view of a secondary school playground from above. The image has a grid structure, which together with the ruler holding the window sash, reveals a complex material setting. The most surprising aspect of the image, its *punctum* and challenge of meaning, seems to be the peculiar use of the ruler, a geometrical tool to measure or draw lines, which here is used as an instrument to keep the window open. This surprising effect is intensified by a thin cord, which is wound around the ruler and attached outside the frame of the photograph. At a conventional functional level, and this might be one level of the materiality of education, a ruler can be related to cultural practices like accurate measuring and precise geometrical drawing, which in this case is also stressed by the grid structure of the photograph. At a conventional symbolic level, which can be described as an additional level of materiality, a ruler refers to two basic operations of school life: measuring learning outcomes and giving grades. At a third level, however, the photograph plays with these clearly defined cultural formula, since the ruler, attached to a kind of lifeline, is used and handled as an

Fig. 4.1 Playground. Municipal Secondary School, Antwerp (© M. Steculorum)

Fig. 4.2 Mathematics Class. Secondary School, Borgerhout (© M. Steculorum)

instrument to open up closed educational spaces. As opposed to the previous levels, this third level can be defined as 'production of presence', which moves beyond cultural patterns and refrains from conventional interpretation.

The caption of the second image (Fig. 4.2) also refers to measuring and counting by showing a mathematics lesson. Contrary to the previous image, here we see a blurred and dynamic impression of space. The rather hectic and informal conduct of the students adds dynamic movement to the classroom scenery and is juxtaposed

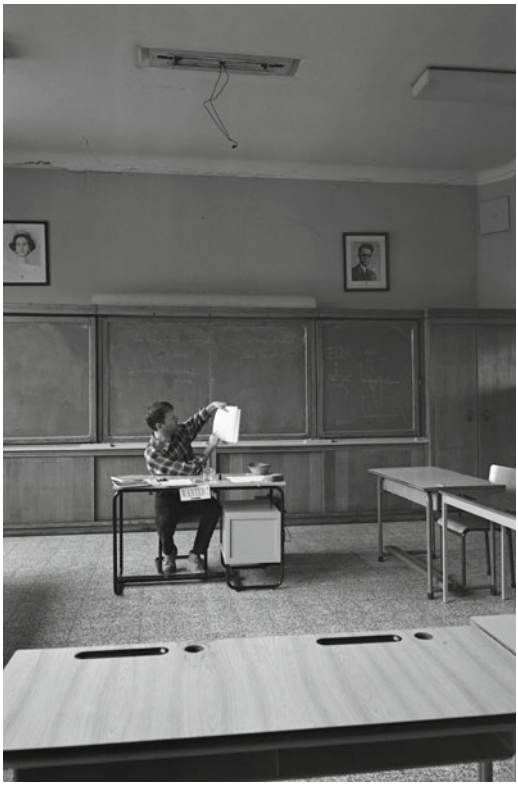

Fig. 4.3 Teacher. Adult Education, Hoboken (© M. Steculorum)

to the sharp lines of composition provided by the school desks and the blackboard. While almost invisible, the elderly teacher, who is seated taking notes, nevertheless is at the centre of the photograph. On a conventional functional level, the photograph does not interfere with traditional classroom settings and school furniture. Everything seems to be in its proper place. The same is true for the conventional symbolic level of space, since the teacher is positioned in front as the head of the classroom. But again there is a contradictory image within the image. In conventional classroom settings the teacher is positioned in a highly visible place, usually at a distance from his students, sometimes standing in front of the class or seated in a chair on a pedestal. Figure 4.2 does not follow this spatial tradition, since the teacher seems to be a rather inconspicuous figure of the classroom arrangement. Another surprising aspect of the photograph is the reversal of the control of educational space: usually it is the teacher (and not the students) who is allowed to move freely around the classroom. Ignoring these regulations of school culture, the image clearly shows the opposite: it shows the teacher as almost disappearing amidst a fast-moving group of students, who are not looking at him (as should be expected in a traditional classroom) but at each other.

The third image (Fig. 4.3) again shows a traditional classroom setting. The photograph is taken from the eye-level perspective of the (invisible) students and keeps

Fig. 4.4 Lift. Municipal Secondary School, Antwerp (© M. Steculorum)

the teacher at a far distance. At the same time the viewer is automatically pushed into the role of a student, as suggested by the desk in the lower front of the photograph. The teacher sits at his desk, in front of a blackboard, above which we see the images of the then King and Queen of Belgium. So far the material setting seems to be highly conventional: the symbolic presence of the royal couple underlines the role of the teacher as a representative of the nation state. The teacher's spatial distance to his (fictional) students further underlines the hierarchical order, as does his gesture of instruction. What can be read as a disturbing sign, as a 'production of presence' that defies conventional interpretation is the fact that this gesture seems to be directed at nobody or, rather, at an unknown audience, possibly the viewer of the photograph. A second aspect seems to have come unexpectedly into the picture: The fluorescent ceiling lights, one of them broken, underline the discrepancy of surveillance of school life; it could also be the teacher who is exposed to anonymous investigation and subject to control.

The fourth and final picture (Fig. 4.4) shows a snapshot of a crowded elevator taking students to their classrooms. The spatial setting and tightly gathered group above all suggests multicultural classrooms and the literally pressing problems of instruction and learning related to this situation. In the centre of the photograph we can see a female student and an arm stretching out to touch her, either to protect her or to push her back. It is this gesture, together with the asymmetr y of the composition, which catches the viewer's attention. Whereas (in the context of school life)

a stretched-out arm is conventionally interpreted either as a gesture of protection or instruction, the same gesture could demonstrate and introduce presence beyond this meaning, that is, a tight grip on the arm of a student, who is having a rather relaxed private conversation with a fellow student.

The essence of this analysis can be described as several interacting and contrasting levels of the pictorial materiality of education and school. The first two levels of documentary school photography aim at the traditional form and function of things and related cultural patterns of school life. Here, the materiality of education represents social order and order of discourse within a social and interpretative matrix, the permanence of educational acts or acting, and the stability of values or meanings attached to objects and bodies situated in educational space. This implies not only traditional cultural practices, but also a certain hierarchy symbolized by gestures, spatial arrangements and positionings, and the function and form of school furniture. At a third level, however, this documentary school photography goes beyond these two levels. This third level implies a verification of presence of school life beyond conventional interpretations by evoking a broad horizon of possible perceptions. Here conventional beliefs, regulations, and hierarchies are being scrutinized. It is of utmost importance that all levels are present within one image or one photographic shot. While looking at these photographs everybody might see slightly different or even contradictory aspects of school. Photography explicitly plays with this ambiguity and rigorously avoids fixed assertions, instead revealing and dismantling very different symptomatic and surprising features and structures of school life by visual observation (see Priem 2009).

4.3 Literary Aspects: Education in School Novels

In the third section, I want to take a closer look at two school novels and discuss how educational manifestations are dealt with and processed in fictional works. With regard to the objectivity of fictional texts, the German sociologist Thomas Alkemeyer (2007, p. 13) has recently argued that fiction too analyses constellations of social reality but does so by aesthetic means, thereby gathering huge amounts of data, which can barely be processed by research. His main point is that literary texts provide exemplary insight into the inner dialogues and ordinary conversations of everyday life. Raymond Williams (1961/1980) for the same reason coined the term ‘structure of feeling’, which in his view articulates exactly how fiction deals with a characteristic moral structure, its daily disruptions, erosions, and related effects in ordinary life during a certain period (see also Priem 2008). The materiality of education and educational presence are much more difficult to trace in novels than in photography since they appear as fixated in a conventional sign system. A novel usually puts things and figures symbolically on stage and lets them interact while at the same time looking at the scenery from several narrative angles. Friedmar Apel (2010) has emphasized that, in recent European literature, authors surprisingly often deal with the materiality in space. It could therefore be added that fictional texts

written by authors of school novels, apart from representing conventions, also offer unfiltered insight into school life beyond cultural and social rationales and formula. In this respect, they might be very similar to photographic investigations of education, since Roland Barthes' labelling of photography as a medium of the verification of presence could also be applied to fiction. Fictional texts are often as contingent and enigmatic as photography.

The novels I have chosen to look at are of French and German origin: Christophe Dufossé's *School's Out* (*L'heure de la sortie*), published in 2002, and Norbert Niemann's *Schule der Gewalt* [School of Violence], published in 2001. The similarities between the two novels can briefly be outlined as follows (see Priem 2007): both first-person narrators are teachers in secondary schools and struggle with the social and emotional pressures of their professional lives. At first sight, the classroom atmosphere in both novels is dominated by conformity and boredom. At the same time the novels' plots suggest that beneath this quiet surface hide threats and dangerous secrets that the adults simply cannot fathom. In both novels, the first-person narrators, unlike their colleagues, are no longer able to ignore these disturbing circumstances of everyday school life. Both teachers increasingly become obsessed with observing their students and the feeling of being observed by them while at the same time suspecting their students of a hidden agenda. In both cases the teachers feel a disturbing lack of power, which they try to fight by being omnipresent and rigorously alert. As for the students, it is obvious that they follow the rules and regulations of school only superficially or simply pretend to do so. They play their game but at the same time plan to take revenge. In the French novel, the students are frightened by the society run and destroyed by adults, which they think will severely harm them. As a consequence, they decide to commit collective suicide. In the German novel, on the contrary, it is the teacher who stylizes himself as a victim. More accurately, he becomes a victim of his own negative imaginations of the students' violence by threatening them with a knife, which he has started to carry in his coat to keep his increasing fear in check.

Both novels illustrate that school life is dominated by hidden emotions, and it is this very notion that is transformed into fiction. School as a repository of emotions is a place of deception, helplessness, anger, hatred, despair, and anxiety, which affect teachers a much as students. A distinct quality of teachers, however, is their tendency to ascribe negative, essentialist views to their students, which can be read as evidence of continuing institutional power and symbolic violence (see Bourdieu 2001; Priem 2007). In school novels in general the problems at hand are outlined by describing strong emotions that are often hidden beneath boredom and everyday routine while they are, at the same time, symbolized by educational artefacts and spatial arrangements, which in novels appear as transformations into written language. Fiction aims at examining human feelings and the way these emotions erode institutional structures and related values. In the case of both novels, the focus is on teachers as first-person narrators. Therefore the readers above all gain insight into the emotional lives of the teachers, whereas the students remain rather frightening and non-transparent entities to both their teachers and the reader.

In school novels, the conventional symbolic level of the materiality of education is primarily translated into emotions. The conventional aspects of boredom and conformity to the rules and regulations of everyday school life symbolically represent the material order of the classroom in the sense that the teacher is standing or sitting in front of the classroom right next to a blackboard, while the students are sitting in a neat row at their school desks, their books and other learning materials on the table, talking only when asked to do so after having raised their hands. This conformity is neither described as being interrupted by uncontrolled talking or any other noise nor by students moving around in the classroom. In both novels the standard of conformity is silence. But silence at the same time is related to the disturbing horizon of emotions beyond the conventional scope. In fiction, the materiality of education therefore refers to a broad array of emotions thereby demonstrating their substantial and disturbing evidence beyond the surface of cultural and social convention.

4.4 Numerical Aspects: Quantified Education?

The fourth section will concentrate on numerical perspectives on education and how the materiality of education is quantified and interpreted in educational research. The following short analysis of PISA is mainly based on the first international comparative study published by the German consortium in 2001 (Baumert et al. 2001).

When it comes to numbers and quantifying methods of research it is almost obligatory to refer to Theodore M. Porters book *Trust in Numbers*, published in 1995. Porter points out that the results of empirical research depend on methods of data quantification and collection. The criteria, categories, codes, and operations of quantification are not at all politically neutral. With regard to statistics and numbers, Porter (1995) states that they "are able to describe social reality partly because they help to define it" (p. 43), that they are "part of a strategy of intervention, not merely of description" (p. 43), that they "create and can be compared with norms, which are amongst the gentlest and yet most pervasive forms of power in modern democracies" (p. 45), and, finally, that they help to establish "an oppressive language of normality and abnormality" (p. 77). Nevertheless, quantification and its rhetoric pretend to be ruled by "a spirit of rigor" and claim to be objective, with objectivity being supposed to be identical with "impersonality" and "truth" (p. 74). In Porter's view, quantification therefore implies a moral and democratic quality, simply because numbers seem to rely not on the individual judgment of elitist experts but on large amounts of data. Quantification, after all, helps to regulate and reduce complexity with the aid of norms and standards. According to Porter, "knowledge [thereby] gives up its critical edge. It sees only the linear, not the dialectical" (p. 85). Quantifying methods in educational research thus negate or eliminate the materiality of education while at the same time claiming to be objective.

Today, it has become widely recognized that international and national PISA studies provide a comparative view of students' proficiency levels and 15-year-olds'

performance in basic competences such as reading and mathematical literacy, presumably with a view to how they will fare in their future lives. More than 180,000 students from 32 countries participated in the first PISA study in 2000. With regard to both the theoretical framework and the results of the study, the designers of the PISA studies insist on the high impact that students' social background has on their competence-oriented learning outcomes and school performance. The students' social background is usually explained by highly differing amounts of cultural and economic capital and the socio-economic status of their parents, which are in turn presumed to affect the students' school performance. The terms 'social' and 'cultural capital' are borrowed from the French cultural sociologist Pierre Bourdieu and transformed into scientific modes of quantification. For Bourdieu (1986), cultural capital is defined by incorporated practices, embodied dispositions, and ownership of cultural objects, whereas social capital refers to the potential support and recognition provided by a social network. In PISA, the transfer of these terms from a sociological concept that is rather ethnographical and oriented at cultural analysis into modes of quantification is not further discussed and occurs without any reflection on methodological differences. The result is marked by an import of categories, semantic shifts and epistemological changes, all of which finally become part of a theoretical amalgam that also includes many traditional socio-economic approaches. This methodological mix is furthermore grounded in normative assumptions of a cultural hierarchy between migrant and non-migrant families, which in turn creates biases in terms of the research methodology and results (Baumert et al. 2001, pp. 331–334), since low levels of cultural capital are instantly related to the students' migration background, lack of language skills, and low school performance. The PISA designers note (ibid., p. 332) that students with low school performance often do not answer all questionnaire items regarding social background. It is simply assumed that this lack of information can be compensated through (missing) data imputation, performed with the help of a highly specialized program called AMELIA. By using these and other quantification techniques and statistical analyses, PISA is apparently able to remove any doubts about its results. Porter's diagnosis of the normative quality, acceptance and societal outreach of numbers therefore seems to be absolutely correct.

There is much evidence of disagreement between Bourdieu and PISA. This is especially the case in their use of language, their rationale, the quality of the data, and their terms and categories to describe social differences. Bourdieu's theory of the social space is multi-dimensional and structured by various fields and groups of agents (Bourdieu 1985), who differ in terms of the amount and configuration of capital in their ongoing symbolic struggles for distinction. For this reason, Bourdieu refrains from using the term 'social class' and is concerned with avoiding societal fixation and proposing a one-dimensional, vertical social hierarchy. Bourdieu in his theory explicitly insists on the preliminary status and constant transformation of social space, whereas with PISA we are confronted with a strong hierarchical and determining set of norms and categories.

Both Bourdieu and PISA transform social and cultural difference into graphic illustrations to visually objectify their results. As can be seen, for example, by his visual model of the bourgeois structure of French society (Fig. 4.5), Bourdieu sketches

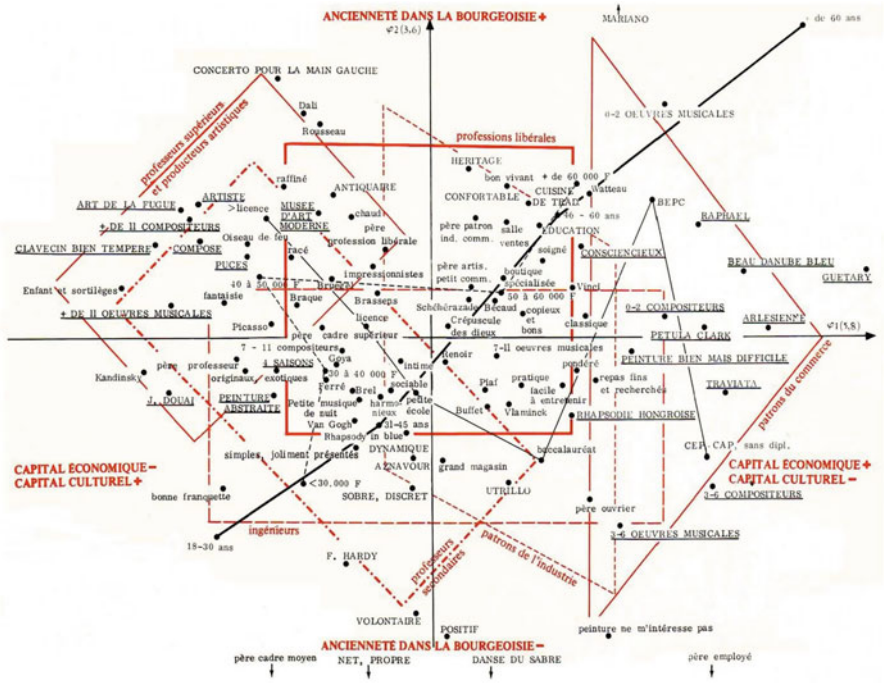

Fig. 4.5 Bourdieu: Variants of Dominant Taste (Bourgoisie) (http://www.classification-society.org/csna/mda-sw/correspondances/Bourdieu-Distinction.jpg, 8.3.2013)

the social space in a very detailed manner while giving exemplary information about varying compositions of capital, social values, dominant taste, and positions in social space. Bourdieu's method of visualization can be characterized as a form of configuration (see Rheinberger 2009), since he arranges different parts and elements in a multidimensional array of lifestyles in order to exemplify "the always open meaning of the present" (Bourdieu 1985, p. 728).

When we juxtapose this model with an example taken from PISA (Fig. 4.6), we note a mode of visualization that makes use of schematization and reinforcement: in a chart that is intended to illustrate the average reading competencies of 15-year-old students belonging to the so-called upper and lower quarters of society, these quarters are not at all defined by analytical language, but rather set up in a rigid hierarchical structure. The same is true for reading competencies, which are defined in numerical steps and quantified categories. With PISA, it seems obvious that a quantifying language of educational research is marked by a tendency to nationalism and a highly normative, rather accusing effect by determining how we should perceive students from a lower social background, namely as students with deficient learning outcomes who fail to be well integrated into the dominant culture. All in all it is obvious that the materiality of education is framed within a strong and closed mode of interpretation without reaching out to the broad horizon of educational presence.

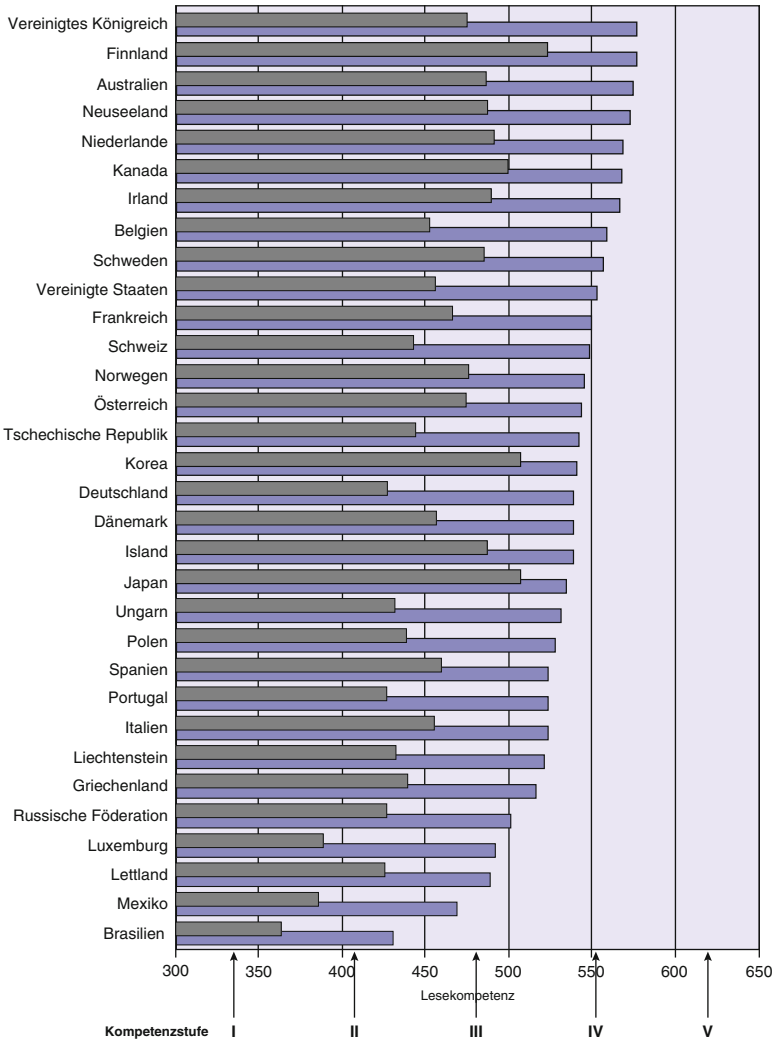

Fig. 4.6 Baumert et al. (2001): PISA 2000, p. 382

4.5 Conclusion

Different approaches or modes of enquiry transform the materiality of education. The materiality of education can be related to culture and meaning, and to educational presence. Educational presence can be described as materiality of education beyond fixed conventions and before interpretation comes to the fore. Educational manifestations can be transformed very differently, sometimes implying objectivity of educational manifestations, sometimes in order to produce presence by revealing a broad horizon of epistemological stimulations.

With respect to photography it can be said that it uses technical devices to transform educational manifestations into visual artefacts and at the same time subjects cultural patterns and conventions to critical evaluation. Thereby the making and perception of images themselves are dominated by cultural patterns, which are visually subjected in photography. Deviations and variations of what we expect to see are perceived only because these patterns always act as pictures behind the pictures. Thus, it is the level of culture and meaning and therefore, one might say, of interpretation, which is at stake in photography. The political and social impact of photography is its contribution to a critical understanding of educational norms. Photography is displaying a broad picture of education, sometimes representing cultural conventions and meaning and sometimes (often at the same time) aiming beyond the level of culture, in both cases addressing or questioning form, function, and handling of educational materiality in space. The visual sphere and visualized educational materiality beyond culture can be labelled as what Roland Barthes has described as '*punctum*' or, to use Hans Ulrich Gumbrecht's expression, as 'production of presence'.

Another mode of transforming educational manifestations is fictional. Fictional texts take emotions as their central theme. Educational manifestations here are transformed into manifold emotions, which are provoked by conventional values and their disruptions. Often it is the emotional undercurrent of cultural patterns and meaning, brought to the fore by staging situations of everyday school life. The two examples presented in this paper are very much concerned with the erosion of values in school, with both teachers' essentialist ascriptions as a means of power on the one hand and teachers' anxiety and fear on the other hand. Fictional inquiry might thus be a way of examining the various and often contradictory emotions present in an educational institution. Examining emotions also entails 'production of presence' and moving beyond the level of fixed and streamlined conventions.

My last example dealt with modes of quantification. Here, I have detected a maximum of normative interpretation of educational manifestations, used to establish fixed norms that exclude dialectical 'rough edges', support nationalism, and are influential in determining political and social life. The measuring of students' competences, for example, has resulted in standardized competence-oriented curricula.

All in all, educational manifestations in numbers provided by PISA imply many steps of normative interpretation and related operations of quantification. Therefore, PISA might be characterized as one of the most 'constructed' texts on education, whereas novels or photographic images are based on an empirical-sensual perception of school, while critically evaluating education as a material experience in space. Quantification therefore is rather contrary to the big horizon of the materiality of education, since it rather strengthens conventional patterns and national cultures of school, whereas photography and novels tend to unveil and explore new and disturbing aspects of the laboratory of education.

References

Alkemeyer, T. (2007). Literatur als Ethnographie. Repräsentanz und Präsenz der stummen Macht symbolischer Gewalt. *Zeitschrift für Qualitative Forschung, 8*, 11–31.

Apel, F. (2010). *Das Auge liest mit. Zur Visualität der Literatur*. Munich: Carl Hanser.

Barthes, R. (1985). *Die helle Kammer. Bemerkung zur Photographie*. Frankfurt: Suhrkamp.

Baudrillard, J. (2005). *The system of objects* (2nd ed., J. Benedict, Trans.). London: Verso.

Baumert, J., Klieme, E., Neubrand, M., Prenzel, M., Schiefele, U., Schneider, W., Stanat, P., Tillmann, K.-J., & Weiss, M. (Eds.). (2001). *PISA 2000. Basiskompetenzen von Schülerinnen und Schülern im internationalen Vergleich*. Opladen: Leske + Budrich.

Benjamin, W. (1980). A short history of photography. In A. Trachtenberg (Ed.), *Classic essays on photography* (pp. 199–216). New Haven: Leete's Islands Books. (This essay was originally published in 1931)

Blumenberg, H. (1986). *Die Lesbarkeit der Welt*. Frankfurt: Suhrkamp.

Bourdieu, P. (1985). The social space and the genesis of groups. *Theory and Society, 14*, 723–744.

Bourdieu, P. (1986). The forms of Capital. In J. Richardson (Ed.), *Handbook of theory and research for the sociology of education* (pp. 241–258). Westport: Greenwood.

Bourdieu, P. (2001). *Masculine domination*. Oxford: Polity Press/Blackwell.

Chartier, R., & Cavallo, G. (1999). *A history of reading in the West* (L. G. Cochrane, Trans.). London: Polity Press.

Csikszentmihalyi, M. (1993). Why we need things. In S. Lubar & W. D. Kingery (Eds.), *History from things. Essays on material culture* (pp. 20–29). Washington, DC: Smithsonian Institution Press.

Daston, L., & Gallison, P. (2002). Das Bild der Objektivität. In P. Geimer (Ed.), *Ordnungen der Sichtbarkeit. Fotografie in Wissenschaft, Kunst und Technologie* (pp. 29–99). Frankfurt: Suhrkamp.

Daston, L., & Gallison, P. (2007). *Objektivität*. Frankfurt: Suhrkamp.

Fleck, L. (1947/1983). Schauen, sehen, wissen. In L. Fleck, L. Schäfer, & T. Schnelle (Eds.), *Erfahrung und Tatsache* (pp. 147–173). Frankfurt: Suhrkamp.

Gumbrecht, H. U. (2004). *Diesseits der Hermeneutik. Die Produktion von Präsenz* (J. Schulte, Trans.). Frankfurt: Edition Suhrkamp.

Gombrich, E. H. (1982). *The image and the eye: Further studies in the psychology of pictorial representation*. London: Phaidon.

Heubach, F. W. (1987). *Das bedingte Leben. Theorie der psychologischen Gegenständlichkeit der Dinge. Ein Beitrag zur Psychologie des Alltags*. Munich: Wilhelm Fink.

Koenig, G. M. (2003). Auf dem Rücken der Dinge. Materielle Kultur und Kulturwissenschaft. In K. Maase & B. J. Warneken (Eds.), *Unterwelten der Kultur. Themen und Theorien der volkskundlichen Kulturwissenschaft* (pp. 95–118). Cologne: Böhlau.

Konersmann, R. (1999). *Kritik des Sehens* (2nd ed.). Leipzig: Reclam.

Lawn, M., & Grosvenor, I. (Eds.). (2005). *Materialities of schooling: Design, technology, objects, routines*. Oxford: Symposium Books.

Meyer-Drawe, K. (1999). Herausforderung durch die Dinge. *Das Andere im Bildungsprozeß. Zeitschrift für Pädagogik, 45*, 329–336.

Niemann, N. (2001). *Schule der Gewalt*. Munich: Carl Hanser.

Porter, T. M. (1995). *Trust in numbers. The pursuit of objectivity in science and public life* (2nd paperback ed.). Princeton: Princeton University Press.

Priem, K. (2007). Die Macht der Verhältnisse: Fiktion und Beobachtung im Schulroman. *Zeitschrift für Qualitative Forschung, 8*, 51–59.

Priem, K. (2008). Literatur als Seismograph des Sozialen: 'Die Unruhezone' als Ortsbestimmung der Adoleszenz bei Jonathan Franzen. In H.-C. Koller & M. Rieger-Ladich (Eds.), *Figurationen von Adoleszenz. Pädagogische Lektüren zeitgenössischer Romane* (pp. 155–163). Bielefeld: Transcript.

Priem, K. (2009). Photographic investigation of childhood: Visual perceptions of poor children around 1900. In C. Mayer, I. Lohmann, & I. Grosvenor (Eds.), *Children and youth at risk: Historical and international perspectives* (pp. 35–48). Frankfurt: Peter Lang.

Priem, K., König, G. M., & Casale, R. (Eds.). (2012). Die Materialität der Erziehung. Kulturelle und soziale Aspekte pädagogischer Objekte. *Zeitschrift für Pädagogik*, Beiheft 58. Weinheim: Beltz.

Rheinberger, H.-J. (2009). Sichtbar machen. Visualisierung in den Naturwissenschaften. In K. Sachs-Hornbach (Ed.), *Bildtheorien. Anthropologische und kulturelle Grundlagen des Visualistic Turn* (pp. 127–145). Frankfurt: Suhrkamp.

Sahlins, M. (1976). *Culture and practical reason*. Chicago: University of Chicago Press.

Schapp, W. (1976). *In Geschichten verstrickt. Zum Sein von Mensch und Ding* (2nd ed.). Wiesbaden: Heymann.

Williams, R. (1980). *The long revolution* (5th ed.). Harmondsworth: Penguin.

Chapter 5
Education and the 'New Totalitarianism': How Standards for Reporting on Empirical Studies of Education Limit the Scope of Academic Research and Communication

Sophie Ward

5.1 Introduction

In 2006, the American Educational Research Association (AERA) published *Standards for Reporting on Empirical Social Science Research in AERA Publications*. These standards are modelled on forms of representation of other sciences, and aim "to provide guidance about the kinds of information essential to understanding both the nature of the research and the importance of the results" (AERA 2006, p. 33). In particular, AERA stipulates that research claims should be 'warranted' and that reporting should be 'transparent', and it offers advice on such things as 'problem formulation', 'design and logic' and 'measurement and classification'. In 2009 this work was complemented by the publication of *Standards for Reporting on Humanities-Oriented Research in AERA Publications* (AERA 2009). In this second publication, AERA (2009) positions its standards as a 'framework of expectations' rather than a definition of the conduct of humanities-oriented research, and seeks to distance itself from the suggestion that "accountability can be determined through application of a checklist of guidelines and procedures" (ibid., p. 481). With this disclaimer in place, AERA identifies policy on such things as 'significance', 'substantiation' and 'coherence', and while these standards are qualitatively different from those prescribed for empirical social science research, they display the same preoccupation with methodological order. The aim of these publications is ostensibly benign: AERA's standards for the reporting on empirical social science research and humanities-oriented research are intended to assist researchers in the US to develop a strong publication record, which is considered a key marker of academic credibility. US universities receive core funding for teaching but not research, meaning that academics must apply to funding bodies for the full costs of

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their intended research (Martin 2011, p. 251). The development of researchers' professional credibility through academic publications is, therefore, vital.

A similar preoccupation with 'standards' marks the work of academics in the UK. The UK operates a dual-support system, where around 80 % of research funding is provided by research councils and charities and 20 % is provided by the Higher Education Council for England (HEFCE), and UK educational researchers are required to follow guidelines for empirical enquiry in order to receive HEFCE funds. In particular, UK researchers must identify the likely 'impact' of their proposed research, defined as demonstrable benefits to the wider economy and society, using an assessment exercise that was originally developed by scientists to appraise highly-specific research papers, but which has been converted by HEFCE into a "mass production model" of research evaluation across all disciplines (Martin 2011, p. 248). Ostensibly, HEFCE standards for academic research serve the public good by ensuring that tax-payers' money is well spent, and are therefore somewhat different from the American Educational Research Association's standards, which serve the researchers' good by helping them secure publications. However, this paper argues that, irrespective of their imagined utility, scientific standards for academic enquiry serve a socio-political agenda that atomises society by denying the possibility of collective human experience. This paper argues that efforts to impose standards in the reporting of empirical social science are symptomatic of the 'new totalitarianism', in which oppositional discourses are silenced through the regulation of academic research and communication. It concludes by identifying the potential of arts-based educational research as a means to resist the atomisation of society by asserting human connectivity.

The chapter is divided into three parts. Part one traces the development of scientific standards in educational research in the UK, and explores the theoretical underpinning of the political interest in 'what works' in the classroom. Part two considers the emergence of the 'new totalitarianism', and how changes to the assessment and funding of UK research are making the demonstration of impact a fundamental component of academic research and communication. Using the example of UK funding for filmmaking, the development of the 'new totalitarianism' in academic research is revealed to be part of the neo-liberal *Zeitgeist*. Part three makes the case for arts-based educational research as a form of resistance to the implementation of market values in education and society.

5.2 Part One: The Rise of 'Scientific' Standards in UK Educational Research, and the Obsession with 'What Works' in the Classroom

The landscape currently inhabited by UK academics has been carefully cultivated, and the preoccupation with 'standards' has been a long time in the making. Stefan Collini (2012, pp. 33–36) identifies four key dates in what he describes as the 'calculated assault' on UK higher education by successive Conservative governments: in 1981 there was a 'savage reduction' in university funding; in 1986 the

Research Assessment Exercise (RAE) was introduced to ostensibly measure the quality of academic research; in 1988 funding bodies were created to 'give direct effect' to government polices by making funds dependent on compliance with the implementation of various reforms or meeting specific targets, and in 1992 legislation enabled former polytechnics to become universities and ushered in a lower-cost model of 'mass' education. The Conservatives were supported in this endeavour by educationalists such as David Hargreaves, who provided an intellectual justification for the political desire to impose a particular conception of 'efficiency' in education (Collini 2012, p. 34). In 1996 Hargreaves gave a lecture to the Teacher Training Agency (TTA) in which he spoke out against what he called "frankly second-rate educational research" that: "…does not make a serious contribution to fundamental theory or knowledge; which is irrelevant to practice; which is uncoordinated with any preceding or follow-up research; and which clutters up academic journals that virtually nobody reads" (Hargreaves 1996, p. 7). Hargreaves advocated a national scientific strategy for educational research based on a medical model, claiming that in education "we too need evidence about what works, with whom and under what conditions and with what effects" (ibid., p. 8).

Hargreaves' TTA lecture prompted the Office for Standards in Education (Ofsted) to commission a report, *Educational Research: A Critique*, authored by James Tooley (1998). Tooley (1998, p. 29) examined a sample of British academic journal articles, and concluded that 63 % of academic journal articles did not satisfy 'good practice' as defined by Hargreaves, and he identified a range of problems including the quality of literature reviews, the use of secondary citations, and the lack of triangulation. Although Tooley acknowledged that the Research Assessment Exercise (RAE) was placing pressure on universities to publish in academic journals, he was nevertheless highly critical of academics who were "engaged in the production of trivia" (ibid., p. 79). In particular, Tooley displayed antipathy towards what he called "partisanship concerning political reform" (ibid., p. 29), and he questioned the validity of studies that criticised the marketization of education. For example, Tooley described as 'contentious' one researcher's claim that the introduction of market principles into the education system had made matters worse for vulnerable children (ibid., p. 56), and he flatly rejected another researcher's claim that the Conservatives' reforms had introduced "self-seeking and ultimately selfish individualism" into society, and that this had had a "devastating effect on schools and teachers" (ibid., p. 53). In response to another researcher's criticism of the 'profit and loss account' in education, Tooley defended the Conservative record, stating that "under the Conservatives, no state school has ever been managed for *profit*" (ibid., p. 29; italics in original). Furthermore, Tooley (ibid., p. 56) appeared to be deeply suspicious of what he described as 'the adulation of great thinkers': for example, he took issue with one researcher's use of Bourdieu's theory to analyse the domination of subordinate groups in society, stating that "writing about Bourdieu removes any onus on the researcher to look for anything which could be useful for classroom practice" (ibid., p. 61).

When New Labour came to power in 1997 it responded with enthusiasm to the call-to-arms for research into 'what works' in schools; an agenda which resonated

with Prime Minister Tony Blair's pre-election proclamation that "what counts is what works" (Blair 1997, p. 1). In 1999 the DfEE duly established a National Educational Research Forum to forge policies regarding the future direction of Educational Research, and in 2001 the Education Panel of the RAE was restructured to include 'user group' (teacher) representation (Elliott and Doherty 2001, p. 211) to limit academics' control of research evaluation. New Labour's reorganisation of educational research gave greater emphasis to the "practical utilisation of research findings" to maximise the performance of the education system, and resulted in an explosion of interest in School Effectiveness Research (SER) (Elliott and Doherty 2001, p. 211). Michael Fielding (2001, p. 143) identifies the "enormous psychological as well as practical and political appeal" of being able to demonstrate that "things have changed for the better', making the popularity of SER understandable, yet researchers" enthusiasm for SER was bound up with a willingness to accept a research paradigm informed by market values, as promoted by Tooley (1998), and many researchers were uncomfortable with this agenda. In spite of the volume of articles uncovered by Tooley (1998) that were critical of neo-liberalism, Ofsted appeared unsympathetic to academics' concern over the promotion of market values in education, and pledged its support for the assault on the "irrelevance and distraction" of much publically funded educational research (Woodhead in Tooley 1998, p. 1).

Tooley's denigration of philosophical research that does not aim to enhance school performance, and the government's belief in the pursuit of 'efficiency' as a guiding principle for political action, appeared to be validated by scientific accounts of the human condition that were emerging from psychology and educational research around this time. According to Smeyers and Depaepe (2012, p. 324), in the late twentieth century developmental psychology came to displace philosophy and ideology as a "legitimising science" in educational theory, and the goals of education were redefined in response to psychological theories about the "optimal development of the 'self'" (ibid., p. 323). Under the scientific model: "… the isolated meritocratic individual replaces the person or subject whose home is a social practice that can be understood to a large extent by focusing on reasons and intentions which explain the alternative ways in which human beings can take part" (Smeyers and Depaepe 2012, p. 328).

Clearly a profound shift in thinking about education had occurred, and for exponents of the scientific method this was long overdue. According to Reynolds et al. (1996), the Marxist conception of education as a social practice had held back the development of Schools Effectiveness Research (SER) during the 1970s, and thus while prototypes of SER existed in the 1960s in the form of medical and medico-social studies of the differences between schools' delinquency rates and child guidance referral rates (Reynolds et al. 1996, p. 135), it was not until the international "paradigm convergence" (Ball 2001, p. 48) of the 1980s and 1990s, when nations came to share a market-based outlook on education as the consumption of a product, rather than a socio-political relationship, that the idea of quantifying and comparing educational provision gained currency.

SER is similar in outlook to the Human Genome Project, established in 1990 in the USA to determine the sequence of chemical base pairs which make up human

DNA: in theory, once all of the factors that make up human education are identified and their interaction understood, then educational researchers will be able to develop value-free, scientific strategies to best support the performance of individual schools. SER is, therefore, a prime example of research informed by the scientific model of the "isolated meritocratic individual" (Smeyers and Depaepe 2012, p. 328). In spite of this, the promotion of SER is commonly positioned not as the adoption of a particular theory of the self, but as a pragmatic response to the 'knowledge economy', which has notionally come to replace "the brute forces of industry" as the source of national wealth (Wriston 1992, p. 7). In the knowledge economy, individuals must prepare themselves to enter the global job market by embracing a doctrine of self-reliance and self-efficacy and accruing credentials for employment (Connolly 2013), and the role of educational researchers is to elucidate and manipulate educational performance to enable schools and universities to support this process. Hence the ambitious scope of SER to research the multiple measures of pupil outcomes, which include such things as locus of control; self-esteem; delinquency; parental socio-economic status and ethnicity (Reynolds et al. 1996, p. 138). Clearly, the justice of casting marginalised young people as autonomous units within a globalised economic network, and positing education as the key to their personal success within that network, is open to question, yet Elliott and Doherty (2001, p. 210) liken educational researchers to a 'midwife', hired by successive governments to help bring this workforce into existence.

5.3 Part Two: The 'New Totalitarianism' and the Quest for 'Impact'

While the aims of SER appear to be based on a value-free, scientific account of the development of the self, the idea that social relations are reducible to factors that are amenable to measurement and manipulation is based on the neo-liberal belief that human experience is an individual transaction, rather than a communal negotiation. The neo-liberal idea of the self as an autonomous economic unit is underpinned by 'rational choice theory', or the belief that individuals are "rational, self-interested, have a stable set of internally consistent preferences, and wish to maximise their own happiness (or 'utility') given their constraints, such as the amount of time or money that they have" (Hill and Myatt 2010, p. 9). Neo-liberalism is, therefore, recognisable as the reassertion of classical liberal economics, as postulated by the Enlightenment economist Adam Smith. The date most often cited for neo-liberalism's formal inception is 1947, when Friedrich von Hayek organised the first meeting of what was to become the Mont Pelerin Society. The early neo-liberals' aim was to develop a form of resistance to the totalitarian forces of fascism and communism that had wreaked havoc in Europe (Friedrich 1955, p. 519), and this discourse of resistance was based upon the concept of freedom and free market principles (Ward 2013). Ironically, neo-liberalism has produced within the UK and elsewhere a 'new totalitarianism', as the ideological grip of single parties (whether

of the right or left) has given way to a 'single mindset' in which there is one solution to cover all society's activities: the market solution of free trade, minimal government, privatisation, and deregulation (Ramonet 2008). Ramonet describes how the market penetrates all society's interstices, like a liquid, that leaves nothing and spares nothing and this process of penetration has been both gradual and relentless. Milton Friedman (2002, pp. xiii–xiv), one of the most celebrated neo-liberal thinkers, boasted of the strategy of waiting patiently for a crisis to occur, developing "alternatives to existing policies" and keeping them "alive and available until the politically impossible becomes politically inevitable". Certainly there is evidence to support Friedman's assertion that the establishment of neo-liberal unilateral thinking was achieved incrementally, and to a large extent imperceptibly: numerous neo-liberal think tanks were established in Europe and the USA in the post-war era; neo-liberal ideology was promoted by the IMF during the 1960s and 1970s and, following an economic crisis, neo-liberal economic policy domination began in the UK with the election of Margaret Thatcher in 1979 and in the USA with the election of Ronald Reagan in 1980. Since the 1980s, the neo-liberal belief that ethical judgements and values are individual preferences, and that freedom is the satisfaction of individuals' wants without constraints (Ward 2012) has been widely used to justify the imposition of a market model of society, in which markets are used "to allocate health, education, public safety, national security, criminal justice, environmental protection, recreation, procreation and other social goods" (Sandel 2012, p. 8). The ideology of the market touches all aspects of life in the UK and USA, and the neo-liberal account of education as the means to prepare individuals with the skills and credentials to barter for employment in the knowledge economy has been promoted internationally by US-backed multilateral agencies (such as the World Bank, IMF, and the OECD) and the European Union, and as a result the reach of neo-liberalism is global (Connolly 2013).

5.3.1 Creative Partnerships: An Example of the Absorption of Left Wing Agendas into the Neo-liberal Hegemony

Paradoxically, then, the vision of some kind of 'scientific' educational research, wrestled free from ideology and in particular the 'adulation' of left-wing thinkers such as Bourdieu, is itself informed by ideology in the form of neo-liberal market fundamentalism. Under the new totalitarianism, educational research that does not aim to elucidate 'what works' in teaching and learning is ridiculed, as demonstrated by Tooley (1998), or dismissed as "intellectual obscurities masquerading as profundities" (Hargreaves 2001, p. 201). Of even greater concern, perhaps, is the extent to which empirical social science research of the type described by AERA (2006, 2009) is neutralised through absorption into the neo-liberal meta-discourse. Approaches adopted by researchers that have social underpinnings, such as emancipatory action research, may unwittingly serve the neo-liberal agenda by seeking to

'empower' individuals to become ever-more autonomous units within the market society. An illustration of this absorption of left wing agendas into the neo-liberal hegemony is Creative Partnerships. Creative Partnerships was an arts education programme established in England in 2002 by the New Labour government, with the aim of giving everyone the chance to play an active part in the society we create, checked only by the limits of their talent and ambition (Morris 2003). Creative Partnerships was greeted with enthusiasm by left wing educators and arts practitioners who wanted to help disadvantaged pupils in the most deprived areas of England discover their 'voice'. Using the creative arts as their medium, practitioners attempted to empower pupils by giving them 'ownership' of projects, with results that often confounded expectations (Ward 2010).

Consider for example the project described by Steven Miles (2007). Miles conducted a 6-month study of a Creative Partnerships project that took place in the Creative Campus in County Durham, a facility which provides performance training for young people that have been excluded from mainstream education. In his ensuing report, Miles (2007, p. 505) expressed his concern over New Labour's desire to "give socially and economically marginal individuals the opportunity to adapt to changing economic conditions, while neglecting the underlying causes of exclusion", and he identified the chimera of economic empowerment offered by schemes such as Creative Partnerships. Notwithstanding his unease over the instrumental use of arts-based education, Miles found much to admire in this Creative Partnerships project. The young people (aged between 14 and 18) interviewed and observed by Miles were from "complicated family and educational backgrounds" and had "particular problems in dealing with authority" (ibid., pp. 508–509), yet in spite of the extremely challenging behaviour exhibited by these young people, the staff at the Creative Campus were determined to offer them a viable alternative to mainstream education, in which "they were accepted as valid individuals" (ibid., p. 509). Miles records the views of a young person, who claimed that the teachers at his mainstream school had told him he was "a misfit" who would not get a job, and that in the "big wide world" no one is "gonna like you", whereas the staff at the Creative Campus "aren't telling you that. They're telling you you've got capabilities" (ibid., p. 510). Miles records the experience of another pupil, who claimed that she had experienced a sense of "authority" during performance work, because the cast trusted her (ibid., p. 512).

Overall, the young people appeared to feel more at ease with themselves and others as a result of taking part in the project, and this finding suggests that such initiatives may offer troubled young people an opportunity to reassess the quality of their interactions with other people prior to leaving fulltime education. However, the actual project reported here aimed to go beyond this important remit, in order to focus on the "practical value of creative learning" by aligning the learning experience with employability (ibid., p. 512). Thus, the young people were asked to take part in a mock-interview for a fictional performance related job, and Miles records the awkward result of this endeavour: "When being interviewed, one individual's behaviour was entirely incongruous with an interview setting. This young person

behaved in a way that was apparently inappropriate, but not intentionally so. He was being himself" (Miles 2007, p. 513).

This young person's experience arguably encapsulates the tension inherent in attempting to empower pupils within a neo-liberal framework. The economic agenda of educational schemes such as Creative Partnerships is not concealed: famously, Prime Minister Tony Blair told the British people that "education is the best economic policy that we have" (Blair in Barber 1997, p. 46). Artists and educators may wish to enhance the self-esteem of pupils who have had their self-image damaged by poverty and intergenerational unemployment, but they are expected to help pupils harmonise this 'self' with the demands of the free market economy, so that individuals' raised expectations might be translated into employability. Arguably, the focus on employability risks damaging disadvantaged young people's fledgling self-esteem, developed through arts-based education, by forcing them to acknowledge the incongruity between their actual self and the 'ideal self' that is aligned with the behaviours of more privileged individuals, who may fittingly 'be themselves' in job interviews. Furthermore, the employability agenda is somewhat illogical: as noted by Miles, creative learning for employment provides "something of a false hope in a local economic context in which opportunities are challenging to secure, and in which the job market is polarised" (ibid., p. 515).

The ethics of deferring questions about the structural constraints faced by socially and economically deprived young people is not addressed by schemes such as Creative Partnerships, and Jones and Thomson (2008, p. 724) speak out against the 'habitual over claiming' of educational initiatives that seek to promote qualities such as 'inclusivity and creativity'. According to Jones and Thomson, such initiatives gloss over the improbability of yoking together "economic dynamism, with its polarising effects, and the rescue of the ex-working class from its state of social exclusion" (ibid., p. 724). Furthermore, Jones and Thomson point out that this model of education denies the fact that individual fulfilment and social cohesion are not always compatible agendas, as demonstrated globally in 2008 by the bankers' pursuit of self-interest, which disrupted the operation of national economies, and more locally by the young people in the Creative Campus, whose expression of individual turmoil disrupted the operation of mainstream schools, from which they were subsequently excluded.

Arguably, educational projects such as the one described above should alert us to the absurdity of the scientific concept of the "isolated meritocratic individual" (Smeyers and Depaepe 2012, p. 328), as they draw attention to how the individual is constrained by material conditions. However, many educationalists have persisted in the belief that neo-liberalism permits creative empowerment, because neo-liberalism seems to tolerate, or even actively support, the application of methodologies designed to liberate oppressed people. Politicians such as UK Prime Minister have spoken the language of emancipation, declaring that "the arts and creativity set us free" (Blair in DCMS 2001, p. 3), yet in the absence of political intervention to redistribute wealth and tackle joblessness, the liberty on offer is revealed to be nothing more than free market fundamentalism, concealed behind the disingenuous embrace of ideological plurality.

5.3.2 The Research Excellence Framework (REF)

The idea of 'setting people free' has found its way into political discourse on the function of the academy. In accord, it seems, with the Conservative's campaign against frivolous and introspective research, New Labour promised to intervene to define the scope of academic communication, and positioned itself as being on the side of the public in an imagined power struggle with academics. Education and Employment Secretary, David Blunkett, proclaimed that the findings of publically funded educational research would, from now on, be widely disseminated and put to good use, stating, "Knowledge is power, and a power increasingly – and encouragingly – in the hands of the many and not the few" (Blunkett, in the ESRC Annual Report, 1999–2000, p. 3). In 2006 the socio-political function of educational research was further defined by New Labour when it announced that HEFCE would develop a new framework for the assessment and funding of research, the 'Research Excellence Framework' (REF), to come into effect after the 2008 Research Assessment Exercise (RAE). A central feature of New Labour's revision of research funding allocation was the stipulation that 20 % of research funding would be based on 'impact'. The idea of impact complimented the political claim that "what counts is what works" (Blair 1997, p. 1), and under the REF academics must now demonstrate that their research has impact, defined as "demonstrable benefits to the wider economy and society", and the guidelines make clear that impact does *not* include "intellectual influence" on the work of other academics (Collini 2012, p. 169).

In summer 2010 the REF team ran workshops as part of the impact pilot exercise, looking at the impacts of research in the performing arts, humanities and social sciences, and the ensuing report (REF 2010) provides insight into the political conception of the social function of academic research and communication. Firstly, as might be expected, the report affirms the government's determination to discipline academics, stating that "there will be behavioural consequences" to the impact agenda, and that the influence on "researcher behaviour" will be positive, as it will improve the "tracking of research beyond academia" and improve "records maintenance" (REF 2010, p. 2). Secondly, the report seeks to establish that the "core beneficiaries" of publically funded research will be the "wider public, conceived of broadly from regional to international", rather than academics (ibid., p. 2). Thirdly, the report states that research that describes the "routine engagement activities" of the department or research centre does *not* demonstrate a high level of impact and "should be discouraged" (ibid., p. 3). The report also states that academics will need to collect "supporting data" to demonstrate impact, such as "visitor numbers from museums" (ibid., p. 4). Academics must, it seems, invest considerable time and effort to make sure that impact is achieved and recorded, as without this evidence the value of their research cannot be determined. As Collini points out, "In terms of this exercise, research plus marketing is not just better than research without marketing: it is better *research*" (Collini 2012, p. 175, italics in original).

The REF (2010) report identifies two case studies that were used in the REF workshop to evaluate the impact of educational research. The first is "Research on

the deployment and impact of classroom support staff that informed education policy and benefitted pupils" (REF 2010, p. 13). The second is "A study on the use of talk to scaffold learning that informed policy-making and professional practice" (ibid., p. 13). The titles alone are enough to reveal that impact is bound up with the scientific, ostensibly value-free interest in 'what works' in the classroom, and it therefore seems likely that the impact agenda will further conceal the ideological desire to position the learner as an autonomous unit in the market society. This possibility seems even more likely when the REF's performing arts and humanities case studies are considered. For example, the case study on "Cultural and commercial benefits through the contribution of English research to new museum exhibitions" (ibid., p. 10) and the case study on "Commercial and cultural benefits from a partnership between performance academics and a digital arts company" (ibid., p. 6) provide examples of the commodification of culture, as critiqued by Michael Sandel (2012). Sandel argues that we "corrupt a good, an activity, or a social practice whenever we treat it according to a lower norm than is appropriate to it" and that goods that should be beyond financial measurement are debased when we impose a cash value on them (ibid., p. 46). Under the REF, *everything* can be bought and sold as a commodity: indeed, what cannot be 'sold', either figuratively as a strategy for improving classroom practice or literally as a 'ticket only' arts event, is deemed to be irrelevant. Academics, whose voice might challenge and hold back the imposition of market values in UK society and the potential debasement of their research, are, it seems, being obliged by government-imposed guidelines for academic research and communication to speak the language of the market.

The assault on educational research is not, of course, occurring in a vacuum. In order to demonstrate how the changes to the assessment and funding of academic research are part of the neo-liberal *Zeitgeist*, the government funding of UK filmmaking is considered next. The discussion draws intentionally upon the work of Bourdieu, a theorist whose influence was singled-out for condemnation by Tooley (1998).

5.3.3 "The Hatred of the Barbarian for the Maker" (Arthur Machen 1907)

In 2010, the newly elected Coalition government announced its intention to impose austerity measures in the UK, and Culture Secretary Jeremy Hunt duly abolished the UK Film Council and withdrew the State's annual investment of £15m in film production. In January 2012 Prime Minister David Cameron gave a speech at Pinewood Studios in which he praised films that are commercially successful, and complained that historically a disproportionate amount of public money was directed at a type of art-house production (Cameron 2012). Nailing his colours to the (commercial) mast, Cameron proclaimed that we need to make films that people want to see and announced his government's decision to direct National Lottery funding at mainstream film production.

Although the Coalition's decision to fund 'what people want to see' is positioned as a pragmatic response to the UK's economic difficulties, the favouring of mainstream over niche products is longstanding. In his novel, *The Hill of Dreams*, first published in 1907, Arthur Machen (2010) laments society's failure to respond to fiction that is not crafted with the sole aim of being, to borrow from Cameron, 'what people want to read'. Machen's fictional novelist cannot reconcile himself to a world that values everything according to its economic return, and which shamelessly parades "the hatred of the barbarian for the maker" (ibid., p. 161). The protagonist's implosion arguably serves to remind us that institutions such as the UK Film Council were established, in part, to protect artists from the whims of the market, not because artists are vulnerable, but because as a society we benefit from artistic diversity. This point was made by UK film director Ken Loach (2012) in his response to Cameron's Pinewood speech, when he described the promotion of filmmaking that attempts to second guess the public's appetite as a 'travesty' that risks narrowing the art form. By rejecting art-house cinema on the grounds of austerity, Cameron has aligned himself with long-standing interests of commercial cinema and the major distributors, who have, according to Bourdieu (2010, p. 227), reduced works of art to "products and commodities" and in so doing "virtually infantilized" all contemporary societies (ibid., p. 226) by feeding them a bland diet of easily digestible material. Concern over the stultifying effects of homogeneity, expressed a century ago by writers such as Machen, underpinned the attempts made by governments in the twentieth century to promote and protect artistic diversity through the establishment of arts organisations, but this policy is being rapidly reversed as governments around the world embrace market values (Bourdieu 2010), and in particular the dogma that we should condition individuals for the market by making them universally receptive to the same commodities and services. The dismantling of mechanisms to promote heterogeneity through State funding of the arts may therefore be viewed as a deliberate and retrograde step that reasserts the power of the 'barbarian'.

5.4 Part Three: Arts-Based Educational Research as a Means of Resistance

Educational research, like filmmaking and other artistic and intellectual endeavours, is being conducted within a social context that is increasingly dominated by neoliberal ideology that seeks to judge everything, including the self, according to its market value. The challenge, then, for educational researchers is to re-articulate the value of education as something other than a means to gather credentials, support employability, and cultivate economic self-reliance in a highly individualistic market society. Numerous educational researchers, such as Peter Clough, Carl Bagley and Patricia Leavey, have demonstrated the feasibility of exploring the social impact of education through the arts, using forms such as fiction, dance and drama as a means of inquiry and dissemination. In spite of the problems with arts-based projects identified earlier in this paper, there is, arguably, no form of educational research better

suited to the task of counteracting neo-liberalism than arts-based research, since recent advancements in our understanding of the human mind have revealed the arts to be profoundly linked with a sense of community, rather than individuality.

In his study of the role of art in human cognition and cultural evolution, Per Aage Brandt (2006, p. 173) identifies four phenomenological aspects of formal perception: *symbolization, construction, epiphany* and *disembodiment*. Of these, the moment of epiphany and disembodiment is particularly relevant to the development of community. According to Brandt (ibid., p. 172), the arts cause a shift from pragmatic to formal perception that "creates a transcendent, affective communal atmosphere, an intersubjective feeling of unity, intentionally oriented toward the shared unique instant in which the *epiphanic* presence of this meaning occurs". Brandt (ibid., p. 172) claims that the perceptual shift "affects the 'self' of performers and perceivers, momentarily creating a euphoric, even ecstatic, feeling of *disembodiment* or fading of the personal 'I'". In addition, Brandt (ibid., p. 174) states that "our minds are capable of attuning plastically to each other, attending jointly to a single event" and can "hold 'private' ideas and understandings and 'public' (socially shared) conceptions at the same time". The evolution of this impressive faculty suggests that we are designed to be cooperative, and it therefore seems that our mental architecture refutes the neo-liberal Prime Minister Margaret Thatcher's (1987) assertion that "There is no such thing as society".

Arts-based educational research that involves the mastery of a craft, such as calligraphy or batik printing, also reasserts the primacy of community, since according to Richard Sennett (2008, p. 288), "Good craftsmanship implies socialism". Sennett's claim is based, first, on the recognition of the "shared experiment, the collective trial and error" that goes into the historical development of crafts, and, second, on the recognition that craftwork focuses on "objects in themselves and on impersonal practices" and "turns the craftsman outward" (Sennett 2008, p. 288). The status of craftwork as a means of communion, rather than individualism, was also recognised by Dewey:

> The development within the young of the attitudes and dispositions necessary to the continuous and progressive life of a society cannot take place by direct conveyance of beliefs, emotions and knowledge. It takes place through the intermediary of the environment…By doing his share in the associated activity, the individual appropriates the purpose which actuates it, becomes familiar with its methods and subject matters, acquires needed skill, and is saturated with its emotional spirit. (Dewey 1952, p. 26)

Finally, arts-based educational research might be said to counteract neo-liberalism by engaging participants with culture, not by accumulating the 'cultural capital' that allows individuals to gain a competitive advantage over one another in the workplace, but through taking part in democratic, cultural interaction, as envisaged by Dewey. According to Dewey (1952), individuals should not be drilled in culture, or 'Hellenised' through instruction in what might be considered to a nation's cultural heritage: instead, they should develop a relationship with cultural artefacts based upon a recognition of the collective endeavour that underpins craftwork; an endeavour which engenders a feeling of connectivity, rather than individuality. According to Dennis Dutton: "The admiration of skill is not just intellectual; skill exercised by

writers, carvers, dancers, potters, composers, painters, pianists, singers, etc. can cause jaws to drop, hair to stand up on the back of the neck, and eyes to flood with tears. The demonstration of skill is one of the most deeply moving and pleasurable aspects of art" (Dutton 2009, p. 53). Educational researchers, in tandem with creative practitioners, are able to bring individuals into contact with cultural materials, and to demonstrate skill based upon the knowledge of craft that is deeply affecting.

Of course, the use of arts-based educational research does not liberate academics from the REF's demand for impact, and, as discussed previously, UK society has been colonized by neo-liberal ideology, making it difficult to wrestle the arts free from its grasp. Indeed, Jonothan Neelands and Boyun Choe (2010) point out that politicians and neo-liberal educationalists have managed to re-position the arts as a source of individual agency, and that the development of this discourse of individualism within education has inhibited the ability of the arts to engender a sense of democratic community: "In our view, the current English model of creativity places too much emphasis on an unconditional and egalitarian faith in human agency, which has become increasingly distanced from a pro-social creative consciousness, shaped by critical, ethical and moral reflections on the social, cultural and economic limits of human capacity" (Neelands and Choe 2010, p. 300).

A pro-social consciousness might be developed through arts-based educational research, but this task will not be easy, given that neo-liberal market fundamentalism has saturated society and turned non-compliant researchers into figures of ridicule, to be mocked by academics such as Tooley. Furthermore, as stated previously, it is difficult to avoid stumbling into the trap of supporting rather than resisting unilateral thinking, as neoliberalism has absorbed competing ideologies (such as progressivism; education for democracy; emancipatory research and so on) and used them to its own advantage (Ward 2010). Morwenna Griffiths (2012) identifies how the academic who wishes to resist the imposition of market values in educational research and beyond is placed in a difficult position, and her argument inspires us to reflect on how the researcher must both conceal his/her antipathy towards the mono-discourse and resist its powerful embrace:

> …there is always a considerable danger that when somebody lives with, but tries to subvert, a hostile environment, that she deceives herself about who and what she becomes. It is possible to live an educational, philosophical life but it must mean expending considerable energy producing smokescreens behind which to do it, and a vigilant reflexivity about the shape that the life has become. (Griffiths 2012, pp. 411–412)

In the UK and elsewhere, conditions imposed by political administrations are limiting the scope of academic research and communication. It is only by acknowledging how life has become for educational researchers under the new totalitarianism that the process of resistance will be recognised as hugely difficult, yet essential. In this endeavour, it may be helpful to consider Friedman's (2002) analysis of the imposition of neo-liberalism. By developing alternatives to existing policies that foreground human connectivity, rather than individual autonomy, and by keeping these alternatives alive through research that challenges unilateral thinking, it may be possible to break neo-liberalism's ideological stranglehold on education and society, if and when the opportune moment arises.

References

AERA. (2006). Standards for reporting on empirical social science research in AERA publications. *Educational Researcher, 35*(6), 33–40.

AERA. (2009). Standards for reporting on humanities-oriented research in AERA publications. *Educational Researcher, 38*(6), 481–486.

Ball, S. J. (2001). Labour, learning and the economy: A 'policy sociology' perspective. In M. Fielding (Ed.), *Taking education really seriously: Four years Hard Labour* (pp. 45–56). London: Routledge.

Barber, M. (1997). *The learning game*. London: Indigo.

Blair, T. (1997). *New labour because Britain deserves better*. Retrieved June 18, 2010, from http://www.labourparty.org.uk/manifestos/1997/1997-labour-manifesto.shtml

Bourdieu, P. (2010). Culture is in danger. In G. Sapiro (Ed.), *Sociology is a martial art: Political writings by Pierre Bourdieu*. New York: The New Press.

Brandt, P. A. (2006). Form and meaning in art. In M. Turner (Ed.), *The artful mind: Cognitive science and the riddle of human creativity* (pp. 171–188). Oxford: Oxford University Press.

Cameron, D. (2012). '*Make money not art-house films': British PM*. Retrieved August 24, 2012, from http://www.news.com.au/entertainment/movies/make-money-not-arthouse-films-british-pm-tells-industry/story-e6frfmvr-1226243062914#ixzz24Sc4vuEo

Collini, S. (2012). *What are universities for?* London: Penguin Books Ltd.

Connolly, R. (2013). Have you ever considered a career in total revolution?: Drama and the corporate reform of UK higher education. *Studies in Theatre and Performance, 33*(2), 225–243.

DCMS. (2001). *Culture and creativity: The next ten years.* Retrieved February 27, 2008, from www.culture.gov.uk

Dewey, J. (1952). *Democracy and education*. New York: The Macmillan Company.

Dutton, D. (2009). *The art instinct*. Oxford: Oxford University Press.

Elliott, J., & Doherty, P. (2001). Restructuring educational research for the 'Third Way'? In M. Fielding (Ed.), *Taking education really seriously: Four years Hard Labour* (pp. 209–221). London: Routledge.

ESRC. (2000). *Annual report (1999–2000) ESRC.* Retrieved July 4, 2010, from http://www.esrc-societytoday.ac.uk/ESRCInfoCentre/Images/Annual%20Report%2099-00_tcm6-6040.pdf

Fielding, M. (2001). Target setting, policy pathology and student perspectives: Learning to labour in new times. In M. Fielding (Ed.), *Taking education really seriously: Four years Hard Labour* (pp. 143–154). London: Routledge.

Friedman, M. (2002). *Capitalism and freedom: 40th anniversary edition*. Chicago: University of Chicago Press.

Friedrich, C. J. (1955). The political thought of neo-liberalism review by Carl J. Friedrich. *The American Political Science Review, 49*(2), 509–525.

Griffiths, M. (2012). Is it possible to live a philosophical, educational life in education, nowadays? *Journal of Philosophy of Education, 46*, 397–413.

Hargreaves, D. H. (1996). *Teaching as a research-based profession: Possibilities and prospects*. London: Teacher Training Agency.

Hargreaves, D. H. (2001). Revitalising educational research: past lessons and future prospects. In M. Fielding (Ed.), *Taking education really seriously: Four years Hard Labour* (pp. 197–208). London: Routledge.

Hill, R., & Myatt, T. (2010). *The economics anti-textbook: A critical thinker's guide to microeconomics*. London: Zed Books.

Jones, K., & Thomson, P. (2008). Policy rhetoric and the renovation of English schooling: The case of Creative Partnerships. *Journal of Education Policy, 23*(6), 715–727.

Loach, K. (2012). *Ken Loach: Pouring lottery money into blockbusters is a travesty*. Retrieved August 24, 2012, from http://www.telegraph.co.uk/news/politics/9006675/Ken-Loach-pouring-lottery-money-into-blockbusters-is-a-travesty.html

Machen, A. (2010). *The hill of dreams*. Cardigan: Parthian Library of Wales.

Martin, B. R. (2011). The research excellence framework and the 'impact agenda': Are we creating a Frankenstein monster? *Research Evaluation, 20*(3), 247–254.

Miles, S. (2007). Feeling 10 feet tall: Creative inclusion in a community of practice. *British Journal of Sociology of Education, 28*(4), 505–518.

Morris, E. (2003). *Creative journeys*. Retrieved May 8, 2008, from http://www.guardian.co.uk/education/2003/jun/24/artsinschools.schools

Neelands, J., & Choe, B. (2010). The English model of creativity: Cultural politics of an idea. *International Journal of Cultural Policy, 16*(3), 287–304.

Ramonet, I. (2008). Chapter 1: Introduction. In R. Brouillette (Director), *Encirclement: Neoliberalism ensnares democracy.* Québec (Canada), HDCam (shot in 16mm), B&W, 2008, 160 minutes.

REF. (2010). *Research excellence framework: Workshops on the impacts of research in the practice-based creative and performing arts, the humanities and social sciences.* Retrieved October 8, 2012, from http://www.ref.ac.uk/media/ref/content/background/impact/workshops_impact_research.pdf

Reynolds, D., Sammons, P., Stoll, L., Barber, M., & Hillman, J. (1996). School effectiveness and school improvement in the United Kingdom. *School Effectiveness and School Improvement, 7*(2), 133–158.

Sandel, M. J. (2012). *What money can't buy: The moral limits of markets*. London: Allen Lane.

Sennett, R. (2008). *The craftsman*. London: Penguin Books Ltd.

Smeyers, P., & Depaepe, M. (2012). The lure of psychology for education and educational research. *Journal of Philosophy of Education, 46*(3), 315–331.

Thatcher, M. (1987). *Interview for woman's own.* Retrieved October 31, 2009, from http://www.margaretthatcher.org/speeches/displaydocument.asp?docid=106689

Tooley, J. (1998). *Educational research: A critique*. London: Office for Standards in Education.

Ward, S. C. (2010). *Understanding creative partnerships: An examination of policy and practice.* Retrieved February 11, 2013, from http://etheses.dur.ac.uk/525/

Ward, S. (2012). Education under the heel of Caesar: Reading UK higher education reform through Shakespeare's *Antony and Cleopatra*. *Journal of Philosophy of Education, 46*(4), 619–630.

Ward, S. (2013). Creativity, freedom and the crash: How the concept of creativity was used as a bulwark against communism during the cold war, and as a means to reconcile individuals to neo-liberalism prior to the great recession. *Journal for Critical Education Policy Studies, 11*(3), 110–126.

Wriston, W. B. (1992). *The twilight of sovereignty*. New York: Macmillan.

Chapter 6
Materials That Shape Researchers

Naomi Hodgson

With the foregrounding of research and innovation in policy for the development and sustainability of the knowledge society, the figure of the researcher has come into particular focus. Since 2010, the European Higher Education Area has formally been in place. Established through the Bologna Process, initiated in 1999, it has bought about comparability and compatibility between member states' higher education systems and made mobility, quality assurance, employability, and lifelong learning central to their individual and collective missions within and between member states. Alongside the European Higher Education Area, and a further central component in Europe's constitution as a knowledge society, is the European Research Area. This encompasses all research, development, and innovation activities, and so the training of doctoral researchers and the ongoing training and development of researchers in general is a central concern. There is an overlap between the ERA and the EHEA and plans are in place it seems to merge the two. This is not only a matter of practical utility, but is also indicative of a shift in the understanding of research and the role of the university in contributing to and competing in the innovation marketplace.

This essay seeks to provide an account of the material conditions in which researchers work today, from the perspective of governmentality. This will contribute to the elaboration of a more detailed account of the particular mode of governmentality operative today, the functioning of power this entails, and the subjectivity this produces (see e.g. Simons and Hodgson 2012). The particular focus of this essay is the understanding of who the researcher is in current European and member state policy. This will be illustrated with reference not only to current policy but also to a particular device developed for the definition and ongoing self-evaluation of the researcher: the Researcher Development Framework. This will illustrate how

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the researcher is understood, not only in terms of the skills, knowledge, and attributes he or she should seek to develop, but also in the inculcation of the very practice of permanent self-monitoring.

While this has been an increasingly prominent feature of our lives in recent years both in and outside of work, in line with the demand for feedback in current modes of government and self-government, the RDF illustrates a further feature of current policy. The need to establish a common language in which to talk about education, research, and innovation, as stated in the EU's identification of 'competences supporting lifelong learning' (OJEU 2010), for example, enables the mobility, compatibility, and comparability of practices, and their measurement.

The constitution of the researcher is understood here from the perspective of governmentality, and more specifically in terms of an environment-ecological self-understanding (Simons and Masschelein 2008; Simons and Hodgson 2012). This entails a particular understanding of the self in relation to time and space, which will be illustrated by the policies and devices discussed here, and which is distinguished from the institutional-historical self-understanding operative in the modern period (Simons and Masschelein 2008). The account given here elaborates on how the environmental self-understanding constitutes a particular mode of subjectivation and illustrates that the figure of the researcher refers not only to the academic in the university but also to a disposition required of us all. It forms part of a particular understanding of citizenship in the learning, or knowledge society (Hodgson 2011).

This account, then, also draws attention to the role of research itself in the current mode of governance, with reference to the explanatory document that accompanies the RDF. This Researcher Development Statement explains the methodology used to develop the RDF in which consultation, feedback, and self-reflection were central. This process, and the collaborative nature of the organisation that developed it, is indicative of the environmental-ecological rationality in the process of policy-making itself, and illustrates further how the researcher is made subject to the environmental self-understanding.

This is a largely descriptive account. The understanding of the researcher and of their development is not evaluated in relation to an idea of what 'a researcher' really is, or of what a researcher development framework should look like. Rather, this essay seeks only a tentative account of how a particular form of governmentality is taking shape. The shift from an historical-institutional to an environmental-ecological self-understanding is seen here to necessitate a shift in the terms and practice of critique in educational research.

To make this clearer the essay begins by outlining the distinction marked by the notion of the environmental-ecological self-understanding. The notion is distinguished from an historical-institutional self-understanding (Simons and Masschelein 2008).

The historical self-understanding existed in the evolutionary understanding constitutive of the modern self, as standing separate from history and situated within a historical process, a teleological story of emancipation and progress. The conception of time of the historical self-understanding of the modern period was as "an ever-augmenting though irreversible line that progresses from an obscure past towards a

more enlightened future" (Decuypere et al. 2012, p. 708). The conception of space was typified by the institution: it can "grow, shrink, or move, but coincides with the building it is housed in" (p. 708).

The environmental-ecological self-understanding entails a recasting of the relation to time, space, and self. In an environmental self-understanding, a teleological narrative within a fixed temporality is displaced by the permanent confrontation by conditions to which we are asked to adapt and to take responsibility. It demands a permanent reorientation of oneself within one's environment in response to the resources available. The responsibilisation of the individual has been a key feature of neoliberal governmentality (Rose 1999). Part of this responsibilisation entails a demand for feedback according to which we can adapt.

Institutions today, including the university, no longer retain certainty over their role, therefore, and instead must take responsibility for identifying their own particular niche among their competitors. Their survival – or their understanding of sustainability – is dependent on their ability to adapt to current conditions in the face of finite resources. This is to describe not only an economic reality for institutions and businesses, but a rationality that governs all aspects of our lives. It constitutes a mode of governance effected in the action of individuals acting in accordance with this rationality by taking responsibility by permanently adapting to their conditions in response to feedback on their own performance.

The reconceptualisation of space as 'environments' stresses our relationship to the 'here and now':

> To regard oneself as inhabiting an environment implies that one's self-understanding is focused on present capacities and opportunities to meet present challenges and needs. Of paramount importance are the capacities and resources that one has at one's disposal and therefore it is indispensable to have transparent and up-to-date information on what is available here and now. This environmental self-understanding implies a particular conception of the past and the future. (Simons and Masschelein 2008, p. 695)

This devolving of responsibility to the individual could be read as a withdrawal of the state. But there is no indication that less governing is going on. Instead, therefore, it may be more accurate to describe it as a shift in the role of the state, from institutional and prescriptive, to collaborative and facilitating (Hodgson 2012a). As the account below will suggest, governmental agencies identify the objects of measurement and facilitate the means to measure and provide feedback.

One aspect of this has been the establishment of commonalities across European member state education systems in order to facilitate compatibility and comparability in measurement. The discussion of policy that now follows will give examples of the areas in which common features have been implemented, and how this relates to a further aspect of the search for shared measurable practices in Europe, the notion of citizenship. In relation to this, a particular understanding of the researcher is evident.

The Bologna Process established a common three-cycle structure for higher education (Bachelors-Masters-Doctorate). While each stage has been subject to specific relevant reforms, more recently, in the light of economic crisis and Innovation Union policy, the third stage of higher education has come into sharper focus as it is

also the first stage of the research career. The account of research present in the policy here refers mainly to doctoral research but is indicative of the discourses and practices that inscribe the understanding of research today. As the European Universities Association states:

> In order to be accountable for the quality of doctoral programmes, institutions should develop indicators based on institutional priorities such as individual progression, net research time, completion rate, transferable skills, career tracking, and dissemination of research results for early stage researchers, taking into consideration the professional development of the researcher as well as the progress of the research project. (EUA 2010, p. 6)

In June 2011, the European Commission Directorate-General for Research and Innovation published its 'Report of Mapping Exercise on Doctoral Training in Europe: "Towards a Common Approach"' (EC 2011). The report is itself based on the principles of good practice in doctoral training set out by the European Universities Association (the Salzburg Principles and Recommendations). The report also ties into the 'interconnected commitments' of the Europe 2020 Flagship Initiative Innovation Union. This Flagship Initiative provides an overarching impetus to all policy relating to research, education, and innovation.

The report on doctoral training expresses the way in which researchers are understood in relation to the wider governance of the European Union as a competitive knowledge economy. It reads:

> Our economy needs to adequately absorb many new researchers. Cooperation between the academic sector and industry (in the widest meaning of the term), starting at the level of early research training, will strengthen the much needed research intensity of our economy. (EC 2011, p. 1)

The notion of absorption in this excerpt evidences an environmental understanding. Like a homeostatic system, a fine balance must be maintained between the production of researchers, the needs of the economy for their knowledge and skills, and the maintenance of a competitive position in relation to other economies. 'Knowledge workers' provide the fuel for permanent innovation. But this is not a passive submission to the demands of the knowledge economy. The individual is responsible for innovating and permanent self-improvement. The policy concern with 'the researcher' is not only a concern for the university, but for the knowledge society more widely. That is to say that the need for specific knowledge and skills is not only a matter of academic or professional competence; this responsibility for innovation is a matter of one's citizenship. As the doctoral training report goes on to state:

> The issue of doctoral training has gained considerable importance in recent years. Doctoral training is a primary progenitor of new knowledge, which is crucial to the development of a prosperous and developed society. Developed economies rely on new knowledge and highly skilled knowledge workers to feed a process of continuous innovation. They rely also on adequately trained responsible citizens that can adapt to changing environments and can contribute to the common good. Grand societal challenges like climate change and healthy ageing require complex solutions based on high level frontier research carried out by new generations of researchers. (pp. 1–2)

The economy requires not only 'skilled knowledge workers' but also 'adequately trained responsible citizens that can adapt to changing environments and contribute

to the common good'. The function of research is no longer the sustenance of the disciplines, or science, situated within the university, for the progress of the nation-state, however. Rather:

> The knowledge society requires the creativity and flexibility of the research mindset for a number of different functions and careers, also beyond those directly related to research. The doctorate has increasingly achieved recognition as a key part of this process. (EUA 2010, p. 2)

Research, then, is a productive force for the governance of the knowledge economy. As discussed previously, research is now a disposition required of us all in order to permanently adapt to the conditions of our environment (Hodgson 2012b). And within higher education, the demand for permanent self-improvement applies not only to doctoral researchers but also to those established in their research career.

The guidelines and policy relating to the doctoral phase seek a professionalising of the doctoral student. This is accompanied by a shift in the understanding of the role of the supervisor and of the environment in which doctoral research is undertaken. The understanding of the relationship between the supervisor and the doctoral student has, therefore, also been recast in current policy and practice. This one-to-one relationship is seen as outmoded and no longer appropriate to meet the needs of the knowledge economy. Instead, in order to ensure the success of the supervisory relationship, to ensure transparency and the possibility of networking, collaboration, and interdisciplinarity, an appropriate research environment should be organised in clusters, with formal contracts codifying the rights and responsibilities of the doctoral student and the supervisor, and the wider graduate or doctoral school (Hodgson and Standish forthcoming).

Researchers, including doctoral students, are essential to the success and sustainability of the knowledge economy. This leads to the statement that a "common supervision culture…must be a priority" (EUA 2010, p. 5), because this ensures that doctoral training and research are maximally effective and productive, and performance is measurable and comparable between institutions, states, and regions. In order to facilitate this, the collaborative, interdisciplinary, transparent research environment becomes the benchmark of excellence. As the European Universities Association states: "Doctoral education is dependent on the research environment. Institutions must develop a critical mass and diversity of research in order to offer high quality doctoral education" (EUA 2010, p. 5). Critical mass refers here not to numbers but to quality. Universities then must ensure they are accountable and thereby comparable in terms of particular markers of research quality and excellence. Each university or research institution will develop its own strategy for quality management and innovation but this will be expressed in terms of the particular discourse of education, research, and innovation, since success in their strategy will be measured in comparison with others.

These interrelated policy statements, which seek comparability and compatibility between member states, illustrates the environmental-ecological rationality of current governance. Hierarchy, age-related stages, and linear progress have been superseded by the establishment of common measures and a streamlining of the language by which functions and qualities are referred to. Success is a matter of competition,

innovation, and entrepreneurialism, aimed toward finding and, through adaptation, maintaining a niche. There is no final goal to be reached as a marker of success but rather a permanently shifting panoply of benchmarks and indicators. This entails monitoring and feedback mechanisms not only at the institutional level but also at the individual level, in order that the university's human resources and the individual's own potential is maximised through permanent self-evaluation. To illustrate this, and to elaborate further the understanding of the researcher, there follows a discussion of a particular device, the Researcher Development Framework (RDF). The account of the RDF also further illustrates the environmental self-understanding and how this is distinct from the modern historical-institutional self-understanding.

The development of the RDF is described as a response to the lack of an overarching framework for researchers, as identified by the Research Career Mapping Tool report, itself part of a process of establishing "the career of 'researcher' as a valued profession" (Reeves et al. 2012, p. 5).

> The need for a framework for research careers had also been recognised at the 2005 UK Presidency conference launching the European Charter for Researchers and the Code of Conduct for their Recruitment. The outputs from the conference stressed the need for 'substantial cultural change in the way researchers are perceived, managed and conduct themselves. The recognition of research as a profession – with researchers recognised, as well as recognising themselves, as professionals – is a key aspect of this change in perspective'. (Reeves et al., p. 5)

In the UK, the skills that postgraduates need were previously articulated by the UK GRAD programme. This was the previous name for Vitae. The shift from the UK GRAD programme to Vitae is indicative of a shift of emphasis from the linear progression through stages of education, e.g. from undergraduate to postgraduate within the institution of the university where the reference to skills was an internal one concerned with meeting academic standards, to the recognition of the researcher as a set of knowledge and skills necessary not only for research in higher education but for employability in all sectors. Vitae – the name and the organisation – reflects the emphasis on lifelong learning and the need for permanent self-assessment, and thus that research training is required not only for postgraduate research in the university but at all stages of one's career, in all sectors. Previously, separate statements existed for postgraduate research skills and the roles of research staff; these were "job descriptions rather than personal and professional skills development" (Reeves et al., p. 5). They were, then, fixed definitions rather than a basis for permanent improvement. Although the RDF has been developed in the UK it has been trialled in a number of sites internationally and is being considered as a basis for a pan-European professional development framework by the European Science Foundation.[1]

The RDF appears, in its graphic presentation, to be a simple device. It is a circle, divided into quarters and containing 3 concentric rings. Each quarter is a 'domain': (A) Knowledge and Intellectual Abilities; (B) Personal Effectiveness; (C) Research

[1] See http://www.vitae.ac.uk/researchers/1271-569801/Vitae-launches-new-Researcher-Development-Framework-Planner.html, retrieved April 21 2013.

Governance and Organisation; (D) Engagement, Influence, and Impact. Each domain contains 3 sub-domains, each with between 3 and 8 descriptors. The detailed content of the domains and descriptors, and the accompanying documents for the use of the RDF as a device for the management of one's development will be the focus of further work. Here, the intention is to highlight how such devices reflect and constitute the shift to an environmental self-understanding. This is illustrated by how the purpose of the RDF was understood by those involved in its development. As will be discussed below, the process of developing the RDF was collaborative and involved a number of stages of consultation. One concern that was raised during development related to the relationship of the framework to career progression, and is indicative of the role that the RDF is intended to play and the self-understanding this implies:

> The consultation version of the framework had loosely linked the phases of the framework to various stages of researchers' careers from new researcher to eminent researcher. The main concern was that this link could imply that progressing through the phases of development for all the descriptors would ensure promotion (see also Section 4.4). This would not sufficiently recognise that opportunities for progression in academia are hugely competitive and subject to many external factors, often out of the control of the individual. The Project Group and Advisory Group decided that this linking added an unnecessary level of complexity and the potential for misunderstanding the primary purpose of the Vitae Researcher Development Framework, which was to support researchers to improve their practice. (p. 8)

But while the stages in the RDF were not linked to career progression, it was identified that a sense of 'aspiration' was needed "to be built into the framework in a more consistent and deliberate manner" (p. 9). To achieve this, a consistency in the language used was necessary and hence a "palette of terms" was devised to ensure this (p. 9).

The final stage of the development of the RDF was a shift from a columnar to a circular design: "The visual presentation of the full framework took account of feedback by designing it without columns and incorporating a circular diagram to emphasise the non-hierarchical nature of the domains and sub-domains" (p. 9). The circular shape was, then, a design feature, but one chosen to reflect the reality it was believed that it did reflect. The shape of the presentation of the RDF reflects the permanent self-evaluation it is designed to enable. This is further facilitated by self-assessment tools relating to each of the four domains, to be utilised by the researcher on the basis of the identification of weaknesses in development. The purpose, and also the very construction, of the RDF illustrates a particular demand for feedback constitutive of the environmental-ecological self-understanding. The RDF provides a device for reflecting not only on those skills traditionally associated with the professional role of the academic, but also on all facets of one's self, that is, the social and the emotional, as well as the practical and professional. Here, the environmental-ecological self-understanding inscribed by such a device becomes clearer – each aspect of one's self must be subject to permanent monitoring in order that it does not adversely affect the others. Furthermore, the device enables the adaptation and mobility required of the individual today by its personalised, electronic form. It can be accessed wherever the researcher is; its applicability is not specific to an institution or to the university.

The device is not only for individual use but can also be incorporated into an institution's appraisal regime and thus feed in to its wider system of performance monitoring and management. It is important to note also that this is not a compulsory, government-imposed tool, but one developed by a collaboration of organisations, and adopted voluntarily by institutions and/or individuals. This reflects the responsibilisation referred to earlier on which the current mode of governance is based; institutions and individuals recognise themselves as individually responsible for their own survival and thus for finding the means to adapt to current conditions. This creates the demand for feedback at all levels, and reinforces the role of research (whether it be in the development of new policies or devices, or into how one is performing, for example) as producing the necessary knowledge to enable one to adapt.

The development of the RDF is illustrative of a shift in the policy-making process commensurate with an environmental-ecological rationality: a shift from an institutionally-based prescriptive role, to a collaborative and facilitating one. The RDF is accompanied by an explanatory Researcher Development Statement. This is taken here to illustrate how the environmental self-understanding is operative in, and further inscribed by, the policy-making process itself. The organisation that developed the RDF illustrates a collaborative, facilitating form of policy-making. This organisation, Vitae, is a collaboration of the UK's Research Councils and the Careers Research and Advisory Centre, and the research process involved a number of organisations involved in higher education, research funding, and industry.

The outline of the methodology and developmental process of the RDF illustrates the framework itself being "grounded in research" (p. 4).

> Within an iterative, interpretive design, the methods used in the project were: semi-structured interviews with researchers, focus groups, literature reviews, sector wide consultations, specialist reviews and advice, expert panel review, validation and feedback. The interview data was analysed using a phenomenographic approach. (Reeves et al., p. 4)

The phenomenographic approach "is an interpretive method in which the framework rests firmly on what researchers, in the first instance, recognise as significant about themselves and later confirm as representing recognisable perspectives on themselves as researchers during the validation process" (Reeves et al., p. 7). Self-reflection, then – which already exists in the self-understanding of the researcher and is oriented in a particular way in the excellent researcher – is embedded in the research to develop the RDF. Consultation on a draft of the RDF, discussed above, was followed by a "period of reflection", "a validation process was conducted by the Interview Group to confirm that the framework represented what researchers recognised as significant about themselves" (p. 9).

The publication of the methodology of the RDF illustrates the way in which research validates what is inscribed by the RDF. The methodology also illustrates the collaborative approach to policy making characteristic of current practices, which seek transparency through dialogue-based, consultative approaches (cf. Hodgson 2012a): "The guiding philosophy for the project was that the framework be developed through a process of community consensus". This means both

an iterative approach and also the concern to represent the reality of the research excellence: "The analysis of the data…involved the clustering of data under categories derived from the data" (Reeves et al., p. 6). The consultative, dialogic process also further inscribes the 'common language' of education, research, and innovation in terms of which the researcher and the research institution, including the university, must understand itself (cf. Hodgson 2012c).

The policies and devices discussed here are taken to be illustrative of an environmental-ecological rationality. This is evident also in the sources of the policy discussed here. They do not come from a single government agency, whose legitimacy is based on its hierarchical authority. Instead they come from a number of agencies of governance, each representing a slightly different aspect of the education-research-innovation triangle (e.g. vitae; the European Universities Association; the European Commission). Each refers to the policy statements of the others, ensuring a common language is spoken and their statement gains authority by virtue of expressing a shared vision. Such organisations play a specific role in governance today, of facilitation. They speak of supporting best practice through 'steering', 'benchmarking' and 'reviewing'. They do not provide judgment as a modern institutional authority might have done, but instead facilitate the means and the objects according to which the individual actor (individual person, university, department, region) can judge itself. Hence, guidelines for best practice, based on what others do (and hence implying comparison with them), are provided, but not specific instructions for action. These are not defined, so as to permit scope for autonomy, innovation, and competition.

A device such as the RDF, which inscribes this self-understanding, also illustrates a further shift relating to how research operates as part of the current mode of governance: a shift from a panoptic to a synoptic surveillance (Simons and Masschelein 2008). The panoptic mode of surveillance was identified as a function of disciplinary power in the modern period. The synoptic mode combines features of the panoptic, in which the few observe the many, unseen, with features of the spectator society, in which the many see the few (Simons and Masschelein 2008). In the synoptic mode, the individual submits to the gaze willingly; the feedback is actively sought. The RDF is all-encompassing, covering all facets of the vitae – from theory to work-life balance, and enables the individual willingly to permanently monitor herself. Through its iterative process of development in consultation with excellent researchers, the RDF entailed a process of self-reflection on the part of the researchers, and then held a mirror back up to them, to allow them to see if they saw themselves. Thus, the RDF, both in its process of development and in the self-understanding it inscribes through the practice of its use, effects a form of synoptic surveillance. The research that devised the RDF further inscribed a self-understanding and a particular common way of speaking about what it means to be a researcher. The excellent researcher is contained in a hermetically-sealed circle of permanent self-reflection. It presents a picture of the researcher in which she should recognise herself and her weaknesses that she address to achieve her potential.

Further analysis of the content of the domains and sub-domains of the RDF, and of the devices for supporting one's development in each of these areas, will help to

elaborate how this particular form of surveillance inscribes a particular form of power. This will further illustrate the role of education, or learning, in governmental rationality through attention to the everyday material conditions – the discourses, devices, and practices – according to which we work today.

References

Decuypere, M., Masschelein, J., & Simons, M. (2012). 'Where are you?' Cell phones and environmental self-understanding amongst students'. *International Journal of Qualitative Studies in Education, 25*(6), 705–722.

EC (European Commission). (2011). *Report of mapping exercise on doctoral training in Europe 'Towards a common approach'*. Brussels: EC.

European Universities Association. (2010). *Salzburg II recommendations*. Brussels: European Universities Association.

Hodgson, N. (2011). *Educational research, subjectivity, and the construction of European citizenship*. Unpublished PhD thesis. Institute of Education, University of London, London.

Hodgson, N. (2012a). 'The only answer is innovation…': Europe, policy, and the Big Society. *Journal of Philosophy of Education, 46*, 523–545.

Hodgson, N. (2012b). From entrepreneurialism to innovation: Research, critique, and the Innovation Union. In P. Smeyers & M. Depaepe (Eds.), *Educational research: The importance and effects of institutional spaces* (pp. 193–209). Dordrecht: Springer.

Hodgson, N. (2012c). Seeking a common language: European citizenship and the governance of dialogue. In T. Besley & M. Peters (Eds.), *Interculturalism, education, and dialogue*. New York: Peter Lang.

Hodgson, N., & Standish, P. (forthcoming). Professor, citizen, parrhesiastes. In J. Laker, K. Mjrnaus, & C. Naval (Eds.), *Citizenship, democracy and the university: Theory and practice in Europe and North America*. Basingstoke: Palgrave Macmillan.

OJEU (Official Journal of the European Union). (2010). *Council conclusions of 11 May 2010 on competences supporting lifelong learning and the 'new skills for new jobs' initiative*. Luxembourg: Publications Office of the European Union.

Reeves, J., Denicolo, P., Metcalfe, J., & Roberts, J. (2012). *The vitae researcher development framework and researcher development statement: Methodology and validation report*. Cambridge: The Careers Research and Advisory Centre (CRAC) Ltd.

Rose, N. (1999). *Powers of freedom*. Cambridge: Cambridge University Press.

Simons, M., & Hodgson, N. (2012). Learned voices of European citizens: from governmental to political subjectivation. *Teoría de la Educación, 24*(1), 19–40.

Simons, M., & Masschelein, J. (2008). "It makes us believe it is about our freedom": Notes on the irony of the learning apparatus. In P. Smeyers & M. Depaepe (Eds.), *Educational research: The educationalisation of social problems* (pp. 191–204). Dordrecht: Springer.

Chapter 7
The *Tractarian* Template in the Representation of Educational Research: Can We Ever Depart from the Picture of Logical Empiricism?

Paul Smeyers

Somewhere on planet earth in a somewhat distant future, let's say for the sake of convenience in the year 2022, a lonely individual (at least in some sense, as she is connected at all times with everyone else) wonders around in London (say Euston Road) and finds herself at the doorstep of a building. She decides to go inside as she did not have anything in particular to do. Indeed, all her needs—as those of everyone else—are taken care of by robots fuelled by solar energy and directed by THE ONE AND ONLY, an intelligent creative super-computer which 'learns' at all times what humans beings long for from their brainwaves and which provides accordingly in a co-ordinated manner the required devices and substances. IT accommodates as well for sub-systems (so called THE DIVERSIFIED AND MANY) which are of no importance at all except that they offer for humans a 'playground' where they can set themselves (privately or collectively) the rules of the game they want to play.

Entering the building she is confronted with millions of strange objects on the many miles of shelves (later it will become clear that these are referred to as 'books' and the building as a 'library'). Our wonderer has never seen any of them. An iPhone has been her companion since she was born which gives access to all thoughts of everyone else (at present and in the past as recorded by The One And Only). She learned to read and write—not that this was necessary, The One And Only also communicates orally—but it was fun and kept her busy for a while, after all she enjoyed this more than playing football, going to the gym or indulging herself in video-games. The objects varied in sizes and colour. Her attention is drawn to one that is shelved at j X.519/18625 and further labelled nam a22002413 4500. It was published in 1922, written by someone called Ludwig Wittgenstein and titled Tractatus Logico-Philosophicus. It is more strange to her than other books she opened: it contains numbered sentences. As it was after all 2022, she looked at the section with the number 2.022, which reads: "It is obvious that an imagined world, however different it may be from the real one, must have something—a form—in common with it". "Obvious?", she asks out loud, "How so?", "Can it?", "Should it?", "Must it?"

The noise she makes arouses The One and Only and IT asks her what it is in particular she wants to know: A clarification of the word 'obvious', of that word in this sentence, or what kind of game she more in particularly wants to play bearing in mind the uses of 'can', 'should', and 'must'. At this point she takes an unusual step and shuts down her iPhone. Absorbed and puzzled by the sentences which precede 2.022 and those that follow on she

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finds herself trapped by nothing else but her own desire—recall that not a single thing nor person depends on the results of her ponderings. For days and days she muses on every possible interpretation (as in the area of The Diversified And Many all can be accommodated) and finds herself happier with some rather than with others. Though this is only small consolation, as it is her experience that most likely things will feel differently the next day.

Years and years go by. The quest comes to a close at the end of her natural life when she and all her sub-systems disintegrate, solely leaving behind a trace of 'what has been' in The One And Only.

7.1 On Interests and the Need for Informed Decisions

Let us dwell a bit on this imagined case. Human beings have all kinds of interests. Some of them have access to everything they desire in terms of goods which in its turn presupposes that they are (made) available. As persons find themselves being part of particular social practices, other sets of what they long for find their origin in these ways of life (against the inherited background of the 'form of life' they share). There is a large variety of social practices and many of them are optional. Though it may be in general only necessary to take part in some of them (just to stay alive), in most cases people will long for more: to help and care for others, to enjoy the respect of others, to excel in certain areas, to do their part as required in a democratic society and all that this entails. As the rules of the 'game' of these social practices are not fixed (at least not forever) a constant 'negotiation' (some will label this a 'struggle') takes place (for instance how rules have to be interpreted, but also what kind of games we need, may, ought to play). Given the constantly evolving stream of social practices (and other changes that take place for example more generally in nature possibly as a consequence of human activity) humans therefore require to adapt and invent new ways of dealing with the situations they find themselves in.

The imagined example may seem far removed from the day to day reality most of us find ourselves in; war, famine, poverty, discrimination, clearly we are not there yet. It is attractive though, is it not? And perhaps it may be difficult to deny that being satisfied at all times about everything (whatever that may mean) is indeed what human beings strive for. One reason why it may be difficult to realize this is surely the necessary limited nature of resources (in the broadest sense, including among other things as well material goods as services). Water, crude oil, rice, timber etc., though there is plenty of these, they are neither always available (in the past, the present, and the future) nor in abundance so that no shortage arises at any point. And the same goes for example for medical care and the provision of education. Time devoted to caring for the elderly, for the sick, to educate children or deal with safety and security issues, holds consequences for what can be put in terms of human activities in other areas.

In order for a society to flourish one or other kind of balance is required; and similarly this is required for the flourishing of an individual human being. It does

not matter whether one embraces concerning this an idea of caring (as the more fundamental category to explain human behaviour) or alternatively of conflict. The fact remains that there are many persons (some will say individuals) who find themselves amidst many others (some will say a society). Empirically one finds in the human history as well many examples of struggles as one may observe at the same time many instances where they have looked after each other and co-existed peacefully. I take the point that there may be more examples of the first than of the latter, but it cannot be denied in my opinion that people have never been indifferent to the happiness of their loved ones. Though they may have been quite restrictive who they identified with—the use of the noun 'barbarian', of which the original meaning refers to a foreigner, one whose language and custom differ from the speaker's thus for example 'whoever is not Greek', has shifted to a pejorative use where reference is made to a rude, wild, uncivilized person; a noun with such a meaning is not only found in Greco-Roman contexts but similar words exist in many non-European civilizations for example in the Hindu and Chinese culture—there always seems to have been those who were considered as 'them' and 'us'. Conversely, no matter how small the distinction between 'us and them' is upheld, there remains an area where decisions need to be made (concerning 'us', having consequences for 'us' and 'them').

Is there a basis for these 'decisions' and if so is such a basis logically different from other areas of interest (or conflict, if one wants)? Clearly, there are many candidates or areas to consider: there is not just means-end reasoning (possibly technological), sound argumentation, justice, but also 'what makes sense' (given a particular social practice one is initiated in), and 'what is interesting' (to us, to me). Is negotiation, conflict, agreement the same in all these cases, or if not, how are they to be characterized? And what is their place in educational research?—that is if one accepts that there is something like that. Educational contexts require many decisions, as well in schools, universities, and more formal settings as in the more delineated space of the family. And people argue about what needs to be done. They base their opinion(s) not only on the direction they would want to go, but like to strengthen their stance by making reference to 'what is the case'. It is there that an abundance of educational research finds its place. How does educational research present itself and how does it represent the reality it wants to speak of? Clearly, as it often provides the basis for informed decisions what it states should be 'beyond reasonable doubt'.

7.2 Examples from Educational Research

I will start with detailing a research example to say something about the issue of (re-)presentation of research. My attention was recently drawn to a study by Van Petegem et al. (2012) published in the Web of Science journal *Developmental Psychology* which focuses on the concept of adolescent autonomy and its relation with psychosocial functioning. In this study the aim is to differentiate between two prevailing conceptualizations of autonomy, that is, (a) autonomy defined as

independence versus dependence and (b) autonomy defined as self-endorsed versus controlled functioning. As their second goal the authors identify to examine the relative contribution of each autonomy operationalization in the prediction of adolescents' adjustment (i.e., well-being, problem behaviour, and intimacy). The article (of more than 10,000 words) follows a standard format: it gives an abstract, describes where the study starts from, gives details of the method that is followed, the data collection, analyses, and results, links the latter with previous research (and theories), deals with limitations of the present study and offers suggestions for future research, before turning to conclusions and adding on the list of references.

The authors gathered data in a sample of 707 Belgian adolescents. Using a newly developed questionnaire, they assessed both the degree of independent decision making per se and the self-endorsed versus controlled motives underlying both independent and dependent decision making.[1] They report that the present study empirically underscores the conceptual difference between two prevailing definitions of autonomy. As specific results concerning their second goals, they report that deciding independently because one personally values doing so relates to a better quality of relational functioning, whereas being externally pressured into independent decision making is associated with less adjustment. Further, for the motives for dependent decision making, it is reported that identified motives were related to higher subjective well-being and to lower problem behaviour; introjected motives related negatively to subjective well-being, and external motives were associated

[1] The following is a summary of the different steps in the analysis of the data. An integrated measure was developed to assess both aspects of adolescent autonomy. Participants first completed a variation of the Family Decision Making Scale (FDMS; Dornbusch et al. 1985), where they answered the question "Who decides[horizontal ellipsis]" on the following 5-point scale: 1 (My parents alone), 2 (My parents, after talking to me), 3 (My parents and I together), 4 (I, after talking to my parents), and 5 (I alone). The scale consisted of 20 issues that typically came from five social domains (Smetana et al. 2004; Smetana and Daddis 2002), that is, the personal domain (e.g., what clothes to wear), the friendship domain (e.g., whether you can hang out with friends your parents don't like), the prudential domain (e.g., whether you smoke cigarettes or not), the conventional domain (e.g., how you talk to your parents), and the moral domain (e.g., whether you can hit others). In a next step, they measured the motives for independent decision making. The questionnaire comprised 18 items, derived from the Self-Regulation Questionnaire (SRQ; Ryan and Connell 1989). Formulation of the items was based upon versions from related domains and reflected identified motives (e.g., "because this is personally important to me"), introjected motives (e.g., "because I would feel bad if I didn't"), and external motives (e.g., "because I am forced by others"). Respondents indicated their agreement on a 5-point Likert scale ranging from 1 (Completely untrue) to 5 (Completely true). A similar procedure was used to assess the motives for dependent decision. Participants completed two scales tapping into their subjective well-being. The global self-worth subscale of the Self-Perception Profile for Adolescents (SPPA; Harter 1988); next, they measured depressive symptoms, using a six-item version of the Center for Epidemiologic Studies-Depression Scale (CES-D; Radloff 1977). Concerning problem behaviour participants completed a shortened version of the Alcohol Use Disorders Identification Test (AUDIT; Saunders et al. 1993) to indicate the level of alcohol abuse; the Deviant Behavior Scale (DBS; Weinmann 1992) was used to assess rule-breaking behaviour. Finally, they measured the quality of intimate functioning in the relationship with one's best friend or romantic partner, using a shortened version of the Intimate Friendship Scale (IFS; Sharabany 1994). For further details see Van Petegem et al. 2012; see also footnote 3.

with more problem behaviour. They thus argue that identified motives for dependent decisions generally relate to a better pattern of adjusted functioning though not to intimacy, whereas controlled motives are associated with less adjustment.[2]

It goes without saying that the mentioned conclusions/results are substantiated by detailing the techniques of analysing the data. I don't think, however, a lot of people will be surprised by the results that are offered—granted, now it has empirically been established (of course, one should not forget that this presupposes accepting the many 'operationalizations' such as the integrated measure and all the other scales that are used, further the presuppositions of the various statistical methods, and last but not least what is involved in what is mentioned by the authors themselves 'the conceptualization of autonomy', i.e. the way they handle, operationalize, the two conceptualizations of autonomy). They suggest further that their findings may have some implications theoretical as well as practical; let me draw attention to what they call important implications for clinical practice:

> …for instance with respect to parenting advice. Based on the correlates of independent decision making, one may consider the maintenance of dependence to serve a protective role against problem behavior. However, the undergirding motivational dynamics for such dependent behavior seem as crucial. If parents use pressure to foster dependent behavior, they may instead elicit rebellious reactions and oppositional behavior, such that their children distance themselves from them rather than stay dependent on them. Likewise, even though an increase in independent functioning is normative through adolescence, youths should not be pressured to decide or behave more independently, as controlled motives for independence also relate to maladjustment. By contrast, fostering adolescents' self-endorsed functioning (e.g., through empathy, giving choice whenever possible, and encouraging them to act upon their personal values and interests; see Grolnick 2003; Soenens et al. 2007) seems to be especially crucial for parents, in order to deal successfully with the challenges of raising an adolescent. (Van Petegem et al. 2012, p. 85) [3]

How remarkable to use the concept of 'clinical practice' when referring to advice for parents. But even if that is seen as fine (or just a matter of no importance), what about the presupposition in this kind of argument which clearly bears the label of a 'means-end' reasoning (the use of pressure to foster dependent behaviour which serves as a protective role against problem behaviour is negatively appreciated because *children may distance themselves from them rather than stay dependent on them*; moreover, youths should not be pressured to decide or behave more independently as *controlled motives for independence also relate to maladjustment*). The final addition, again based upon empirical research, to foster adolescents' self-endorsed functioning to deal successfully with the challenges of raising an adolescent, will surely baffle the reader, will it not? Seriously, do we really need empirical research to give this kind of advice, and more importantly, there is

[2] They report that in the final model, the predictor variables explained 24 % of the variance in well-being, 43 % of the variance in problem behaviour, and 23 % of the variance in intimacy (Van Petegem et al. 2012, p. 83).

[3] The references to publications which are part of quotations of the two educational research examples that are discussed either in the main text or in footnotes are not included in the list of references given at the end of this paper. They are nevertheless included to do justice to the study that is discussed.

something interesting going on here: though clearly nothing spectacular follows from this study, we should not worry: reference can easily be made to another empirical study that is consistent with the findings of the present one. Thank goodness, the approach has been saved!

There may be people who need to be convinced of the 'truths' that are offered in this sophisticated study. I doubt however that this kind of empirical research is really necessary for their perspective, whether, in other words, some simple straightforward arguments where the relations between a couple of concepts combined with some acquaintance with experiences educators generally have had, would not have been enough. The format of presentation works however quite well: this study is not a one off (it is linked to relevant theories and other research), the results corroborate what is already known and allow identifying specific issues for future research.

I take it that some colleagues will protest and point to the fact that my example is drawn from psychology (after all, the research is published in a psychology journal), so perhaps I may have set the reader on the wrong foot when surmising that what I have dealt with is a real educational research example. I will now, therefore, turn to a somewhat related research issue (particularly interesting given the parallel with my 'psychology' example). It concerns a study by Bosmans et al. (2011) titled 'Parents' power assertive discipline and internalizing problems in adolescents: The role of attachment' published in the Web of Science journal *Parenting: Science and Practice*. The authors start from the observation that current evidence-based therapeutic and preventive parent management training programs teach parents to discipline their children in response to misbehaviour. As research, according to these authors, has demonstrated that parental disciplining leads children to develop less antisocial behaviour, it is important to know whether discipline has side effects for the child (i.e., leading to internalizing problems). They distinguish power assertive discipline and inductive discipline. Examples of the former are corporal punishment, deprivation of privileges, psychological aggression and penalty tasks; examples of the latter are diversion, explanation, ignoring misbehaviour, reward, and monitoring.

Because it has been demonstrated, so they argue, that it is the power assertive character of disciplining that predicts internalizing problems, it is this what they will study further. More particularly, they are interested in the relation with attachment insecurity, as the link between power assertive discipline and attachment (which provides internal working models) has not been studied explicitly. Following Wu's assumed close association between power assertive discipline and attachment insecurity, and in line with the association that obtains between attachment and internalized behaviours, they hypothesize that attachment insecurity mediates the association between power assertive discipline and internalizing problems (Bosmans et al. 2011, p. 37). This is, they say, at the same time a test of a basic tenet of attachment theory which predicts that children and adolescents store their experiences with parents in internal working models (less secure working models are expected to be characterized by insecure attachment, cognitions, and behaviours and this should be linked with an increase in internalizing problems). It is their prediction that power assertive

discipline will be positively linked with adolescent internalizing problems and that this effect will be mediated by attachment security (ibid., p. 39).

Thus far it is clear that the interest of this study is motivated by a theoretical issue, a particular theory, and that it is a specific hypothesis based on this theory that is tested; there is, however, also a further interest which is explored and which is inspired by a particular practice (parenting advice) where disciplining in response to misbehaviour is taught; here it is all about the possible side effects such as a clinically relevant emotional cost for the child leading to internalizing problems. Participants included 514 elementary and high school students ranging in age from 10 to 18.[4] The article describes in detail the characteristics of the scales and instruments that are used (including their reliability, validity, etc.). It then details all the analyses that were carried out and offers justifications for the choice they made and the ways they proceeded. The study confirms that "…when parents apply more power assertive discipline, adolescents report higher levels of internalizing problems and report being less securely attached. It is important to note that our analyses show that attachment completely explains the relation between power assertive discipline and internalizing problems" (ibid., p. 48). They continue by warning the reader: "These findings should be interpreted with caution. Demonstrating mediation suggests causal pathways, our data are cross-sectional and we investigated correlations. This allows us only to conclude that what we observe is consistent with what we would expect to see whether indeed a causal path leads from power assertive discipline to internalizing problems over attachment representations … Future research should investigate these associations using longitudinal research designs" (ibid., p. 48). Their findings are important they say for at least three reasons: they have implications for our understanding of the influences of power assertive discipline, they confirm a basic tenet of attachment theory, and they suggest that attachment is still malleable in adolescence. As customary they also discuss the limitations of the study, the relation of their findings with what has been suggested by other studies, options for future research etc.

It comes as no surprise that these authors too (given their own starting point) return towards the end of the paper to implications for clinical practice:

> The present study has implications for clinical practice. Clinicians should exercise care when they propose to use disciplining tactics such as deprivation of privileges or imposing penalty tasks, even in a consequent manner, to counter externalizing problems, because these results suggest that, at least in adolescence, this might have negative side effects as

[4] Power assertive discipline was assessed using the Ghent Parental Behavior Scale. Two punishment scales of the GPBS are combined: harsh punishment (for example slapping one's child) and disciplining (for example taking away something fun or not letting her watch TV). For 'internalizing problems' The Youth Self-Report questionnaire is administered (internalizing problems syndrome scales withdrawn/depressed, somatic complaints, and anxious/depressed subscales); for 'attachment' a short version of the Inventory of Parent and Peer Attachment IPPA) was used (attachment was conceptualized as the quality of the relationship with mother and father; three subscales: 'trust', 'communication' for example 'I tell my mother about my problems and troubles', and 'alienation' for example 'My mother doesn't understand what I am going through these days'). For further details see Bosmans et al. 2011.

> well. Our findings should be further investigated before advising too strongly against using nonphysical power assertive discipline. Research is needed to investigate whether applying nonphysical power assertive discipline in combination with parental warmth and involvement has more positive outcomes. Research on the authoritative parenting style advocates in favour of such a balanced perspective (Baumrind 1996), but all power assertive discipline behaviors have in common that they do not allow the adolescent the autonomy he or she requires in this developmental phase. Consequently, less controlling and more autonomy-supportive parenting behaviour might have a positive effect on internalizing and externalizing behaviour problems in adolescence given that they have a positive effect on attachment security (Soenens et al. 2008). (Bosmans et al. 2011, p. 50)

And they continue:

> The mediation effects add to the growing suggestion that merely trying to change parenting behaviours without taking into account the quality of the relationship between parents and adolescents might not have an immediate or sufficient effect on psychopathology, nor on less secure attachment-related cognitions that are associated with power assertive discipline … This study shows that one of the reasons for the limited therapeutic effect of parent management training might be because cognitions about the quality of the relationship become more important than the actual behaviors of the parents. Therefore, in adolescence it might become increasingly important that therapy focuses on these maladaptive cognitions and on the quality of attachment relationships. After all, research shows that less securely attached children communicate less with their parents about their feelings. Consequently, they become more vulnerable to develop depression (Bosmans et al. 2010) … In sum … [r]esults demonstrate that power assertive discipline is associated with internalizing problems and less secure attachment … The large sample families, the use of a multi-informant measurement of parenting behaviors, the use of well-established measures, and the replication of findings across parental gender, gender of the adolescent, and age groups all underscore the results. (Bosmans et al. 2011, pp. 50–51)

This research, as the previous one I discussed, has a lot to go for: theoretically embedded (documented by several pages of references), moreover related to clinical practice, meticulously detailed, sophisticated, addressing issues that so far have not been studied, sound argumentation etc., etc. Interestingly, Bosmans and Van Leeuwen—two of the co-authors—are affiliated with the 'Parenting and Special Education Research Centre' of the KU Leuven; and taking further in consideration the journal where the study is published, I presume therefore that this can be seen as an example of educational research.

Yet, focusing on at least one of the results (that power assertive discipline is associated with internalizing problems and less secure attachment, in the particular way this has been given shape, see footnote 4) one is inclined to comment that it would indeed be very strange if this were not the case. And it goes without saying that there are many reasons why people should refrain from power assertive discipline (never mind its association with internalizing problems and less secure attachment). It is furthermore remarkable that though at the beginning of the paper reference is made to inductive discipline, this was just left out in this study (granted, it has a specific focus, but it is telling that it is left out). And further, the advice to focus on attachment relationships instead of focusing on particular parental behaviour, again will presumably not surprise many (and please do recall that such is suggested on the basis of the results of this and other empirical studies).

7.3 On Pictures and the Pictorial Form

As I implied above, all of this is puzzling, very puzzling indeed. What is it that these authors hope to achieve? And why, one is inclined to ask, is the demonstrated reliance on empirical methods the only avenue they dare to walk confidently? The knowledge that is offered in educational research is of various kinds:

(a) local, situated, descriptive (of whatever nature: either based on sensory experience or observation; or involving the subject to express one or other judgment about the situation or herself, or a combination thereof);
(b) addressing some elements to make the process run more smoothly (let us call this 'technological' knowledge);
(c) generalization (theoretical, in many cases based on statistical methods), complemented with results based on other empirical research directed towards theoretical insights (most frequently combined with an interest to achieve certain ends);
(d) finally, interpretation including discussions 'where to go'.

The examples I have discussed (which I hold paradigmatic for educational research nowadays) do pretty well on (a), (b), and (c), but do poorly and are even neglectful concerning (d). What does this point to? Although very few colleagues in educational research will admit it, I surmise that most of them are in fact embracing the presuppositions of positivism, logical positivism or logical empiricism. They pay lip-service to the traditional criticisms, they know how to speak politically correct about the *limited* nature of their own research, and they will grant everyone that value questions are always involved and that they have to pay attention to these, yet when they are pushed to make explicit what they think their own knowledge as experts is, then what one hears is nothing less than what may be labelled objective knowledge, which invokes one or other variation of the correspondence theory of truth in a rather naïve form. Though such a kind of educational research has been criticized, successfully one may say, and moreover logical empiricism (logical positivism and positivism) has been criticized, again successfully let me insist, it is as lively as ever.[5] Why, one may ask is it so attractive, so much alive? The quite simple answer to this is surely that as it focuses exclusively (or at least predominantly) on

[5] There is a further development, i.e., post-positivism which too embraces ontological realism, the possibility and desirability of objective truth, and the use of experimental methodology. In this amended version of positivism it is held that reality can only be known imperfectly and probabilistically (taking into account among other things that theories, background, knowledge and values of the researcher can influence what is observed). For post-positivists human knowledge is based not on unchallengeable, rock-solid foundations, but rather upon human conjectures which are justified by a set of warrants which can be modified or withdrawn in the light of further investigations. Though this stance deals successfully with a number of criticisms of various versions of positivism, it remains however a meta-theoretical position that cannot do justice to what according to many is at the heart of social sciences, i.e., the interpretation of human experience and the particularly human reality that is addressed here (including what is offered for example in disciplines such as history, philosophy, etc.).

referential meaning it is more satisfactory than other positions (which include other kinds of meaning) because it leaves (almost) no room for doubt (at least not once a particular theory has been identified including the concepts it works with). In epistemological terms this may be characterized as a kind of logical positivism (obviously, there are other kinds). It may be tempting to consider this kind of logical positivism as the only option for educational research and if so, this may come close to a particular version which has attracted considerable attention, i.e., close to the formulation it has been given by Ludwig Wittgenstein in his early (1921) work (*Tractatus Logico-Philosophicus*). Let us make abstraction for a moment of the fact that Wittgenstein himself and many of those who deal (have dealt) with his work vehemently deny that his position is a kind of logical positivism, it nevertheless has been labelled so. Indeed for Wittgenstein, ethics, aesthetics, religious beliefs etc. are crucially important, but he holds that they cannot be expressed in a meaningful language, they do not belong to the area of 'nonsense', but what they say cannot be said (cannot be put into words but only shown), they are deprived, bereft of meaning and thus lack sense. Clearly, Wittgenstein's *Tractatus* if positivism at all, is not a crude but rather a very mild version of it. I will now draw attention to a number of the claims and arguments of his position. My over-all aim will be that even if one would embrace this stance to justify theoretically what it is that educational research is doing or can do nowadays—and I am focusing on the dominant kind of educational research, i.e. empirical—such justification would not work as it would betray what the *Tractatus* makes itself abundantly clear. It goes without saying that if this could be established for a mild version of positivism, it clearly rules out more fully fledged stances. And, if I may add, I will be arguing this without relying on the mysticism that Wittgenstein himself invoked and that he thought necessarily has to be added to make sense of his position at all. So let me now turn to the all too often neglected ideas of the *Tractatus.*

Though Wittgenstein rejected the calculus idea of language[6] typical for his early work in the *Philosophical Investigations* (1953), published some three decades later, he did not change his mind about numerous other issues he argued for in the *Tractatus*. These may be helpful I think to understand better some of the puzzling aspects of the educational research mentioned earlier. Incidentally, it could (and has been) argued that the differences between the early and the later work can be exaggerated as Wittgenstein, some would claim, attacks much the same problems though in different ways. For example in 4.112[7] of the *Tractatus* he writes: "Philosophy aims at the logical clarification of thoughts. Philosophy is not a body of doctrine but an activity … does not result in 'philosophical propositions', but rather in the clarification of propositions", whereas in the Investigations too it is also all about doing

[6] One of the main characteristics is that a rule determines its own application; this is, as one may recall, replaced by 'meaning as use'.

[7] References to Wittgenstein's *Tractatus* (Wittgenstein 1974a/1921) and to the *Philosophical Investigations* (Wittgenstein 1974b/1953) are given by numbers (which refer to one or more sentences numbered by the author himself). In the case of the *Philosophical Investigations* these are preceded by '#'.

philosophy, understanding the 'grammar' (# 90), offering reminders for a particular purpose (# 127), and thus he complains for instance that we do not *command a clear view* of the use of our words (# 122). I submit that the way that the *Tractatus argues,* and the detail and differentiation of its conceptual apparatus, may be helpful to unravel some of the knots empirical educational research presents us with, and such in a more convincing way than what is possible on the basis of what one finds in the Investigations.[8]

Briefly, the *Tractatus* argues that the world, i.e., the totality of facts (the existence of states of affairs) is all that is the case. We picture facts (a model of reality) to ourselves. A picture is a fact; it is laid against reality. A picture cannot, however, depict its pictorial form: it displays it. What any picture, of whatever form, must have in common with reality, in order to be able to depict it—correctly or incorrectly—in any way at all, is logical form, i.e. the form of reality. A picture whose pictorial form is logical form is called a logical picture. A picture agrees with reality or fails to agree; it is correct or incorrect, true or false. What a picture represents is its sense. A logical picture of facts is a thought (a proposition with a sense). And 'finally', the correct method in philosophy would really be to say nothing except what can be said, i.e. propositions of natural science. It is this latter element combined with the famous "What we cannot speak about we must pass over in silence" (7) which attracted a lot of attention and set the scene for decades of critical discussion much of it devoted to the mysticism implied in this stance. Yet many other aspects dealt with in the *Tractatus* (typically very precisely formulated), as many authors have argued, are not given up in the later work.

Reality is, for the author of the *Tractatus,* the existence and non-existence of states of affairs (2.06) and the world is the totality of existing states of affairs (2.04). However, the world is the totality of facts (the existence of states of affairs) not of things (1.1.) We picture facts to ourselves (2.1); such picture is a model of reality (2.12), it is a fact (2.141) and is laid against reality like a measure (2.1512). A picture, conceived in this way, also includes the pictorial relationship (which makes it into a picture) and consists of the correlations of the picture's elements with things (2.1513, 2.1514). Now if a fact is to be a picture, it must have something in common with what it depicts (2.16), then there must be something identical in a picture and what it depicts, to enable the one to be a picture of the other at all (2.161). The precise language of the *Tractatus* and moreover its pointing at the same time to what is presupposed is I think in many ways very helpful. Thus in 2.172 he writes "A picture cannot, however, depict its pictorial form: it displays it", and it cannot, however, place itself outside its representational form (2.174)—a position which will be rephrased in the later work by addressing the relatively closed nature of a language-game embedded in the groundlessness of the form of life. And he continues: "What any picture, of whatever form, must have in common with reality,

[8] First of all the *Tractatus* addresses referential meaning ('what is the case'). It seeks 'clarity' in limiting the propositional form to 'what can be said' meaningfully. It does not embrace the shift to 'meaning as use' characteristic for the later work which may lack face validity for educational researchers of the dominant paradigm or even engender reproaches of relativism.

in order to be able to depict it—correctly or incorrectly—in any way at all, is logical form, i.e. the form of reality" (2.18); such a picture is called a logical picture (2.19) and these can depict the world (2.19). As a picture has logical-pictorial form in common with what it depicts (2.2) it agrees with reality or fails to agree; it is correct or incorrect, true or false (2.21). And as what a picture represents it represents independently of its truth or falsity, by means of its pictorial form (2.22), this is its sense (2.221), therefore the agreement or disagreement of its sense with reality constitutes its truth or falsity (2.222). Finally he underscores that it is impossible to tell from the picture alone whether it is true or false (2.224) and that there are no pictures that are true a priori (2.225). Not surprisingly yet importantly the *Tractatus* limits what can be said to propositions of natural science (6.53)—in a proposition a thought finds an expression that can be perceived by the senses (3.1).

7.4 Questioning the Necessary Connection Between Propositions/Thoughts/Perception

It can be questioned whether the limitations of 3.1 is necessary and moreover whether it is helpful at all if we take seriously what the *Tractatus* focuses at. Suppose someone says, "I am not comfortable about the way you treat me" (let me call this expression A), or "For me excluding this person from social benefits is a real injustice" (expression B).[9] From the point of view of the person who utters this there is no way she or anyone else can verify the truth or falsehood of this expression. One is left with the veracity of the expression of a feeling. But matters are different for the person who hears this utterance. What is heard can in principle be checked. It is therefore possible to say something about what a particular person *said* about how she felt at a certain moment, about the situation she finds herself in. But if that is possible, why would propositions have to be limited to those of natural science? What is argued for would entail that qualitative data could be part of what we can speak about, and that social sciences (together with philosophy, ethics etc.) are not necessarily excluded from what can be spoken of. Wittgenstein, of course, ruled this out. And in talking about philosophy in 6.54 he writes: "My propositions serve as elucidations in the following way: anyone who understand me eventually recognizes them as nonsensical, when he has used them—as steps—to climb up beyond them. (He must, so to speak, throw away the ladder after he has climbed up it.) He must transcend these propositions, and then he will see the world aright." As for him what could not be spoken of (for example ethics) was nevertheless of the highest importance, he invoked a particular kind of mysticism to give this a place. The latter is, it seems to me, not necessary, provided reference is made to a different kind of warrant for what we say, more precisely when we talk (interpret, argue, claim) about 'what is said' (or done).

[9] Both examples use concepts, are judgments of a particular situation and invoke therefore a particular normative stance.

But there is more: the propositions of the *Tractatus* itself are nonsensical according to Wittgenstein (they cannot be perceived, they have no empirical content, see 3.1), and more generally, 2.172 excludes that a picture depicts it pictorial form. The suggestion offered above does not require to accept the 'showing/saying' distinction (and the mysticism that goes with it, which may be objectionable in the eyes of many), neither does it fall in the trap of relativism. And although it embraces the position argued for in the later work, it does not do that by starting from the argument of the *Philosophical Investigations* but by only giving up *Tractatus* 3.1. (and what this implies); moreover, thus justice is done to the relevance attached by the author of the *Tractatus* to ethics, religion, etc. My suggestion only presupposes that some meaning can be given to expressions such as A and B. It goes without saying that this cannot be done according to the *Tractatus*. But isn't the latter position not on the verge of being incoherent, as it does accept for example in 2.161 and 2.222 an analogous kind of judgment?[10] Can I underscore that making this suggestion is a very limited move: it is not arguing that language can say it all (exhaustively)—that language cannot do that, that its very nature is 'defective' in this respect, is a characteristic of language generally and not just of ethical language but of referential language too (something accepted by Wittgenstein in the earlier as well as in the later work)—nor that now new foundations are offered; instead the only thing that is suggested is that some utterances of human beings which are not part of a referential discourse can make sense and should therefore not be discarded.

It could be objected that in following what I suggest injustice is done to what is at stake in religion or ethics, by making reference to how people 'feel', more precisely how they speak about how they feel (see again footnote 9). In other words, have I reduced religion, ethics to whatever people say and thus made a joke of them? I think not. The nature of justice, of ethics, their existence, is of a different kind than the existence of objects such as a table. Incidentally, the latter too require concepts when we want to refer to these to in what we say—the limit being a language-game part of a form of life of which the characteristics are addressed in the later work. Nor am I flirting with another possible danger that may surface, i.e., relativism. Taking at face value what someone says presupposes not only that she is speaking truthfully but also that she makes use of words of which the meaning is shared (in order for there to be communication at all). The latter, incidentally is a characteristic which is not denied by the *Tractatus* where one finds in 4.03 "A proposition must use old expressions to communicate a new sense. A proposition communicates a situation to us…". The warrant to rule out paranoia and delusion is to be found in a social practice, in other words for these to be ruled out a social practice is necessary. But such a social practice is also required for areas of a formal nature as mathematics and logic.[11]

[10] See also 3.262 "What signs fail to express, their application shows. What signs slur over, their application says clearly". I am grateful to Jean Paul Van Bendegem who has drawn my attention to this.

[11] For a discussion of the former see Coessens and Van Bendegem 2006; for the latter see Winch 1958 more in particular pp. 55–57.

Has anything been gained by trying to make interpretation part of what is addressed in the *Tractatus*? I am inclined to answer this positively. All what is needed to see the relevance of this for example for social science (moreover for ethics and philosophy) is a concept of reality that is broadened to 'what makes sense to say (for us)'. Above it has been argued that nothing stands in the way for such a move, moreover what is argued in the *Tractatus* requires such an addition if, as I have done, the mysticism (and please recall that this is for Wittgenstein a necessary addition to the argument the *Tractatus* makes) is bracketed for a moment. It is however worth noting that particular remarks (for example that a picture cannot depict its pictorial form but displays it) are made by the author of the *Tractatus* and are thus as well characteristic for the limiting case where what can be perceived by the senses (3.1) is at stake and for which Wittgenstein offers more general 'elucidations' (see 6.54).

7.5 Educational Research as a Logical Representation: On Thoughts, Facts, Picture, and the Limits of Propositions with a Tractarian Sense

What would follow if we take the nature of the pictorial form seriously, yet accept at the same time that propositions should not necessarily be limited to those of natural science? It may very well be conceivable to proceed along these lines; after all it may not be that different from what we do in natural science and is offered in the *Tractatus* kind philosophical reflection.[12] So how about if we would start (in a discussion in ethics, aesthetics, or education) from "This strikes me as the right way of putting it". How would this be different from an expression where it is said that the table stands next to something else. The latter expression surely presupposes not only a human being with such and such sensory apparatus, but moreover one that is familiar with the use of 'next', of 'standing' and so on and so forth (lacking the ability to see, failing to understand 'next', all of that would incapacitate her to express the mentioned proposition). Clearly, only in very specific cases there may be room for doubt and for discussion (and I think that here the matter could always, at least in principle, be settled). It is this I surmise what the author of the *Tractatus* has in mind. But it may be helpful to recall that here too the sense of the propositions is a projection of a possible situation of which the pictorial form (now in oral or written signs) can only be 'displayed'. And although I said a little bit earlier that in principle agreement can always be reached, it may in some cases not be straightforward (What is 'a table'?, What is 'next'?).[13] Thus it can be asked whether the situation social scientists or ethicists find themselves in, what they debate is, indeed

[12] It goes without saying that the intelligibility that is sought will not be exclusively in terms of causality or may even not be about causality at all.

[13] An interesting case is the so-called Higgs boson particle of which scientists now believe to have found evidence for its existence.

fundamentally different. The similarity I want to draw attention to is of course the 'pictorial' form. This is not to say that ethics, aesthetics etc. should not any longer be distinguished from referential language use, but it is to argue that everything has to be situated at the 'semantic' level (or, if one prefers this, on the level of 'what makes sense for us to say'). It is the 'raw material' that is different: whereas referential language deals with propositions where thoughts find expression that can be perceived by the senses according to the *Tractatus* (3.1), in cases of ethics, aesthetics, etc. that material consists of appreciative utterances which make sense in a particular language-game and which invoke one or other kind of different 'bedrock' (see # 217). There is much more variation (and therefore disagreement) possible in these areas than in the preceding one. But that does not mean that rational discussion would be impossible here nor that a discussion of concepts would have to be ruled out; of course, in this area it may not always be possible or desirable to reach agreement—it is precisely the richness of these areas, the possibility of different interpretations which sometimes are each other's opposite, in other cases add or deepen the meaning that is highlighted through 'layers of meaning', that make them interesting. This comes with the danger to give in to the temptation to bracket in these areas the 'pictorial' form and to develop doctrines as it is when referential language is concerned. It is crucial to appreciate that one pictures facts to oneself, that a picture is a model of reality, which agrees with reality or not, bearing in mind that what is real necessarily refers to 'what is real for us'.

In the *Tractatus* Wittgenstein writes in 3. : "A logical picture of facts is a thought" and in 3.12 the sign with which we express a thought is called a propositional sign, which is continued in 3.14 with "A propositional sign is a fact". As a thought is a proposition with a sense (4), 4.01 reads "A proposition is a picture of reality. A proposition is a model of reality as we imagine it.", continued by "A proposition *shows* its sense. A proposition *shows* how things stand *if* it is true. And it *says that* they do so stand." (4.022). Reiterating in 4.05 that "Reality is compared with propositions" they are further qualified "… [they] can be true or false only in virtue of being a picture of reality" (4.06), to arrive in 4.2 at "The sense of a proposition is its agreement and disagreement with possibilities of existence and non-existence of states of affairs." As what a picture represents is its sense and the agreement or disagreement of its sense with reality constitutes its truth or falsity, moreover as we use the perceptible sign of a proposition (spoken or written, etc.) as a projection of a possible situation, the method of projection is to think of the sense of the proposition (3.11). Applied to the area of social sciences and of educational research, this characterizes poignantly, I submit, what needs to be understood.

As I argued above, most educational researchers seem to be aware that there are necessarily limitations concerning how to proceed. They put a lot of effort in determining the kind of data they need, how to analyse these and are showing their willingness to justify all the steps they take before offering (usually in a tentative way) some conclusions. Yet that their approach is heavily criticized and in particular by philosophers of educational research now turns out not so difficult to explain. Indeed it is tempting to ignore momentarily the pictorial form and then forgetting that one has ignored it. This conclusion prompts itself even if one does not go along

with what is offered in my discussion on the basis of expressions of the kind of A and B (as a criticism of the *Tractatus*). In trying to achieve value free, i.e., objective knowledge, to represent reality as it really is, many educational researchers confuse rational discussion with a rather crude kind of naïve registration (which they present) in their representation of research. Though it is accepted that theories and concepts are needed, no serious engagement is shown with the kinds of theoretical insights the complex human reality requires, with the kind of questions Socrates famously asked—one may want to recall his 'the unquestioned life is not worth living'. What they offer can be identified as positivism, or in any case as a less outspoken or milder version of it. A metaphor may be helpful here: in a similar manner as facts and concepts are often portrayed as two sides of the same coin, ethics, aesthetics, and all dimensions which come together in our social practices can be taken to identify what will be seen looking through a prism (of which each point of entry may be a particular dimension). For a moment one may indulge oneself getting engrossed in how reality looks like (really is) from a *particular* point of entry. But when choosing to take a particular stance, one is not at liberty to forget or do away with its particular picturing (neither with other possible entries). It (i.e., the stance) is therefore not a matter of taste at all, or of what works or what is popular, but must be part of a rational deliberation involving various perspectives and the voices of all who want to be part of it. Each of these possible stances (particular entries in the prism if I may be allowed to continue the metaphor), may focus on what is absolute in a particular 'perspective'.[14] What I labelled 'referential meaning' is thus a particular case (a discourse which relies on *sense* data); it is by no means the only way reality makes sense for us and that is shown in the variety of ways we speak of what is 'real' for us.[15] It is easy to forget this, witness of this not only the many aberrations in empirical educational research, but also in interpretations that are offered in philosophy of education.

Examples of this are given in a previous study (Smeyers 2009). Dealing with the arguments that have been put forward in previous discussions by the Research Community, there I have argued that the proofs and arguments that feature in critiques of educational research often focus on what particular writers seem to be unaware of, namely issues/areas that they have forgotten to address that still need

[14] Incidentally, the concept 'perspective' may suggest that one can take a distance from what one observes and/or that one can decide to take only a particular perspective. Both of these tendencies should be resisted: the first is clearly impossible; the second can only momentarily be the case in view of a particular purpose. It is rather that one always finds oneself in one or other perspective which foregrounds itself.

[15] Of course, it may never be completely or totally possible to diverge oneself from one or other kind of correspondence theory of truth. Once one accepts, however, that there is theoretical knowledge one needs to realize that more is at stake which can no longer be captured by a correspondence theory of truth, and from this it follows that more and different kinds of 'what makes sense to say' have to be 'admitted'. Such broadening can build on a thin conception of meaning (may even always necessarily build at least partly on this, for example on referential meaning, a language-game which one can hardly avoid to play), but offers richer perspectives which are I believe no less rational.

accounting for. The critic will therefore draw attention to a particular point that a researcher overlooked, or did not want to deal with. Consequently, the critic will introduce this point and thereby add another dimension to the discussion. This involves an attempt to illustrate how one's own position is *more true to the nature* of what one is dealing with in accordance with the way in which one conceptualizes what is at stake. The differentiations one makes or the stance one foregrounds may be thought of in terms of a kind of wisdom that has been forgotten or ignored. In other cases one *imposes a particular logic* or set of rules that frame the debate. By implication this will exclude some colleagues or other educational researchers (for example the empirical researchers one is criticizing) from the discussion. It can be argued that this is possibly another version of forgetting that a particular picturing is at stake by insisting on one or other dimension (in this case one that is part of philosophy of education). In withdrawing oneself from the debate between scholars (either on oneself of together with those who are of the same mind) and relying on insights only 'they are privy to' in virtue of or backed up by a methodological claim or claims used to arrive at the truth—evidently of what *they* profess—(such as a particular method for example a Foucauldian one, a particular kind of discourse analysis, of concept clarification, etc.) or just excluding anyone else who does not share a particular philosophical stance, the latter being repeated again and again in a text that is less argumentative than it is rhetorical in a pejorative sense, they too seem to forget that it is all about picturing a model of reality which claims to give a picture of the world but which cannot depict its pictorial form but only display it.

Returning to the imagined case this paper opened with, it has been argued that what the Diversified and Many entertain, cannot be limited to a self-indulgent game in the space provided by The One and Only. Decisions need to be made and for that reference to 'what is real' is crucial. Following Winch (1958), it is my claim too that a more fruitful way to talk about this is phrased by 'what it makes sense to say'. The answer the majority of educational research nowadays offers is something that aspires to be 'beyond reasonable doubt' within the chosen frame-work (or language-game) of empirical educational science. One is interested in what is the case, what is real, unbiased and therefore one typically also suggests that the insights should be taken up by practitioners. However, one operates as if educational research is a kind of natural science and is inclined to forget that there is more at stake. It is telling that one wants to be as far as possible removed from discussions about ends; moreover, these are presented as if they are to be situated beyond critical scrutiny. Possibly this is because one is afraid of doctrines professed under the guise of wisdom and because one abhors preachers. But this is not the right kind of identifying alternatives. What is argued for in ethics, philosophy, and so forth is not excluded from rational debate and should not be confused with telling people how to think and/or act. It is not the case that what is offered in the dominant stream of educational research is not interesting (and it definitely is in the particular context in which these researchers operate); and it is certainly doing well in the present climate of performativity at the university, but it is so limited, especially when it is offered for clinical practice. The wariness of these researchers to engage with other areas, sometimes motivated by 'perhaps it is not a lot research has to offer but it is the only thing it can offer', is troublesome.

The nowadays dominant tradition of educational research presupposes that what is the case administers a normative background and generates aims which have to be observed and aspired at any cost. The illusion of certainty that they uphold is very attractive, almost irresistible to all those who struggle to decide what to do but is yet another manifestation of scepticism. Their help, well-intended cannot do away with the responsibility and the requirement to offer a justification for the way we interact on behalf of those who are put in our trust. It cannot do away with the normative stance they themselves are necessarily embracing as researchers. In their search for what is real in a particular sense (what explains how things are, which insights correspond with what is observed), their forgetfulness of the pictorial form is at odds with the position they seem to embrace. Notwithstanding the appeal of what can be perceived by the senses (which according to Wittgenstein's *Tractatus* limits what can be said), a close reading of what he argued there would teach them a lesson.

References

Bosmans, G., Braet, C., Beyers, W., Van Leeuwen, K., & Van Vlierberghe, L. (2011). Parents' power assertive discipline and internalizing problems in adolescents: The role of attachment. *Parenting: Science and Practice, 11*, 34–55.

Coessens, K., & Van Bendegem, J. P. (2006). Expectations of what scientific research could (not) do. In P. Smeyers & M. Depaepe (Eds.), *Educational research: Why' what works' doesn't work* (pp. 109–125). Dordrecht: Springer.

Smeyers, P. (2009). Revisiting Achilles' sadness that no method can be found. Educational research: To whom should we talk, for what purpose and in what way? In P. Smeyers & M. Depaepe (Eds.), *Educational research: Proofs, arguments, and other reasonings* (pp. 161–176). Dordrecht: Springer.

Van Petegem, S., Beyers, W., Vansteenkiste, M., & Soenens, B. (2012). On the association between adolescent autonomy and psychosocial functioning: Examining decisional independence from a self-determination theory perspective. *Developmental Psychology, 48*, 76–88.

Winch, P. (1958). *The idea of a social science and its relation to philosophy*. London: Routledge.

Wittgenstein, L. (1974a). *Tractatus logico-philosophicus* (D. F. Pears & B. F. McGuinness, Trans.). London: Routledge & Kegan Paul. (Originally published in German 1921; first English edition with a translation 1922; this text is a revision of the 1961 translation)

Wittgenstein, L. (1974b). *Philosophical investigations/Philosophische Untersuchungen* (G. E. M. Anscombe, Trans.). Oxford: Blackwell. (Originally published in 1953; 3rd edition—unaltered text of the 2nd edition which itself was a revision of the 1st edition)

Chapter 8
The Ethics of Materiality: Some Insights from Non-representational Theory

Lynn Fendler

Why should we care about materiality? Assuming we are not interested in pursuing ontological debates about the number of angels capable of dancing on the head of a pin, why study materiality? In what ways is materiality an issue of ethical concern for educational researchers?

I began this study by trying to get a grasp on the limits around the concept of materiality, so I started with the question, "What are criteria by which something could reasonably be classified as being *not* material?" Not surprisingly, I was unable to pin down any epistemological, historical, subjective, logical, or definitional criteria that would serve categorically to exclude phenomena from the classification of 'material'. In the process, however, I came to some insight about the conceptual limits around 'materiality': the conceptual boundaries of materiality seem to depend on where we draw the line between text and context. As educational researchers, what do we accept as appropriate or relevant contextualization for a research question?

Because there are so many possible frameworks for drawing the line between text and context, the concept of materiality is very complex. To illustrate that complexity, below are listed just seven possible frameworks that appear variously in educational research projects as approaches to contextualizing a study:

Intellectual History is an approach to contextualization that situates the text (problem or question) in relation to philosophical or historical precedents. In this approach, contexts for inquiry can be found in previous research and publications. For example, if we want to propose or conduct research on language and speech acts, then it is necessary to contextualize our research inquiry in relationship to the work of John Langshaw Austin and Ludwig Wittgenstein.

Biography can serve as a context for a research project when people offer explanations by appealing to the personal lives of the objects of study. When

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biography is the contextual framework, then it matters that Sandra Harding is a woman, or that Louis Althusser murdered his wife, or that John Dewey never visited Germany.

Structure/Function serves as the context for research projects when nations, political systems, cultures, and religions are invoked as explanations for phenomena. In a structural/functional approach to research, it does not make sense to compare the theories of Hume and Kant because they worked in such different structural contexts. In a structure/function approach to contextualization, we might explain the popularity of statistical reasoning by appealing to the structural context of neoliberalism.

Archaeology is an approach to contextualization in which we understand research as the examination of interrelationships among various phenomena in the same historical slice of time. For example, Foucault analyzed the interactions among contextual elements of linguistics, natural history, and economics in the eighteenth century to arrive at a characterization of Enlightenment systems of thought.

Utility is a form of contextualization in which use is a salient factor for classification. In a utility framework for contextualizing a research question, it does not matter so much whether standardized tests are valid, or German, or analytical; but it does matter whether standardized tests are used for administrative purposes or as pedagogical training devices.

Kairos is a particular context for research in which the temporal sequence of events or phenomena is a crucial salient quality. For example, we can only make sense of comedy or jazz by attending to timing as a key element of context. We might argue that the sequence of premises makes a difference in the interpretation of a philosophical argument. We might investigate an historical text by looking at the order of things: what is presented as the starting point of the narrative, and what is presented as following from that beginning.

Aesthetics is an approach to contextualization in which we understand educational research as being affected by place, including architecture, the temperature or smell of a room, the rhythm or alliteration of language, the emotional climate of the conference, or the esprit de corps of the reading public.

In each of those seven frameworks for contextualization, the line between text and context falls in a different place. Sometimes the line appears in incommensurable, orthogonal dimensions. Concomitantly, the conceptual boundaries around 'materiality' also shift depending on the relationship between text and context that is established by the theoretical framework of the research.

Early on in my investigation into materiality, I encountered a relatively new approach to theorization that provided some purchase on the complexities of conceptualizing materiality and context. 'Non-representational theory', has been developed recently by geographers in the U.K.[1] Since the mid-1990s, cultural

[1] Geographers include Tim Cresswell (Royal Holoway, University of London), J.D. Dewsbury (Bristol), Hayden Lorimer (Glasgow), Derek McCormack (Oxford), Mark Paterson (Exeter), Richard G. Smith (Swansea), Nigel Thrift (Warwick), and Sarah Whatmore (Oxford).

geographers have developed non-representational theories that derive from geography's longstanding scientific focus on material things of the world as they exist in space and time. Patchett (2010) characterizes non-representational theory as having "a heightened sensitivity to the fleshy realities of the human body" (online version). Non-representational theories are anti-dualistic; Patchett calls for "a more democratic relationship between conceptual and empirical work". Cartography, a branch of traditional geography, strives to get a handle on spatial relationships by representing the world through mapping and/or projection. Non-representational theory is a branch of newer approaches to cultural geography that strive to get a handle on spatial relationships not by *re*presenting them, but rather by presenting them. In this case, 'present' connotes spatial and temporal proximity and availability.

Non-representational theories are creative and experimental. They have allowed me to imagine materiality in new ways, and also helped me to raise questions about the ethics of materiality. I find non-representational theories fascinating insofar as they seem to have done away with, once and for all, the last vestiges of structuralism in social theory. In non-representational theories, there are no longer signs or symbols that represent concepts or realities. Furthermore, non-representational theories also dissolve any Wittgensteinian distinctions between the speakable and the unspeakable, and they erase distinctions among pictures, models, displays, or depictions and reality.

Non-representational theories render such distinctions moot by positing that all things exist on the same epistemological plane. In other words, for non-representational theories (unlike for Wittgenstein's postulates) the nature of justice or ethics is *not* different from the nature of things on the table; affect is not a different order from logic; and words are not different from things. To enhance this epistemological set-up, non-representational theories also practice what they preach; they perform their epistemological claims in their linguistic/rhetorical forms by means of various propositional, performative, and evocative literary devices that reunite mind and body. In a non-representational fashion, I have attempted some similar performative devices in this chapter with occasional anecdotes, asides, and footnotes.

Frankly speaking, I suspect that non-representational theory is in its honeymoon phase; its proponents tend to promise lofty theoretical potentials in almost utopian terms.[2] Nevertheless, I have found current versions of non-representational theories to be useful, even inspiring, for generating perspectives about materiality in educational research. This paper is organized around three issues that are relevant to questions of materiality in educational research and that are amenable to insights from non-representational theories:

- Subject and object
- Past and present
- Uniqueness and repeatability

[2] Vannini lists 20 characteristics of non-representational research as: vitality, hybridity, sensuality, fluidity, relationality, performativity, corporeality, materiality, affirmativity, sustainability, ineffability, potentiality, consequentiality, creativity, multimodality, reflexivity, proximity, mobility, immediacy, and partiality.

In this chapter, I first explicate some perspectives from non-representational theory that are relevant to each issue; then I provide examples that pertain to educational research; finally I suggest some ethical implications that non-representational perspectives bring to bear on materiality.

Schematic Organization

Focus for Educational Research	Relation to Materiality	Extensions and Examples	Ethical Implications
Subject and Object	Alternative to both constructivism and positivism; displacement of subject-object dichotomy	Theorizing language as figurative and representational	Distributed agency
Past and Present	Materiality as non-transcendent; presence and absence	Theorizing causality as historical and ideological	Anti-determinism
Uniqueness and Repeatability	Simultaneously transient and permanent	Theorizing objects (including humans) as essence and performance	Inclusion and irreplaceability

8.1 Subject and Object: Non-constructivistic and Non-empiricistic Epistemologies for Educational Research

Non-representational theory is described as a critical alternative to two mainstream epistemological positions for research, namely social constructivism and logical empiricism. Non-representational theories aim to provide a generative conceptualization of the relationship between subject and object that involves neither replacing the material with the discursive, nor representing the material with the discursive.

Non-representational arguments against logical empiricism resemble those leveled by most post-linguistic-turn philosophies. Those arguments are familiar to most educational researchers, so there is no need to repeat them here.

The specific arguments against constructivism, however, are perhaps less familiar and merit some explication. First, non-representational theories claim that social constructivism[3] is representational because of its twofold assumption: (1) meaning is created and exists inside people's heads, and (2) the meaning inside people's heads is not autonomous. That is, we do not construct random, idiosyncratic,

[3] Of course, there are different versions of social constructivism or social constructionism (see, esp. Hacking 2000). The critiques from non-representational theory apply more or less to those different versions.

discrete, cognitive categories; we *socially* construct meanings *of the world*.[4] Non-representational theories take exception to the representationalist assumptions of social constructivism by critiquing the role of the symbolic in social constructions:

> [S]ocial constructivism is distinguished by a preoccupation with representation; specifically, by a focus on the structure of symbolic meaning (or cultural representation). Social constructivism looks to how the symbolic orders of the social (or the cultural) realise themselves in the distribution of meaning and value, and thereby reinforce, legitimate and facilitate unequal distributions of goods, opportunities, and power. (Anderson and Harrison 2010, p. 4)

Non-representational theories challenge the epistemology of social constructivism by arguing that constructivist languages and practices serve to recreate and reproduce the Cartesian material/non-material divide. In other words, if we subscribe to an epistemology of social constructivism, then we have still assumed a subject-object split; we have just inverted empiricism's cause-and-effect sequence.

Non-representational theories deal with the problem of the subject-object split by putting everything—I mean *everything*—on the same qualitative plane. Borrowing heavily from Deleuze and Guattari, Anderson and Harrison (2010) explain that non-representational theories deal with things as if everything existed on the same 'plane of immanence'. To illustrate this claim of radical equality (and reminiscent of Jorge Luis Borges' Chinese encyclopedia) non-representational theories provide a list of a few[5] things that are all regarded as ontologically and epistemologically equivalent:

> beliefs, atmospheres, sensations, ideas, toys, music, ghosts, dance therapies, footpaths, pained bodies, trance music, reindeer, plants, boredom, fat, anxieties, vampires, cars, enchantment, nanotechnologies, water voles, GM Foods, landscapes, drugs, money, racialised bodies, political demonstrations. (Anderson and Harrison 2010, p. 14)

When everything is held on the same plane of immanence, then everything has equal potential to be subject and object; neither subjectivity nor objectivity is essential or predetermined. In fact, within non-representational theories, everything is always simultaneously subject and object. In this way, non-representational theories posit a view that contrasts with Hacking's (1995) distinction between human kinds (which can both act and be acted upon) and non-human kinds (which can only be acted upon). For example, within non-representational theories, the APA citation system and I have mutual effects on one another. As a researcher, I have an impact on Predictive Analytics SoftWare just as much as Predictive Analytics SoftWare has an impact on me. We (all material things of the world including boredom and enchantment) can be seen as acting and being acted upon; there is no essential distinction between subject and object or between empirical and rational. Rather, subjectivity and objectivity are effects of perspectives within specific material relations in time and place. As Anderson and Henderson (2010) write, "the meaning of things comes less from their place in a structuring symbolic order and more from their enactment in contingent practical contexts" (p. 7).

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[4] In this way non-representational theories have characterized the epistemology of social constructivism in terms of Kantian categories, I think.

[5] I really wanted to write, "provide a representative list of…", but could not, for obvious reasons.

The radical epistemological equality presented by non-representational theories also extends to relationships between the individual and the social. Anderson and Harrison (2010) ask, "[W]hat becomes of the subject and the social *as such* once constructivism is radicalised in the manner described … and the human is understood to be part of the on-going becoming of worlds?" (p. 11). In educational research, then, the theoretical relationships among traditional analytical categories—the social, the institutional, the cultural, the individual, and the school—are flattened. There is no more essential hierarchy or nesting of conceptual categories, and no assumption that some entities have agency while other entities have none: "Here the influences of Gilles Deleuze and Bruno Latour are most evident, as we attempt to describe the consequences of non-representational theory's relational-materialism for thinking about the composition and nature of the social" (Anderson and Harrison 2010, pp. 2–3).

By placing all things on the same epistemological plane, non-representational theories evacuate not only the problem of the Cartesian subject-object dualism, but also the empirical-rational dichotomy, and the individual-social split in theory. They accomplish this evacuation by appealing to a kind of nominalism in which all things can be material, and all things have a right to be treated equitably in research as both passive recipients *of* and active providers *to* each other as material constituents of worldly activities.

8.1.1 The Case of Representational-Versus-Figurative Language

I think it is fair to say that educational research is dominated by representational language. Researchers of all stripes use language primarily to communicate meaning that is assumed to lie 'behind' or 'beyond' words; language is used symbolically as a pointer to meaning. Representational language embeds assumptions about language as a vehicle or medium of communication in which language does not have the same material status as the things that are represented by language. Even post-linguistic-turn projects tend to rely heavily on the representational function of language for research and communication, even as they/we realize the materiality of language per se, and we are willing to acknowledge that Nietzsche, Wittgenstein, and Foucault advocate for and use language in non-representational ways.

Representationalism is founded on the structuralist dualism of signifier and signified in which the signified becomes the proper object of research (while the signifier is relegated to mere epiphenomenon). In representationalism, language is not granted material status. Rather, language functions as the transparent signifier, and this set-up has implications for what counts as material. Bleich (2001), for example, argues that, "'Materiality' is understood in contrast to 'transparency'" (p. 120). I have always thought that it was an example of extreme irony that materialist theories would reject the perceptible materiality of language in favor of the implied materiality of the underlying signified.

One possible alternative to representational language is figurative language. Figurative language does not have a representational function, so it constructs a relationship between text and context that is unlike the relationship constructed in representational language. Figurative language does not represent meaning; figurative language is itself the material and the meaning. By analogy, figurative research does not represent knowledge; figurative research is itself the material of meaning. Figurative research, like figurative language, may create, catalyze, spark, inspire, generate, move, provoke, and/or persuade, but it does not represent, convey, deliver, or provide. Imagining figurative research, we may have to address the disconcerting premise that educational research stands alone as its own thing, not representing any meaning at all, but rather constituting an aspect of the world that is equivalent to all other objects and subjects.

The distinction between representational and figurative language has been elucidated by Wittgenstein's theories. However, non-representational theories go one step further and treat representational language and figurative language on the same epistemological plane, as analytically equivalent. Non-representational theories reject structuralist dichotomies, but they also reject phenomenological and existentialist distinctions at the same time. In fact, in non-representational theories it does not make sense to separate structuralism from poststructuralism or phenomenology from existentialism any more. My mental image for the way non-representational theories work is to assemble all of the terminology from all of those systems (*langue, parole, discourse, consciousness, life-world, perception, memory, choice, emotion, volition, authenticity, telos*) and lay them out on the same surface[6]—on the same 'plane of immanence'. Then theorization becomes a matter of collage and topography: the re-arrangement of items in such a way that the process and resulting product becomes educational, elucidating, pleasing, inspirational, and/or enlightening. The collage could presumably be evaluated according to any number of valuation schemes from aesthetic to pragmatic to ethical.

8.1.2 Cartesian Privileges

> To draw attention to a philosopher's metaphors is to belittle him –
> like praising a logician for his beautiful handwriting.
>
> Max Black 1962

Modern social sciences typically assume that meaning can be represented by language. Non-representational theories problematize representational relationships by placing everything on the same plane of immanence instead. On the surface of it, the distinction between representational and non-representational systems might appear to be axiologically neutral. However, there is always already power afoot. When language or research is assumed to be representational, a hierarchy of authority is established in which one or the other—research or readers—has more

[6] I usually imagine a giant tablecloth.

authority than the other; one can determine the other. The epistemological commitments of representational research thereby set up a foundational assumption of inequality in which determinism is inescapable. Within representational empiricism, texts determine meaning. Within representational constructivism, the readers determine meaning. Either way, privilege and power are being exercised.

Ethically speaking, representational research and figurative research establish two different constellations of power relations between knowledge and people, and two different conceptual horizons for imagining what educational research might mean. Within representational theories, research is supposed to make me a better person by helping to remediate my ignorance or allowing me to improve the knowledge in my own mind. Within figurative research however, language does not mediate the meaning. Figuration is a non-instructional, non-remedial, and non-therapeutic form of address. Non-representational theories regard both representation and figuration as equal players in the material world of research along with my reading, your editing, intellectual ambitions, and the whole world of mathematical equations.

Non-representational theories map explanation, representation, figuration, research reports, and schoolmasters onto the same epistemological plane. They imply an ethical relationship that is similar to Rancière's figure of the ignorant schoolmaster. Critiquing the 'master explicator', Rancière (2006) describes the role of the emancipated reader/writer as "aesthetic autonomy" (p. 27). Mixing the language of non-representational research with the language of Rancière, I can say the emancipated reader reads all texts *as if* they were non-representational. The emancipated reader assumes a position of equality—not deference, authority, receptivity, management, or dependency—relative to the research and the objects of research. Within these ethical parameters, to be emancipated means to participate in educational research—as both reader and writer—*as if* research were an opportunity for mutual engagement, not a source of truth, authority, or remediation.

8.2 Past and Present: Non-linear and Non-transcendent Temporal Relationships in Educational Research

In addition to the epistemological issue of subject-and-object, non-representational theories also address the issue of the relationship of the past to the present, which is a perennial (!) issue of historiography. Both causality and continuity are historiographical problems, and yet most casual references to history tend to assume one and/or the other. The causality/continuity stance is reflected in both of these adages, one straightforward and the other ironic:

> Those who cannot remember the past are condemned to repeat it. (George Santayana)

> We learn from history that we do not learn from history. (Georg W.F. Hegel)

To study history for instrumental purposes (e.g., not to reinvent the wheel; to prevent future mistakes; to predict probable future outcomes) is to assume some degree of causality and continuity in the relationship of the past to the present and the

future. Instrumental approaches to historical research are associated with modern, administrative, and managerial social sciences in which the purpose of research is to remediate society. Social sciences generally prefer to assume linear relationships among past, present, and future; that assumption of linearity supports the belief that we can control things—as if we could reduce future risks by heeding past mistakes.

Most social scientific research imposes some degree of causal inference between the past and the present: anthropology assumes culture or tradition; psychology assumes genetics, conditioning, or latent disturbances; sociology assumes power, identity, or structuration; economics assumes maximization of utility or capital, etc. Even some historians[7] (present company excluded, of course) appeal to events and patterns of the past in order to explain or make sense of the present. In most social-scientific research approaches, there is a rarely acknowledged assumption of continuity; the present and the future are regarded (in some sense) as dependent on the past; remarkably, that is an ahistorical assumption to hold.

There are several interesting problems with chronology, only one of which is the *post-hoc-ergo-propter-hoc* fallacy of interpretation. Historians from many epistemological camps recognize that causal inference is a confounding variable of historical analysis, but not all historians accept the premise that presentism is inevitable.[8] Chronology is not only an issue of fallacious inferences or perspectival bias, however. There are also more fundamental problems with chronology, one of which is the problem of trying to stop time long enough to write about it. This problem is analogous to the cartographical problem of projection: it's not possible to render three-dimensional space onto a two-dimensional surface without distortion. Analogously, because there are trillions of things happening 'at the same time', it is always necessary to omit from historiography 99.9 % of what is happening. We write history in the present using processes of retrospection (memory) and speculation (fantasy). Generally speaking, we do not interrupt every sentence with a footnote that explains the revision history of that sentence in the context of the paragraph or the larger project.[9] In historiography, it is not possible to project four-dimensional life onto two-dimensional narratives without distortion and selection bias.

As a way of trying to negotiate the complicated interactions in the chronological relationships among past, present, and future, non-representational theories frame the relationship of the past to the present in terms of the *performative*, making particular reference to the performative as it operates in conventional social scientific research. In brief, the theoretical challenge is to account for the present by considering everything—our memories of the past, our feelings in the present, and our orientation to the future—and put everything—along with our inclinations to explain human activity by making references to the past—on the same plane of immanence.

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[7] Some educational histories are more social science, and other histories are less so.

[8] Presentism is inevitable because we, as historical beings, cannot stand outside of history. See Fendler 2008.

[9] The original version of this sentence was "With the exception of James Joyce's *Ulysses*, we do not write by transcribing every fleeting mental image and digression that occurs in the ongoing processes of composition and narration". Of course, I have revised both sentences several times.

The relationship of the past to the present and future has bearing on questions of materiality in at least two, and probably three, dimensions. Material things are not supposed to be transcendent. Material things are supposed to have presence in both time and space, even when 'materiality' takes the form of an abstract concept like capitalism or beauty. If materiality does not imply some kind of empirical encounter, then it at least implies some kind of existential encounter with time and place. In that way materiality is both finite and infinite, which implies a very dynamic notion of temporality. In the same way as Heraclitus' river puzzle is both solvable and unsolvable, materiality is implicated in non-representational theories through diverse conceptualizations of the geometry of past, present and future (linear, circular, tesseract, matrix, etc.).

Within non-representational theories, materiality can have—but does not necessarily have—a temporal component that is independent of the apparently sequential experiences of the perceiving subject. That is, things themselves can be described as having their own histories that are comprised of shifting relations in which events in the present superimpose meanings that recreate events in the past. It is not possible for us anymore to imagine the World Trade Center towers as they were in August of 2001. Within non-representational theories, we would be able to include in educational research our memories of the event, together with our feelings of nostalgia for what life was like before 9/11, and our affection for those lost along with our current beliefs about the wars in Afghanistan.

8.2.1 The Case of Finitude and Infinitude

> He who binds to himself a joy
> Does the winged life destroy
> He who kisses the joy as it flies
> Lives in eternity's sunrise
> Wm. Blake (*Eternity*)

Representational research aligns with the infinite when it presupposes a Cartesian search for eternal truth. This is an epistemological bias that rejects the historical or material in favor of the universal or transcendent. Focusing attention on the peculiar boundaries around materiality, Carozzi (2005) calls this representational approach 'disembodied discourse':

> We wonder then, what are the practices that condition our perception that what we do as academics is not a product of the body but of the 'mind', the 'intelligence' or the 'will': agents that appear simultaneously human but not corporeal, and therefore carry a certain supernatural character. (Carozzi 2005, p. 27)

Emphasizing the reproduction and reiteration of the Cartesian mind/body split in educational practices, Carozzi (2005) remarks on the material conditions of schooling that place a higher value on transcendence than immediacy:

> [T]he school trains the body both not to pay attention to the quality of the sound of the voice produced or listened to during an oral lecture, as well as not to pay attention to the body

> movement involved in writing and speaking, but to address the attention to understanding and allowing understanding, that is, to producing and allowing production of equivalent discourses. (Carozzi 2005, p. 31)

Feminists and other materiality researchers have been calling attention to Cartesian privileges for some time. However, non-representational theories are making a different sort of argument in which the challenge is to recognize the presence of both the infinite and the finite in our lives, and to put both on the same plane of immanence. Rather than to invert the epistemological privilege from infinite to finite, as in feminist materialism, the aim is to construe both finite and infinite as material actors in mutual relation. Taking writing as an example of the interrelations of finite and infinite, Thrift (2008) has written:

> If one of the most important cognitive leaps of the last few hundred years was the growth of writing in its many forms, now… a similar change in the structure of cognition is occurring but as a general process of the purposeful production of semiosis, in which space is both template and font. (Thrift 2008, p. 23)

If I were to imagine how this interrelationship might play out in educational research, it would suggest an approach to research that shares some of the relational features of Bakhtin's theory of dialogics. Dialogics (not to be confused with dialectics) is a feature of writing that 'breaks the plane' of the narrative. The most intuitively accessible example of this dialogic displacement is when an actor on stage breaks out of character to address the audience directly. Similarly, an educational research project would include not only the plane of the narrative, but also the breaking of that plane as equivalent subjects/objects of study. For example, a research report designed to analyze school desks would include the researchers' personal asides to the reader about where they are sitting as they write, and how they feel about their own body positions at the moment, because our desktops and seating postures are also material factors in the production of research knowledge together with insights from archival texts.[10]

8.2.2 Presence and Absence as Affects

In non-representational theories, objects can be both present and absent, and it is not always possible to distinguish presence from absence. This presence/absence holds especially for things like "affects, virtual memories, hauntings, and atmospheres in the enactment, composition and durability of the social" (Anderson and Harrison 2010, p. 16). Similarly, tenses are frequently mixed in historical narratives: "Proust writes" is virtually interchangeable with "Proust wrote". From another dimension, dead people are brought to life in historiography; they are present in history precisely because of their absence in history.[11]

[10] I happen to be in my bed under blankets because it's cold and damp today but we don't want to turn on the furnace yet.

[11] I wrote that sentence on Halloween.

Creative non-fiction writer Marcia Aldrich (2012) recently appropriated a writing approach that addresses this interplay of presence and absence in an historical way. For more than a decade she had struggled unsuccessfully to write a memoir of Joel, a close friend of hers who took his own life. She was trying to create a narrative—to write a history—in which the event of the suicide was not minimized, but at the same time in which the event of the suicide did not overwrite the whole of Joel's life. She experimented with a variety of memoir and biographical genres, but all of them failed to capture both Joel's presence and his absence. Eventually Aldrich wrote the story of Joel's life in the form of a companion (as in *The Oxford Companion to Philosophy*), comprised of short entries organized alphabetically with cross-reference 'see also' listings. In this way, it became rhetorically possible to include entries that existed in the context of, and also free of the suicidal overlay. The literary device of the companion addressed the analytical problem of comprehending simultaneous presence and absence, and avoided a teleological, predetermined historical narrative. Notably, it was a literary device (in this case, the companion)—not a methodological safeguard—that provided the analytical framework that accounted ethically for selection bias and teleology. The companion presented a history that honored the irreducible complexities of Joel's life.

The urge to write Joel's history in a non-reductive way was animated by affection. Non-representational theories regard affect as material, and affect is both a transitory and permanent state: "The social is affective, and it is often through affect that relations are interrupted, changed or solidified" (Anderson and Harrison 2010, pp. 16–17). It is not difficult to imagine that affect is at least as important as triangulation in our daily lives as educational researchers. In our educational research, why *wouldn't* we want to take affect into account as a relevant material component of educational experience, philosophical commitment, and/or historical change?

8.2.3 Causality and Determinism: Implications for Freedom

The ethical issue is that causality and continuity in history interject some degree of determinism into possibilities for subjectivity and objectivity. Non-representational theories take the perspective that materiality is a constituent of thought, "Not only do objects make thought do-able…but they also very often make thought possible" (Thrift 2008, p. 60). Since non-representational theories construe everything on the same plane of immanence, there is no necessity—neither causality nor continuity—*implied* in any relationship, although it is an option for researchers to include causality and/or continuity as material entities in the analysis. In that way, non-representational theories avoid imposing determinism in relations among past, present and future.

Dirksmeier and Helbrecht (2008) theorize qualitative social research before and after the 'performative turn'. They offer an argument for distinguishing between live performances and [video or audio] recordings. Relating performance to ritual

(artistic, cultural, and/or religious), Dirksmeier and Helbrecht call attention to the role of causal inference in theorizing performances:

> [A] new methodology for qualitative social research after the performative turn requires a theoretical position which does not fall back to a position of causality as the temporal consequence of a cause and effect, as maintained by ritual theory…. we suggest 'non-representational theory' for this venture. (p. 1)

A key aspect of their argument is the indispensable role of the audience in a live performance, "The public is an equal partner and *sine qua non* of the performance" (Dirksmeier and Helbrecht 2008, p. 5). The non-deterministic possibility for spontaneous interaction is a material context that is distinct from watching pre-recorded performances. The possibility for improvisation or dialogic interjection is also at issue in considerations of what kinds of utterances are thinkable in any discursive situation.

The ethical implications of non-representational theories resemble those of archaeological and genealogical projects insofar as they all avoid imposing causality, linearity, dialectics, cycles or other mechanisms to explain historical change over time. Archaeologies and genealogies avoid some forms of determinism by shifting the dimension of historical analysis from time to space. Non-representational theories make a similar move to avoid determinism, but non-representational theories are more promiscuous in sending invitations to the analytical party.

8.3 Repeatability and Uniqueness: Non-stable and Non-individualistic Events in Educational Research

For the most part, social scientific research has refused to take seriously whimsy, chance, inimitability, or freak occurrences as viable candidates for analysis or modes of explanation. The tendency to exclude the unique and idiosyncratic can be attributed historically to an ethos of modern scientific structuralism that prefers patterns, generalizations, and predictive validity as the modus operandi of research. In social science epistemologies, the unique can be dismissed, ignored, excluded, or pushed off the radar screen, as in cases when the unique is called an 'outlier' or a 'deviation' (see also Fendler and Muzaffar 2008).

Non-representational theories speak to repeatability and uniqueness as educational issues and as ethical issues. Educationally speaking, some of the most memorable moments in life are one of a kind. We remember unique occurrences, and sometimes we remember them *because* they are unique. Memory is a key component in both education and research. Making something memorable might be a definition of educational research. Ethically speaking, the value of uniqueness aligns with Biesta's definition: "The subjectification function [of education] might perhaps best be understood as the opposite of the socialization function" (Biesta 2010, p. 22). This position contrasts with that of Levinas who calls uniqueness a 'fundamental problem' in the face of universal language. Other theorists have critiqued subjectification for being politically naïve (see, e.g., Egéa-Kuehne 2010). Nevertheless, when

non-representational theories construe a radical equality, with everything on the same epistemological plane, then in that context, uniqueness and repeatability have equal rights to be included as subjects/objects of educational research.

Non-representational theories deal with the problem of uniqueness by not defaulting into individualism in the process. It is not the case that aggregate patterns supersede individual quirks, and neither is it the case that anecdotes or idiosyncrasies supersede aggregate claims. Rather, non-representational theories reject the stratification of the material world into separate levels of 'individual' or 'social'; rather, they make repeatability, repetitions, uniqueness, grief, and school desks materially equivalent.

8.3.1 Transience and Permanence

The issues of transience and permanence are related to theories of change in history, and the relationship of past to present. The problem is that the decision about whether something is transient or permanent is usually a matter of perspective. Non-representational theories have invented a new term, *qualculation*, in an effort to capture some remarkable transient/permanent features of twenty-first-century life including speed (things change faster now), faith in numbers, limited numerical facility among ordinary people, and memories that are recorded in numbers and symbols (e.g., barcodes, fingerprints, and computer cookies). Thrift (2008) explains qualculation as being related to ethnomathematics in the sense that it relies on:

- prostheses (like computers) that process information digitally
- provisional spatial coordinates that are recorded in track-and-trace grids
- the sheer quantity of information that is easily accessible
- a diversity of calibration possibilities that can be brought to bear for measurements
- shifts in how it is possible to think about 'home' (list paraphrased from Thrift 2008, p. 99)

Non-representational theories stipulate a radical historical contingency in which many otherwise divergent or discrete levels of experience are all included as the present, including fleeting memories of the past, hopes and fears for the future, the force of gravity, the vibrations of mobile phones, linguistic rules of grammar, and the temporary disorientation of jet lag during any ongoing conversation. In this way, there is no dichotomy between the transitory and the permanent.

When non-representational theories address transience and permanence, they also shift the aesthetic to the plane of materiality:

> Insisting on the non-representational basis of thought is to insist that the root of action is to be conceived less in terms of willpower or cognitive deliberation and more via embodied and environmental affordances, dispositions and habits. (Anderson and Harrison 2010, p. 7)

Thrift (2008) points to the installation work of Bill Viola as an example of contemporary art that integrates transience and permanence. For example, Viola has installed old black-and-white video images shown on plasma screens behind actual waterfalls

set into the space of seventeenth-century church altars. Non-representational theories aim to account for multidimensional material forms such as Viola's in the aesthetic domain.

8.3.2 The Case of Repeat Performances

Thrift (2008) uses the term *experimental* to talk about the relationship between repeatability and uniqueness. He writes, "I would like to pull the energy of the performing arts into the social sciences" (p. 12). In this case, the performing arts allow for a non-representational theoretical framework in which to apprehend the interplay between repetition and uniqueness. For example, we can grasp intuitively that there have been repeated performances of the same play, *The Book of Mormon,* on Broadway (and soon London), and that each performance is simultaneously a repetition and unique.

Ethically speaking, Descartes' modernist subject/object dualism is inflected with normative value that affects our intuitions about repetition and uniqueness. In Cartesianism, the mind/spirit is good and true, while the body/sensation is deceptive and unfaithful. The truth of the mind/spirit is eternal, while the body/sensation is fleeting. This hierarchy of values is sustained in logical empiricism when scientific 'validation' favors abstract laws, repeatability, and permanence, while it discounts ephemeral sensations, non-transferable perspectives, and shifting material states. The hierarchy is also sustained in social constructivism when abstract cognition is privileged over immediate material sensation. To privilege the repeatable and ignore the unique is an exercise of power and exclusion, and therefore an ethical issue.

In non-representational theories, affective sensations in the present are material conditions of research, as are perennial conundrums. The line between text and context is not fixed, but shifts relative to subjective, aesthetic circumstances in time and place. Therefore, included as relevant to research is not only the chair in which I am sitting to read and write, but the preferences for generalizability and the lure of statistics are also equally relevant material conditions for my work. In this approach to theorizing, both sensory affect and empiricist ideology exist on the same plane of immanence, and are viable objects of inquiry for our educational research. The theoretical challenge becomes to perceive affect and ideology in a non-representational and non-hierarchical relation.

8.3.3 Irreplaceability

Within most educational research, uniqueness is a kind of mistake. However, when we classify people as if they were interchangeable or replaceable, then we have objectified them or stereotyped them, which is an ethical problem. In that way, irreplaceability is an ethical issue for educational research.

The most poignant example of the ethics of irreplaceability is illustrated when I attend at the deathbed of a loved one. Under those circumstances, I cannot call in a professional to take my place. This Rancièreian ethics of irreplaceability suggests it is a matter of basic human dignity to regard each person as unique and irreplaceable. This ethical stance is incompatible with most demographic and other aggregations or classifications of people. Non-representational theories call for analyses that include both uniqueness and stereotyping as aspects of present time and space that constitute material life.

8.4 The Ethical Possibilities of Researching 'As If'

When I first encountered writings in non-representational theory, I was (of course) skeptical about the degree to which these approaches actually offered anything new, and whether they had any reasonable potential to avoid previous epistemological pitfalls. But after a while I became enamored, or *was affected,* as the geographers like to say. There is one frequently used term in non-representational theories that I have not written about because I can't seem to wrap my mind around it. They talk about *bare life*:

> These four sources of inspiration[12] allow us to begin to sense, through this combination of work in areas as diverse as biology, philosophy, and performance studies, what an understanding of that little space of time that is much of what we are, a space not so much at the edge of action as lighting the world. I will call this domain 'bare life' after Aristotle's notion of *Zoé*, a 'simple natural sweetness'. (Thrift 2008, p. 60)

I don't get the concept of bare life yet. However, I can relate an anecdote that helps to illustrate the kind of situations and perceptions that non-representational theories bring to the sensible surface. Last evening I was watching the film *Man on a Ledge*. The female lead was played by Elizabeth Banks, who most famously played the character Effie Trinket on the *Hunger Games*. While watching Elizabeth Banks in her role in *Man on a Ledge*, I kept seeing the Effie Trinket character. That association affected my experience of watching *Man on a Ledge*, as did the fact that the house was cold, I was distracted by a growing list of administrative tasks, my nephew was just deployed to Afghanistan for 6 months, the Tea Party is threatening to take over the Michigan Supreme Court, my father and brother live in northern New Jersey which was just devastated by Super Storm Sandy, the political campaign ads have reached absurd levels, and if Mitt Romney wins the presidential election, all of us progressives will want to emigrate. Although it would be unconventional, it would be possible to narrate an historical account *as if* all of those things are (were?) material factors of my experience while watching *Man on a Ledge.*

[12] His four sources of inspiration are (1) biological philosophers and philosophical biologists (e.g., Margulis), (2) non-cognitive dimensions of embodiment (e.g., Wittgenstein), (3) increased importance of objects (e.g., Latour), and (4) genealogy of body practices (e.g., Foucault).

Non-representational theories allow analysis and commentary in which all of those factors can be treated *as if* they were relevant and interrelated aspects of materiality. In the process of analysis and communication, I will omit some of those factors, but I can omit them *as if* criteria of ethics, aesthetics, and pedagogy were more important than criteria of ideological conventions, publish-ability, or traditions of coherence.

We can imagine a similar approach to educational research. Non-representational theories allow inclusion of all of the following material conditions *as if* they mattered to our research practices: the collegiality of debates between opposing views, the differences between paper and electronic texts, the rhetorical choices between representational and figurative languages, whether we feel bored or frustrated while listening to a paper, the degree to which a thesis is repeated or unique, the chairs and tables on which we work, histories of personal affections and animosities, the smell of the room, the preoccupations with health-money-politics-family, the absences and departures of people from the Research Community, and planning for how to edit the volume from this year's conference papers.

Non-representational theories elaborate possibilities for theorizing materiality in educational research that are not available from other theoretical perspectives. On the one hand, non-representational theories share with Rousseau and Dewey a romantic worldview insofar as their aim is to deregulate. On the other hand, however, non-representational theories depart from more conventional romanticism in a way that is similar to the way Rancière's theory of emancipation departs from Freire's. There is in both Rancière's work and in non-representational theory an expectation of radical equality. While neither Rancière's philosophy nor non-representational theory ought to be taken as a method, they both invite researchers to behave *as if*. To behave *as if* is an act of creation on a material plane.

I think what appeals to me most about non-representational theories is that its purpose is to tear down limits around how it is possible to think. Current limitations on thinking include three classical dichotomies: subject and object; past and present; uniqueness and repeatability. Non-representational theories have offered ways of thinking that can do away with all of those splits. When everything is placed onto the same plane of immanence, then it is up to the researcher's creative ethics to assemble—to geo-graph—an infinite array of finite material things. The theory allows for the inclusion of the broadest possible range of inclusion, in which anything can be regarded as a constituent of materiality, and fair game for invention.

References

Aldrich, M. A. (2012). *Companion to an untold story*. Athens: University of Georgia Press.

Anderson, B., & Harrison, P. (2010). The promise of non-representational theories. In B. Anderson & P. Harrison (Eds.), *Taking place: non-representational theories and geography* (pp. 1–34). Farnham: Ashgate.

Biesta, G. J.-J. (2010). *Good education in an age of measurement: Ethics, politics, democracy*. Boulder: Paradigm Publishers.

Black, M. (1962). *Models & metaphors: Studies in language and philosophy*. Ithaca: Cornell University Press.

Bleich, D. (2001, Winter). The materiality of language and the pedagogy of exchange. *Pedagogy, 1*(1), 117–141.

Carozzi, M. J. (2005). Talking minds: The scholastic construction of incorporeal discourse. *Body & Society, 11*(2), 25–39.

Dirksmeier, P., & Helbrecht, I. (2008). Time, non-representational theory and the "performative turn": Towards a new methodology in qualitative social research. *Forum Qualitative Sozialforschung [Forum: Qualitative Social Research], 9*(2). Available http://www.qualitative-research.net/index.php/fqs/article/view/385

Egéa-Kuehne, D. (2010). Subjectification: Biesta's strong link to education: Response to Gert Biesta's "on the weakness of education". In D. Kerdeman (Ed.), *Philosophy of education 2009* (pp. 363–366). Urbana: Philosophy of Education Society University of Illinois at Urbana-Champaign.

Fendler, L. (2008). The upside of presentism. *Paedagogica Historica, 44*(6), 677–690.

Fendler, L., & Muzaffar, I. (2008). The history of the bell curve: Sorting and the idea of normal. *Educational Theory, 58*(1), 63–82.

Hacking, I. (2000). *The social construction of what?* Cambridge, MA: Harvard University Press.

Patchett, M. (2010). A rough guide to non-representational theory. *Experimental geography in practice.* Available: http://merlepatchett.wordpress.com/2010/11/12/a-rough-guide-to-non-representational-theory/

Rancière, J. (2006). *The politics of aesthetics* (G. Rockhill, Trans.). London: Continuum.

Thrift, N. (2008). *Non-representational theory: Space, politics, affect*. London: Routledge.

Vannini, P. (n.d.). *Non-representational theory and ethnographic research*. Available: http://ferrytales.innovativeethnographies.net/content/non-representational-theory-and-ethnographic-research

Chapter 9
Mud and Hair: An Essay on the Conditions of Educational Research

Richard Smith

> Parmenides proceeded: And would you also make absolute ideas of the just and the beautiful and the good, and of all that class?
>
> Yes, he said, I should.
>
> And would you make an idea of man apart from us and from all other human creatures, or of fire and water?
>
> I am often undecided, Parmenides, as to whether I ought to include them or not.
>
> And would you feel equally undecided, Socrates, about things of which the mention may provoke a smile?—I mean such things as hair, mud, dirt, or anything else which is vile and paltry; would you suppose that each of these has an idea distinct from the actual objects with which we come into contact, or not?
>
> Certainly not, said Socrates; visible things like these are such as they appear to us, and I am afraid that there would be an absurdity in assuming any idea of them, although I sometimes get disturbed, and begin to think that there is nothing without an idea; but then again, when I have taken up this position, I run away, because I am afraid that I may fall into a bottomless pit of nonsense, and perish; and so I return to the ideas of which I was just now speaking, and occupy myself with them. (*Parmenides* 130 c ff, trans. Jowett)

9.1 Introduction: The Priority of the Material

In this chapter I begin by asking how we are to understand the fact that our (we educationalists, philosopher and historians) research is demonstrably done in the context of particular material circumstances that at least in part determine the topics we address, the styles in which we write, the disciplines from which we write, and so on. The questions are timely given what many of us experience as the ever-increasing tendency for our research, like the rest of our academic lives, to be directed and even micro-managed. Perhaps all this is less new than it may seem, even if the determining factors these days seem unusually insistent; the historical

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dimension I can confidently leave to the historians. Many of the determining factors at work currently in the UK will emerge in the course of what follows, but some examples at this point may be helpful.

First, there is the formal, regular evaluation of academic research. I will not write of this in general terms, nor of its most recent designation as 'Research Excellent Framework', though the temptation to offer some semantic analysis is strong. I mention only the Impact requirement that has made its first appearance in the evaluation to be undertaken in 2014. The requirement is that an academic department include in its submission some examples (roughly one for every 10 active researchers) of how its research benefits the wider, and specifically non-academic, community. Again, much could be said about this requirement, and about the assumptions being made for instance about how one is to predict such benefits; or about how a department of Philosophy or English Literature or Pure Mathematics is supposed to be able to show that it has—strictly speaking, that it is going to have—'impact'. Here I only note that universities are now employing people to seek the required evidence of impact (Has our Department of Basket Weaving changed the way you weave baskets? What has been the effect on the local economy?). It is an entirely logical extension of the Impact requirement. And no doubt these research canvassers will have targets and managers, which will contribute to the whole process building its own momentum and sense of inevitability.

Second, where once a researcher might have found an interesting field of enquiry and then turned her attention to possible sources of funding, matters are now the other way round. This tendency has acquired a name: sponsorism. "Sponsorism is when someone's research is designed to fit the agenda of funding bodies" (Macfarland 2012). It is now a prerequisite for the passing of probation or for promotion at many universities that one should at least have made applications for research funding (naturally the emphasis on funding means that funding bodies are deluged with applications so that actual funding is more and more difficult to win). New colleagues, I find, simply assume that the search for funding is their first research task and react to the older idea—that an interesting question might take priority—with the discomfort and surprise appropriate to the suggestion that they start by buying a good fountain pen.

Third, the coming together of a number of (material) circumstances has led to what I have begun to think of as the Autonomy of Technique in research. The long-standing assumption that students should be taught Research Methods (an odder assumption than it may appear: see Smith 2006) has been further fed by the arrival of overseas fee-paying students whose command of English, though impressive, does not enable them to engage comfortably with conceptual or philosophical dimensions of education. Different techniques for collecting data for empirical 'research projects' however are relatively easy to grasp, not least because the quicker you can get to numbers and quantities the quicker you leave behind the tricky problems of concepts and philosophical ideas. T-test, ANOVA, ANCOVA, Chi-square, Linear regression, Factor analysis and a host of other techniques have the further virtue of making research look 'scientific'. I think of these as 'autonomous' because they can be learned independently of any particular area of enquiry and then bolted on to

pretty well any social science project, whether it is nominally concerned with education, use of new technologies or substance abuse. A consequence of this is the appointment of specialists in 'research methods' in education. Roughly one third of the academic staff in my own department (https://www.dur.ac.uk/education/staff/) list variations on 'research methods' or 'methodology' among their specialisms. One includes 'method', 'methodology' or 'methodologist' 8 times in her web profile; one does so 12 times. In virtually all cases these are staff who have been appointed in the last few years. They have learned the right things to say at least.

Fourth, particular topics for research are emerging which, even if they are not sanctified by funding, methodology or techniques, seem somehow to be becoming established as what one ought to write about. Cosmopolitanism is perhaps a case in point. I can only speculate about the reasons for what seems to be a fashion for writing about it. Macfarlane diagnoses political correctness in the case of *globalisation*, but this seems too simple. *Cosmopolitanism* presses a whole range of the right buttons: it is "trans-disciplinary … [and] includes geography, anthropology, ethnology, international relations, international law, political philosophy and political theory, and now sociology and social theory" Beck and Sznaider 2006). It allows the writer to invoke particularly sexy concepts such as liminality ("the empirical investigation of border crossings and other transnational phenomena", ibid.). It encourages the dissolution of dualities or binaries, such as the local/global, international/national (ibid.). It makes you sound like a Researcher of the World, transcending merely parochial concerns. It permits a re-visiting of many of the traditional themes and topics of social science in the light of "the key conceptual, methodological, empirical and normative issues that the cosmopolitanization of reality poses for the social sciences" (ibid.). It allows one to assert one's philosophical credentials by quoting both Kant and Derrida. And as a short visit to Google Scholar reveals, all this makes for a lot of citations if you on the topic, which in our time when citations are sometimes imagined to be second only in importance to funding is perhaps the key here.

9.2 Responses

The question, then, that I am asking here is how we are to understand and respond to these factors that stand to shape or influence what we write and how we think. The first group of possible responses can be thought of as inspired by the idea of constructivism. All knowledge is socially constructed, the easy assumption goes, and these just happen to be the factors that shape our knowledge in the twenty-first century, particularly in its universities. From here there are easy steps variously to what I call quietist or realistic accommodation, and to what I call manipulative accommodation. I shall discuss them as if they are separate but there are many overlaps and points of connection among them.

Quietist or realistic accommodation takes the form of acting as if the new world of academic research and the knowledge it claims to seek (there may well be talk of

'knowledges' here) is an ineluctable given, which it is meaningless or pointless to resist. Just as you need to take an umbrella with you when it's raining so you have to seek funding and write about the right topics if you want an academic career. From this perspective the academic committed to an older set of values—who claims to be driven by pure intellectual curiosity, perhaps—may look as odd as the investment banker who reads Marx in her lunch-hour, or the advertising executive who enthuses about the Occupy movement. Such people are surely no more than sufferers from cognitive dissonance. Why sign up for banking if you are impressed by Marx, or for a university career if you have a wholly unfundable interest in Aristotle, or a desire to write about theories of progressive education in nineteenth-century Belgium? Such things are more like an absorption with the history of Manchester United FC than mainstream academic research. (A colleague in philosophy of education told me some years ago that his head of department was in the habit of referring to his specialism as "Alchemy, or whatever it is that you do".)

The important point here is that what may seem to be the nature of knowledge constructed in our time is indeed constructed, and not ineluctably given. The requirement for Impact, for example, does not translate into a criterion for every piece of research or every researcher unless it is so translated, generally by managers who seem determined that universities will do more damage to themselves than any outside bodies can do (the phenomenon of 'identification with the oppressor' may be suspected here). Citation counts have been explicitly ruled out as a criterion of quality for most areas of research but are often treated as—constructed as—significant for internal purposes, perhaps because this confers power on those doing the counting. Quietist accommodation is untrue to its own sources.

Prominent in what I am calling manipulative accommodation are the varieties of sponsorism: the carefully cultivated relationship with a funding agency ("I've had £50k from them before, so it shouldn't be too difficult to get £75k next time"), attachment as a new researcher to a project for which experienced researchers (that is, people with a good track record of funding) are bidding, the decision to write on a particular topic because it is the latest fad and therefore should secure a healthy number of citations, the willingness to come up with an apparently transparent title ('Cosmopolitanism: the neglected dimension', perhaps, not forgetting to put the key word before the colon for the sake of the search engines), reluctance to try anything new in case it doesn't come off and leaves a gap in your publication or funding record. I call these strategies 'manipulative' where they are accompanied by a strong element of disingenuity, with the researcher claiming for instance an impassioned commitment to this or that minority who, it seems, have never had their voices heard before and whose needs and identity will at last be recognised by the research proposed. (A related tendency here, which deserves proper discussion of its own, is the earnestly advertised desire to *make a difference*: "My reason for being interested in this research is that I want to make a difference". This can easily be linked to funding opportunities since these naturally focus on the same kinds of headline issues that put the difference-desirers beyond criticism: new ways to tackle bullying, say, or peer-tutoring schemes to teach entrepreneurship.) At least it is honest to say that otherwise your job will not be safe and you need to pay the mortgage.

Three minor points are worth adding here. First, the new conditions are beginning to spawn new kinds of research in investigating or responding to the new conditions of research. A brief example: Hayden's 'Empirical study of philosophy of education journals' (2012). "Over 143 different concepts were identified and analysed from 1,572 articles. The data suggests that philosophy and education, while primarily concerned with theory, teaching, and learning, tackles a diversity of subjects in a slightly narrowing band of thematic topics" (from the Abstract. Who would have thought it?). If the new conditions of educational research favour the empirical, then philosophers of education can do that too. We might note in passing that all this is a gift to Foucauldian genealogists, who will plot the historical sources of the new conditions in all their materiality, and delineate the power-knowledge configuration.

Second—and I am not sure if this supports the Foucauldians or the opposite—we should of course note that there is nothing especially new here. This dimension of the academic life is chillingly and memorably illustrated in Malcolm Bradbury's novel, *The History Man* (1977). Howard Kirk is a young lecturer in sociology at a new university, a Marxist for whom history is evolving according to inevitable laws: for whom, as a dialectical materialist, "The ideal is nothing else than the material world reflected by the human mind, and translated into forms of thought" (Karl Marx, Afterword to the Second German Edition of Volume I of *Capital*.) Here he is discussing a recent party hosted by the Kirks, with Annie Callendar, a new and desirable lecturer in English literature and avowed 'nineteenth-century liberal'. She says she is interested in finding out what Kirk and his friends and colleagues are all up to.

> 'Did you?' asks Howard. 'I'm not sure', says Miss Callendar, 'I think you're very interesting characters, but I haven't discovered the plot'. 'Oh, that's simple', says Howard, 'it's the plot of history'. 'Oh, of course', says Miss Callendar, 'you're a history man'. 'That's right', says Howard, 'and that's why you have to trust us all. Like those kids last night. They're on the side of history…' (p. 106)

While Kirk has a lot to say about history, and about its necessary, even inevitable, patterns and laws, at the same time he has no objection to greasing the wheels of history by his own machinations when it suits him to do so. Both Annie Callendar and George Carmody, an old-fashioned student who accuses Kirk of failing him out of personal animosity, are part of an obsolete world whose passing Kirk is happy to accelerate: by causing Carmody to be removed from the university and seducing Annie Callendar. Those who believe ideals are shaped by material conditions cannot, it seems, be expected to stand back as mere spectators of the process if it coincides with their own interests. As Marx observed, "Force is the midwife of every old society pregnant with a new one" (Marx, *Capital*, Vol. I, 1955, p. 603).

Third, it is worth considering the distinctive forms of text that the new conditions of research foster. About this too much could of course be said. I will only note here my clear impression that there is little reflection about textuality. It would, no doubt, strike most researchers as an effete irrelevance, as not 'making a difference'. After all we are hard-headed and probably hard-nosed too, we rigorous empirical

researchers. We are not afraid to get our hands dirty, unlike the philosophers sitting in the library. A mysterious Anglosaxon yearning for the world of dirt and effort (to recall *blut und boden* would no doubt be unfair, but the similarity to mud and hair is striking) seems to come into play here. This yearning appears in the general feeling that it is a good thing to 'buckle down', 'put your shoulder to the wheel', and deal with the 'nitty gritty' (the soil again: this phrase has been replaced by 'granularity' in the discourse of managers, granularity indicating the fine-grained *boden* of data and performance indicators). Dislike of theory, authors with foreign names and long words may be suspected. Derrida does not make a difference.

9.3 The Tranquillity of Thought

None of these concerns about the material drivers of educational research seems trivial or misplaced. Yet at the same time there is a danger here of resurrecting a traditional binary. On one side is the philosopher who contemplates Truth, or the Platonic Forms, eternal and pure and immutable; or who is committed to rational, abstract thought, unperturbed by and uninterested in the contingencies of the secular world. On the other side are people as pictured by Plato, competing for prizes for remembering the sequence of passing shadows and predicting their future order of appearance (*Republic* 516 c-d). The true thinker (or researcher) finds "hair, mud, dirt or anything else which is vile and paltry" (*Parmenides*, quoted above) risible and beneath serious notice: so too, then, will she find research funding, concern about impact, and citation counts.

Accordingly we might pay particular attention to the strand in the philosophical tradition—persistent but relatively unremarked—which reminds us that philosophy itself is rooted in quotidian and material experience. For example, Descartes is often supposed to have inaugurated modern philosophy precisely by marking off the realm of Thought, *res cogitans,* from that of brute matter, *res extensa*. In the former the philosopher proceeds *more geometrico,* the method of hyperbolic doubt as its most famous example enabling progress on the basis of axioms known *a priori* rather than by empirical acquaintance with the ordinary world of mud and hair. The Latin phrases themselves which signal the essential points of Descartes' enterprise—above all the resounding *cogito, ergo sum*—seem to advertise its remoteness from everyday material reality.

Yet Descartes wrote the *Discourse on Method* not in Latin but in French, the everyday language of his time rather than that of a technical, remote treatise. Its structure is that of autobiography, deliberately putting his life on display for all to see (*de représenter ma vie comme en un tableau*, Discourse I), with six chapters setting out in order the significant episodes of his life. The *Meditations* too, though they are written in Latin (as the *Meditationes de Prima Philosophia* by Renatus Des Cartes), have the structure of a diary describing something like a Jesuitical retreat (Rée 1987, p. 19). It is in the French 'autobiography' of the *Discourse* that

Descartes sets out the train of reasoning that leads him to his famous conclusion, where it appears not as *cogito ergo sum* but as *je pense donc je suis* (Discourse 4). Successive chapters have already located his thinking in very particular material circumstances:

> *J'étois alors en Allemagne, où l'occasion des guerres qui n'y sont pas encore finies m'avoit appelé; et comme je retournois du couronnement de l'empereur vers l'armée, le commencement de l'hiver m'arrêta en un quartier où, ne trouvant aucune conversation qui me divertit, et n'ayant d'ailleurs, par bonheur, aucuns soins ni passions qui me troublassent, je demeurois tout le jour enfermé seul dans un poêle, où j'avois tout le loisir de m'entretenir de mes pensées.*
>
> [I was, at that time, in Germany, whither the wars, which have not yet finished there, had called me, and as I was returning from the coronation of the Emperor to join the army, the onset of winter held me up in quarters in which, finding no company to distract me, and having, fortunately, no cares or passions to disturb me, I spent the whole day shut up in a room heated by an enclosed stove, where I had complete leisure to meditate on my own thoughts.] (Discourse 2, trans. Sutcliffe 1970)

This detailed and deliberate contextualising of his philosophical reasoning in Discourse 2 is picked up again towards the end of Discourse 3, where Descartes writes that he decided to withdraw to a country in which the armies that were stationed there guaranteed peace and security; "where, in the midst of a great crowd of busy people … without lacking any of the conveniences offered by the most populous cities, I have been able to live as solitary and withdrawn and I would in the most remote of deserts". Discourse 3, which moves quickly to the establishment of what we have come to call the *cogito*, and to think of as the most abstract and *a priori* of philosophical axioms, begins by echoing the account of his situation from the second and third Discourses: "I do not know if I ought to tell you about the first mediations I pursued there, for they are so abstract and unusual…", thus insisting on the abstractness of his ideas and simultaneously giving a full and artfully constructed account of their physical context; of the material circumstances, as we might put it, of his research. (I leave aside here the long and interesting story of how Descartes' attempt to ensure that the contents of his mind have not been put there by a malicious demon is connected with the background of the religious wars of the sixteenth century and the Thirty Years' War: a background that provided the strongest motivation to distinguish superstition from certainty; see e.g. Toulmin 1990.)

A similar ambivalence to 'mud and hair' is struck by Montaigne, whose stylistic example, particularly his use of the French language, Descartes followed in certain respects. Montaigne is often represented as one who withdrew from the world to his library in a circular room at the top of a tower on his estate: an impressive image of seclusion. He cultivated the image himself, inscribing on one of his beams a declaration that in 1571 on his 38th birthday he had retired from "the servitude of the law-courts, and of public offices … with faculties still entire, to the arms of the learned virgins, there to pass in all quiet and security, such length of days as remain to him, of his already more than half-spent years, if so the fates permit him to finish this abode and these sweet ancestral retreats consecrated to his freedom and

tranquility and leisure".[1] The image is strengthened by Montaigne's account of his library (*Essays* Book 3 ch. 3) as a place of meditation and retirement, where he is 'in his kingdom', sequestered from all society. It appears to be the classic picture of the philosopher turning away from worldly distractions to contemplate a different order of reality. But, as with Descartes, the somewhat romantic picture is misleading. Boutcher (2005, p. 30) notes that "his privacy was very busy, full of his *commerce* with friends, scholars, patrons, and books". And it is familiar that Montaigne's philosophy emerges from nowhere but himself and "his own doubtful self-knowledge" (ibid.), a self that is thoroughly caught up in the world of eating, drinking (to be undertaken in moderation until you are 40, but after that to excess as often as you like), farting (and even farting a tune: Book 3, ch. 6, Book 1, ch. 20), belching and sneezing, the gout, kidney stones and indigestion, and playing with his cat. In his description of his library he does not omit to mention the 'cabinet', i.e. lavatory, that is situated conveniently to one side of it.

We might ask why Montaigne, like Descartes, seems to present himself as both above the material world and as firmly rooted in it, especially since this ambivalence appears carefully contrived. Part of the standard answer is that Montaigne at any rate is writing a particular kind of book. It is not a gathering together of the ideas of others (largely Classical writers, no doubt): he has put *himself* into his book, testing his more abstract speculations through their effects on his person. The full answer here is complex and persuasive; I want to emphasise one aspect of it. Montaigne has written, and caused to be published, a book, an artefact freighted with distinctive meanings by the relatively recent invention of the printing press. He has drawn the reader's attention to various features of it. It consists of *Essais*, attempts, and nothing that claims to be the final word on any topic—on courage, friendship or drinking: rather these *Essais* show their author asking how it would be if he wrote as follows, if he were to put things this way and that. Essays, as a genre, do not draw their authority from anywhere other than from themselves (if authority is the right word in any case), unlike the modern academic article with its appeal to Jones (2008) and Volestrangler (1998). It is an essential feature of essays that they are crafted, and display that quality with a proper modesty. They are gifts to the reader of a kind of companionship, all the more welcome for not attempting to command her assent. The materiality of the essay's text urges us not to look for some separable content or message, but to receive what is written and its physical realisation together.

[1] 'An. Christi 1571 aet. 38, pridie cal. mart., die suo natali, Mich. Montanus, servitii aulici et munerum publicorum jamdudum pertaesus, dum se integer in doctarum virginum recessit sinus, ubi quietus et omnium securus (quan)tillum in tandem superabit decursi multa jam plus parte spatii: si modo fata sinunt exigat istas sedes et dulces latebras, avitasque, libertati suae, tranquillitatique, et otio consecravit'. as cited in Helmut Pfeiffer, 'Das Ich als Haushalt: Montaignes ökonomische Politik', in Rudolf Behrens and Roland Galle (eds.) *Historische Anthropologie und Literatur:Romanistische Beträge zu einem neuen Paradigma der Literaturwissenschaft*, Königshausen und Neumann, Würzburg, 1995, pp. 69–90 p. 75.

9.4 Pastimes and Diversions

There are notable similarities here with the 'indirect communication' of Søren Kierkegaard. This has the effect of distancing author from authority and calling on the reader to make a personal appropriation of what is written or said, and of situating the reader with respect to the truth rather than communicating the truth. The reader is not so much told anything as subtly brought to read and listen with a particular quality of attentiveness. She finds the suitable expression of a thought in the word or text, "which is realised by means of a first reflection, [then] there follows a second reflection, concerned with the relation between the communication and the author of it, and reflecting the author's own existential relationship to the Idea" (Kierkegaard, *Concluding Unscientific Postscript*, 1973, p. 71). Any suggestion that we might have now grasped the essence of 'indirect communication' is promptly dissolved: "Let us yet again cite a few examples; for we have plenty of time, since what I write is not the expected last paragraph which will complete the system… Truth is inwardness": except that this last banal phrase begins to get things wrong from the start. Imagine town criers of inwardness, Kierkegaard asks us, and you will begin to acquire some idea of the pitfalls here, and what is at stake. The project of indirect communication (to call it a project again gets things wrong, and to understand that might itself be to make some progress in grasping what indirect communication is) is closely bound up with Kierkegaard's use of pseudonyms and the layeredness of his texts. We are not to expect doctrines, philosophical truths or systematic answers. Kierkegaard's foregrounding of the 'writerliness' of his text, of its material history as a particular kind of book, both at the beginning of *Concluding Unscientific Postscript* and in the Appendix (authored by 'Johannes Climacus') also enables us to position ourselves as readers:

> You will perhaps remember, dear reader, that near the end of the *Philosophical Fragments* there appeared a certain remark which might look like the promise of a sequel (Kierkegaard 1973, *Introduction,* the opening words).
>
> To write and edit a book, when one has not a publisher, who might be put to embarrassment by the fact that it doesn't sell, is indeed an innocent pastime and diversion, a lawful private enterprise in a well-ordered state which tolerates luxury and where everyone is permitted to spend his time and money as he will, whether it be in building houses, buying horses, going to the theatre, or writing books and having them printed… (ibid., *Appendix,* p. 547)
>
> So then the book is superfluous; let no one therefore take the pains to appeal to it as an authority; for he who thus appeals to it has *eo ipso* misunderstood it (ibid., *Appendix,* p. 546).

We find too in many of Plato's dialogues the same problematising of the authorial voice (is it Plato, Socrates, 'Socrates'?) and literary devices that distance the text from any idea that it declares a doctrine, or has a theory to impart, or a direct communication to make. This is achieved in part by insisting on the *materiality* of the texts. Often the dialogues are framed as accounts of what was said by one person to another, sometimes long ago, with various devices to suggest that what is now reported is partial and unreliable.[2] *Theaetetus* supplies a good example, not least

[2] I have written about Plato in this context in several places, e.g. Smith (2011).

because the central question of the dialogue is generally supposed to be 'what is knowledge?' Euclid and Terpsion meet to have a slave read this dialogue to them. It is said to have taken place long before: Socrates described the conversation to Euclid, who then wrote it down in note form and 'filled them up from memory', finally asking Socrates to check the notes over several times. Euclid produced a corrected text on this basis. It is not obvious that the text, being thus filtered and tinkered with, is to be thought of as authoritative.

The *Parmenides*, where Socrates is apparently so dismissive of the low matter of mud and hair, is framed by a similar story about its own materiality. It begins as follows:

> We had come from our home at Clazomenae to Athens, and met Adeimantus and Glaucon in the Agora. Welcome, Cephalus, said Adeimantus, taking me by the hand; is there anything which we can do for you in Athens?
>
> Yes; that is why I am here; I wish to ask a favour of you.
>
> What may that be? he said.
>
> I want you to tell me the name of your half brother, which I have forgotten; he was a mere child when I last came hither from Clazomenae, but that was a long time ago; his father's name, if I remember rightly, was Pyrilampes?
>
> Yes, he said, and the name of our brother, Antiphon; but why do you ask?
>
> Let me introduce some countrymen of mine, I said; they are lovers of philosophy, and have heard that Antiphon was intimate with a certain Pythodorus, a friend of Zeno, and remembers a conversation which took place between Socrates, Zeno, and Parmenides many years ago, Pythodorus having often recited it to him.
>
> Quite true.
>
> And could we hear it? I asked.
>
> Nothing easier, he replied; when he was a youth he made a careful study of the piece; at present his thoughts run in another direction; like his grandfather Antiphon he is devoted to horses. But, if that is what you want, let us go and look for him; he dwells at Melita, which is quite near, and he has only just left us to go home.
>
> Accordingly we went to look for him; he was at home, and in the act of giving a bridle to a smith to be fitted. When he had done with the smith, his brothers told him the purpose of our visit; and he saluted me as an acquaintance whom he remembered from my former visit, and we asked him to repeat the dialogue. At first he was not very willing, and complained of the trouble, but at length he consented…

Thus Pythodorus told Antiphon of a conversation between Socrates, Zeno and Parmenides 'many years ago'. Antiphon, now much more interested in horses, somewhat unwillingly relates this conversation (his memory must be extraordinary) to Cephalus, who is at first not named, and to his fellow Clazomenians, who are not named at all. If we are at all sensitive to this framing its effect is both to heighten the impression of philosophical depth and abstraction, by comparison with these worldly fripperies of horse-bridles, and to undermine the impression of depth since the transmission of the conversation between Socrates, Zeno and Parmenides is so contingent on chance meetings and an individual who has a memory of unlikely comprehensiveness (a further layer is added when we reflect that these details and dialogues must be largely fictive and in that sense immaterial; yet various details seem based in fact—not least the historical existence of Socrates). From these contingencies emerges an account of the Platonic Forms, of all things the most eternal,

pure and immutable. Without labouring the point that readers have not always been sensitive to this framing, we might take a recent journal article as emblematic. "For professional philosophers Plato's *Parmenides* is one of the seminal texts in the history and tradition of their subject" (Evans 1994, p. 243). They must be professionally committed to ignoring the framing of this seminal text, then. "The first part of the work consists of a critical examination of the theory of Forms; and the opening moves in this exercise consist of a dialectical exchange between Socrates and Zeno" (ibid.). Thus the framing is entirely written out of the 'history and tradition' of philosophy.

To read Plato as I have sketched above goes against the long habit among educationists of finding *Republic* pretty well the only dialogue of any interest, and of reading *Republic* as if it were an Athenian education policy document ("Why else would Plato have written it?"). To be alert to the irony of Plato's dialogues instead, and to engage in one's own lesser ironies, has its dangers. "Even when we listen to these philosophers they turn out not to have any clear message for us". And some of them have begun writing *essays*, which on their own account are tentative and exploratory. Do they seriously expect such stuff to have any impact? All very well as a hobby, but you can hardly call it research. The paradox of offering in reply any explicit justification for irony—at least for reading all kinds of educational research with an ironical eye—will be obvious enough. It would be to undertake direct communication to explain indirect communication, or to write a potted guide to the doctrines of Plato (naturally such things have been written). All one can do is try to keep irony alive in any way one can, in the hope that it will serve people in time to come. And not expect funding for it.

References

Beck, U., & Sznaider, N. (2006). Unpacking cosmopolitanism for the social sciences: A research agenda. *British Journal of Sociology, 57*(1), 1–23.

Boutcher, W. (2005). Montaigne's legacy. In U. Langer (Ed.), *The Cambridge companion to Montaigne* (pp. 27–52). Cambridge: Cambridge University Press.

Bradbury, M. (1977). *The history man*. London: Arrow.

de Montaigne, M. (2003). *The complete essays* (M. A. Screech, Trans.). London: Penguin.

Descartes, R. (1970). *Discourse on method and other writings* (F. E. Sutcliffe, Trans.). London: Penguin.

Evans, D. (1994). Socrates and Zeno: Plato, Parmenides 129. *International Journal of Philosophical Studies, 2*(2), 243–255.

Hayden, M. (2012). What do philosophers of education do? An empirical study of philosophy of education journals. *Studies in Philosophy and Education, 31*, 1–27.

Kierkegaard, S. (1973). *Concluding unscientific postscript* (D. F. Swenson & W. Lowrie, Trans.). Princeton: Princeton University Press.

Macfarland, B. (2012, October 4). I'm an academic and I want to be proud of it. *Times Higher Education Supplement*. Retrieved April 25, 2013, from http://www.timeshighereducation.co.uk/421337.article.

Plato. (1871). *The dialogues of Plato* (4 Vols., B. Jovertt, Trans.). Oxford: Oxford University Press.

Rée, J. (1987). *Philosophical tales*. London: Methuen.
Smith, R. (2006). As if by machinery: The levelling of educational research (In *Philosophy, methodology and educational research*, special issue). *Journal of Philosophy of Education, 40*(2), 157–168.
Smith, R. (2011). The play of Socratic dialogue. *Journal of Philosophy of Education, 45*(2), 221–233.
Toulmin, S. (1990). *Cosmopolis: The hidden agenda of modernity*. New York: The Free Press.

Chapter 10
Material and Aesthetic Tensions Within Arts-Based Educational Research: Drawing Woodpaths

Maureen K. Michael and Ian Munday

10.1 Introduction

Materiality, and its representation, is fraught with productive tension. For educational research these tensions are most evident in the ontological relationship between methodology and theory. In particular, educational research that draws attention to practice, that is, what people do with things, must discern how best to observe and analyse this interactivity without diminishing the nature of the thing or the activity. The materiality of things is entirely entangled with what people are doing. Such a view of the world has implications for how that world is viewed, how that world is understood, and how that understanding is then represented. The study of practice invites varied conceptual resources with capacities to gather multiple meanings from multi-dimensional material and social relationships. One such conceptual resource is usefully explored in arts-based methodologies appealing as they do to material, aesthetic and ontological properties sensitive to the entanglements of sociomaterial phenomena. Central to this resource is its capacity to acknowledge the sociomaterial relations within which the researcher is entangled. The text of this chapter is a material performance of those relations, reminiscent of Heidegger's woodcutting (which will be explained later).

Co-authored, the chapter gives voice to a variety of different registers: first, the expressions of doctoral research claiming methodological territory; second academic critique challenging the philosophical and theoretical assumptions underpinning the claim. A third register might be afforded to the visual vocabulary expressed in the research drawing 'Things of Her Practice' (Michael 2012; Fig. 10.1). As the chapter progresses the different registers shift as the writing moves between description, analysis, reflection and critique.

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Fig. 10.1 Things of her practice (Line drawing (21 × 29 cm)). Michael, M. K. (2012)

The chapter is divided into three main parts alternating between Michael and Munday. Part One presents an episode of arts-based research that seeks to understand the work practices of artists. The study of artists and the use of arts-based research are described and this contextualises the drawing and narrative that follows. 'Things of Her Practice' is then explored in terms of Schatzki's social theory of practice and Michael attempts to reconcile drawing as an immersive act of analysis with drawing as a representation of practice. In critical dialogue with Michael, Munday uses Part Two to draw attention to ontological concerns that emerge from Michael's research. He argues that a deformed Heideggerianism present in the work of Schatzki raises issues about the ontological status of material entities. Munday expresses a concern that Schatzki's approach to practice may lead Michael to the wolves and away from the 'woodpaths' she was already creating and following. Philosophical concepts of nearness, farness and technology are employed to examine the potential, as well as the limitations of Michael's theoretical and methodological frame. Finally in Part Three, Michael reconsiders her initial conceptualising and responds with further critique. She suggests that the epistemic objects of Knorr Cetina are useful in describing practice in a way that addresses some of Munday's concerns with Schatzki. Taking all this into account,

Michael reassesses the significance of the research drawing 'Things of Her Practice' and confronts material and aesthetic tensions as intrinsic to, but unresolved within arts-based research.

10.2 Part One. Practices of Artists and Arts-Based Research

Not solely the preserve of art historians and critics, the study of artists attracts the curiosity of academics across the fields of economics, sociology, and education. Economists seek to understand the exceptional economy of the arts through quantitative survey studies and statistical analyses (Abbing 2002). Sociologists explore the social relations of the art world often through ethnographic observation and interpretive analysis (Becker 1982; Thornton 2009). Education researchers look to understand the role of art and artists in the processes of learning and teaching, employing qualitative methods of observation and interview (Dewey 1934/1958). More specifically, in the field of arts education, pedagogy, curriculum and professional practice are investigated through conventional methods of observation and interview but increasingly also through experiential, arts-informed approaches (Irwin and de Cosson 2004). For example, employing the literary form of the novel, Pauline Sameshima disrupts and critiques issues of identity and pedagogy by adopting the forms of letter and email correspondence (Sameshima 2007). This choice of aesthetic is a deliberate challenge to traditional expressions of academic research. The literary and physical form of the publication are important to the representation of, and possibilities for education research. 'Things of Her Practice' (Fig. 10.1) offers an example of a visual and aesthetic approach to the educational phenomenon of artist practice. In this chapter the materiality of the art-based methodology is shown to be in tension with the theoretical constructs it explores.

The rationale for an arts-based approach demands particular researcher specialisms. That the researcher should be skilled in a selected art form is arguably one of the contributing characteristics of rigorous arts-based research in education (Barone and Eisner 2012; Cahnmann-Taylor and Siegesmund 2008). As a research method, the arts-based approach should hold ontological congruence with the phenomenon under investigation. It is here in the methodological area of arts-based research in education that a nexus of personal research interests gathers.

With a sociological curiosity for the work of the artist as a social practice of *knowing*,[1] I am interested in the description of three phenomena: what artists technically do with things; the material means through which they achieve this; and the social relationship therein. In the analyses of these complex phenomena are insights of how practice becomes knowing. Equivalence is deliberately afforded to the materiality of social relationships and to the social nature of material relationships.

[1] Knowledge is expressed as 'knowing' in order to convey an epistemological position that understands knowledge as a phenomenon in a state of becoming rather than fixed.

With this equivalence I understand social relations to emerge in co-production with objects: a sociomaterial understanding. To illustrate this from an empirical perspective, consider a study of filmmaking as a sociomaterial practice. Strandvad (2012) adopts a sociomaterial stance to explore how the material development and circulation of the script is used to call attention to the social processes around it. Strandvad argues that the sociomaterial perspective enables us to see the artistic product, in this case the script, and the social relations of the script as co-produced. To see this co-production it is necessary to attend to the evolution of the script content as it is passed through the various contexts and people of the filmmaking process. Therefore, argues Strandvad, following the artistic artefact is as essential to the sociological inquiry as tracing the relations between the people of the inquiry. What this approach implies for my research on artists' practice is that both social relations and material relations can be attended to. It also implies that the selected methodology must have the capacity to do likewise: to attend to social and material phenomena. In this instance the material capacities of art-based educational research offer a sound rationale for the adoption of such a methodology here. The research does not have to forsake social theory for art criticism nor does it have to choose conventional research tools over art based tools. It is not the case that 'anything goes' methodologically. It is the case that there is a rationale for bringing specific things together in an arts-based investigation of artists work practices. With a professional background in both education and artistic practice, it makes sense to me that I can understand the social world through drawing. It makes sense to me that drawing can be a methodological tool in social research. It makes sense to me that I can research the work practices of artists through my own art practice of drawing.

A double helix of conceptualising is being formed in this research. In the first strand is a sociological study of artists work practices. In the second strand is a study of drawing as a sociomaterial methodology for the study of practice. These two strands are parallel but with points of connectivity. At the points of connection, for example when a drawing is used to theorise aspects of practice, then the thinking within each individual strand is interrupted and I am forced to see it afresh through the connection.

10.2.1 Things of Her Practice

'Things of Her Practice' is the title of a drawing. Tracing the work practices of artists, the drawing is replete with materiality and layered with interpretation and meaning. It is a drawing that analyses theory and methodology as entangled within issues of representation. As such it signals an ontology of the sociomaterial that features aesthetic materiality in the topic, theorising, process and dissemination of the research.

'Things of Her Practice' mediates between the social phenomenon it claims to capture and the analysis of that phenomenon. In the papers, posters and PowerPoint presentations a material understanding of the social world is performed. In these mechanisms of performance (pedagogic and artistic) material and aesthetic tensions

manifest. What follow now is the eponymous drawing, its narrative description, and an exploration of the activity and materiality of the drawing as practice.

> Amidst the furnishings of her practice the artist sits sewing. Stitching the tiny stitches an artwork is crafted. The skill of the craft has been earned through thousands and thousands of previous stitches, and in these present stitches the future artwork unfolds.
>
> Arrangements of boxes, packets and bags are piled on the floor and placed upon shelves. Leaning away from these arrangements of things she remains connected to them and she continues sewing.
>
> Unplugged technology is spaghetti-ed under the desk, drawn as if fused and linked ludicrously to the fabric being stitched. A cable winds its way to the desk below and into the spaghetti beneath.
>
> The back pack on the floor does not reside here. Brought from elsewhere, it is carried to other places and carries with it more of the things of her practice. A suitcase is stored on a bottom shelf, fastenings snapped closed. Transient contents stilled in storage but ready to hand. Parcels of paper are positioned beside post-its and packets of pencils, silent but purposeful.
>
> The drawing is traced from a photograph, a snapshot of the artist at work. Deliberately drawn with thin black lines, the drawing depicts relationships amongst artefacts and practice. The unbounded composition allows white space to seep and lines to leak. Relationships to what cannot be seen are implied. The missing corners of the drawn coffee table do not mean that they do not exist; unseen ends of the bookcase and desk do not mean that they will collapse; and the table-top easel remains an easel despite the unfinished end of its lines. (Michael 2012)

First I *did* something. I drew the drawing. The visual elements of line and shape act with careful intention. They are used to inhabit drawing practice and give a frame of reference, the rules within which the practice exists. Meaning exists between the actions and materials of the drawing. The physical movement of trailing a line over paper has a relationship with the surface of the paper, the ink in the pen and affection for the resulting drawing. Amongst these relationships meaning is created. Meaning is further 'installed' in relationships between the drawing and its contexts. The current contexts for 'Things of Her Practice' are various sites of academic research. Papers, proceedings, posters and PowerPoint slides act as sites of mediation. Through such mediation the drawing finds its way into the social world and discourses of practice theory, methodology and representation. The discourse on the image becomes part of the image. 'Things of Her Practice' demonstrates a visual art approach to researching practice.

Practice is a term used variously to describe what humans *do*. More specifically, practice is used as a term to describe what people *do with things*. Practice theory has expressions across academic disciplines that seek to understand the social world. Whilst there is "no unified practice approach" (Schatzki 2001, p. 2) consensus is that practice concerns human activity, with a growing interest in the equivalence (or not) of the non-human in the performance of practice. Attending to non-human aspects of practice, what might be termed the material aspects, acknowledges social life as embodied actions interwoven with, rather than independent of, material contexts. The interconnectivity of social and material action presents us with a *sociomaterial* context within which to explore practice. With this sociomaterial perspective in practice theory 'Things of Her Practice' embodies intimate relationships between activity and materiality observed from a moment of work practice.

The American philosopher, Theodore R. Schatzki has developed a series of collecting metaphors in order to explain his concept of practice as social co-existence. Practice bundles, material arrangements, nexus, constellation and plenum are each used to describe how human activity and materiality are held together in relation to each other. His definition of practice as "embodied, materially mediated arrays of human activity centrally organised around shared practical understanding" (Schatzki 2001, p. 2) brings knowledge (practical understanding) and materiality into an inextricable relationship with doing. It is a useful starting point in understanding how 'Things of Her Practice' gathers aspects of practice theory.

With Schatzki's theoretical concepts of practice 'Things of her Practice' becomes a feature of bundles of practices and material arrangements. The drawing manifests practice in a way that allows practice theory to treat the drawing in its terms. The drawing both depicts art as activity and mediates that activity. Following Schatzki's logic, the drawing then qualifies as social phenomenon: it is a constellation of linked practice bundles and material arrangements. Practice bundles for Schatzki are the doings and sayings of practices, and they are linked to material arrangements. These doings and sayings are organised through concepts of knowhow, rules and teleological ideals; the material arrangements attend to the non-human collaborators found in furniture, technology, tools etc. Depicted in the drawing is a person sewing—a performance of artistic knowing combined with an arrangement of fabric, furniture, needle and thread. The practice performed in the actions of sewing is tied together with the practices suggested in other figurative aspects of the drawing. The fabric is stored on the shelves and transported in the rucksack. The needles and thread are kept in boxes, which are placed upon tables and stored amongst shelves. The fabric being stitched will be framed and transposed from the material arrangements of the workshop/studio to those of the gallery and the exhibition. Relations begin to pattern between the practices of making, storing and travelling, which are in turn tied to the material arrangements of workspaces and transport. Fabric, frames, thread and furniture are held in relation to walls, fixings, price lists and interpretation panels. The doings of the artist are depicted in the drawing but they are depicted as tied to the materiality of the practice context.

The drawing also mediates the doings/sayings/material arrangements of a research practice. It acts as a go-between that renders the abstractions of practice visible in such a way that makes empirical research not only possible but also personally desirable. It is important to me that the aesthetics of the drawing appeal to me, that they invoke a sense of desire. Personal desire speaks to the teleological aspect of Schatzki's social theory of practice: that "the organization of a practice is an array of understandings, rules, ends, projects and even emotions" (Schatzki 2005, p. 481). That I should desire to make the drawing in the first place is significant to the research practice because it implies a desire for representation. The emotional aspiration is bundled in the drawing (drawing practice) inspiring a deeper understanding of the phenomenon under investigation. Without teleology, suggests Schatzki (2012) the practice, in this case the practice and object of the drawing, would not exist.

The essential relational feature of this sociomaterial approach to the study of (knowing) practices is not limited to social theorists. The 'relational aesthetics'

of contemporary art are positioned by Nicholas Bourriaud as a theory of form where the art so created is "taking as its theoretical horizon the realm of human interactions and its social context" (Bourriaud 2002, p. 14). Framing much of the conceptual art in the last decades of the twentieth century, relational aesthetics resonates with Schatzki in its social and material considerations. As such, the 'form' of the artwork exists not in physical materials but in the dialogue, the relationship with the world, generated through the artwork. Bourriaud, in echo to Schatzki suggests that "each particular artwork is a proposal to live in a shared world, and the work of every artist is a bundle of relations with the world, giving rise to other relations, and so on" (ibid., p. 22). Could it be that Bourriaud's theory of form mirrors Schatzki's theory of practice? What relevance might this similarity have for our consideration of the material and aesthetic tensions in arts-based education research?

That Bourriaud and Schatzki share some ontological leanings is interesting. These writings of art and of practice draw from similar theoretical sources: Luc Botlanski, Michel de Certeau and Pierre Bourdieu are cited by both. They each pay attention to the materiality of their respective subjects but neither extends an equivalency of materiality to the aesthetic experience of those subjects.

The capacity to articulate aesthetic experience lies at the heart of education, its rationale and our research of it (Dewey 1934/1958; Eisner 2002; Greene 2004). Returning again to the actions of the drawing—in these actions rests an aesthetic experience that is at once material and sensory. The tactility of holding a pen, the leaning weight of my hand adjusted in response to the near toothless surface of tracing paper: experiences both material and sensory. Perceptible only just is the occasional scratch against surface when a jagged fibre of pen is caught as it turns through the line. I have been mindful of the reaction of ink, pressure and pen to the surface of paper and my desire for lines. With each pull of the pen along a yet to be made line I know that the nib of the pen changes. The weight of my leaning compresses its fibres and the fine roundness of the nib becomes flat with pressing, the subsequent lines becoming fatter. It is not the reservoir of ink that determines the life of the pen but the condition of the nib in relation to the task of lines.

I remember that prior to the drawing I have taken a photograph. A curious turn of phrase, to *take* a photograph, to *take* a picture: as if the view has been removed and its ownership is now changed. The material of the photograph is at first denied by its digital conception. The physical evidence of its digital taking does not materialise until the digital image finds itself within a digital world and the keystrokes 'Ctr-P- Enter'. There it is—full of colours, shapes, patterns and tones, a white edge on four sides of a rectangle: the photograph. Colours jar with shapes, patterns compete with tones. It is too noisy, too tiresome.

Softly, gently the noise is quietened as translucent tracing paper is laid upon the photograph. This tracing paper mutes the noise but it must not obscure the sounds. It must still be possible to see the sounds, to select the shapes around which thin black lines will be laid. With clean fingers the layer of tracing paper is rustled up to check the garish shapes underneath. What is it that I see through this layer of parchment? The eye must see again the shapes with clarity if the hand is to draw the lines with confidence.

Lift up, smooth down; lift up, smooth down. Fingertips and thumbs lift up, and the flat of my hand smooths down.

The drawing, its acts and materials of making combine with an affective loop of tactile feedback/response and desire to imagine, to bring forth an image. In the mindful experience of making the image I discover bits of 'knowing' i.e. partial understandings of the sociality I seek to understand. The drawing is an object of knowing. When I draw, when I am making the lines, I am informing decisions about where a line should go, how heavily should I lean on the nib of the pen, which shapes and contours should be accounted for, which should be neglected. Even though I might stop drawing and declare the image finished, I am aware that it is not actually complete. The drawing can never be complete because the possibility of more is ever-present. I *could* continue to engage with this drawing in different ways. I *could* develop the content of line and shape, perhaps with dots, or cross-hatching. I could bring in a vocabulary of tone and comment on depth and dimension. I could, but I do not.

I make objects of knowing when I draw. *In* the object of the drawing there are knowings both implied and explicit: a visual vocabulary of line, colour and shape describes a level of technique and mastery. This same vocabulary imagines for us stories of things and actions—visual interpretations of that to which attention was paid (Grady 2001). But *from* the object of the drawing there are further knowings both implied and explicit. There are stylistic references to graphic illustrations, pedagogic references to early years colouring-in books. Each time I inhabit the drawing I bring with me all previous knowing, and so my seeing is changed. This cannot be otherwise. The object of the drawing has a temporal feature: it cannot be defined by what it currently is only be what it is yet to become. It is defined by its own lack, its own incompleteness. My understanding of it is also always incomplete. The materiality of the drawing gives substance of paper, pen and ink to its being but the judged weighting of lines inscribes this materiality with an aesthetic ontology and because my knowing is incomplete but changed with each encounter then that ontology is constantly unfolding, it is constantly in the process of becoming.

In the first part of this chapter the study of artists practice has been positioned as an intellectual project of sociomaterial endeavour that necessitates an art-based methodology of description and analysis. Contributing to this rationale is the theorising of practice as a social phenomenon brought into being by the interrelationships of actions and materials. The line drawing 'Things of Her Practice' presents aesthetic sensibility as materially significant in the description and analysis of artists practice. However, the aesthetic and material are held in tension as the drawing, and the practice it claims to study, is forever incomplete.

10.3 Part Two. The Nearness and Farness of Things

One way of responding to Michael's research might be to query the point of all this photography and drawing. What sort of data is this? What kinds of question does it answer? I am not particularly interested in going down this route. Asking such

questions may lead to approaching Michael's drawings and ways of speaking to those drawings in a way that gets things wrong. Her project seems to shift between observing, inhabiting, explaining and representing artists' practices. Though the bringing together (and sometimes) blurring of these orientations is perhaps a good thing, the issue of what is going on at an ontological level deserves exploration. Ontological questions concerning the nature of social life are central concerns for Schatzki, whose work Michael draws on. Schatzki, a fairly well known Heideggerian scholar, maintains that 'site ontologies' such as his own owe a debt to Heidegger. It might therefore be fruitful to look at what Schatzki is doing so as to open up a way for Michael to address ontological concerns. Some of this will rehearse what has already been said about Schatzki.

In 'The Sites of Organizations' Schatzki (2005) argues that he is introducing a new form of social ontology. Social ontology, we are told, "examines the nature and basic structure of social life" (Schatzki 2005, p. 465). Schatzki's vision departs from "the two social ontological camps—individualism and societism—into which social theory has been divided since its inception". Ontological individualists (who are identified as either constructionists or institutionalists) "maintain that social phenomena are either constructions out of, or constructions of, individual people and—on some versions—their relations" (p. 466). In contrast, the societist camp, which "encompasses greater variety than the individualist camp" (ibid.), do not believe that all social phenomena are constructions out of individuals and their relations though they disagree over what is needed to analyse and explain social phenomena. Examples of societist ontologies include "modes of production (Marx 1973), whole societies (Malinowski 1926), abstract structures (Levi-Strauss 1963; Althusser 1970; Bhaskar 1979) discourses (Foucault 1976), and social systems (Parsons 1966; Luhmann 1984)" (p. 467). Despite the differences "societism holds that there are social phenomena, and that analysing and explaining many social affairs refers to phenomena, that are something other than features of individual people or groups thereof" (ibid.).

Schatzki's site ontology differs from individualist and societist ontologies through its particular use of context. This is because sites "are a particularly interesting sort of context. What makes them interesting is that context and contextualised entity constitute one another: what the entity or event is is tied to the context, just as the nature and identity of the context is tied to the entity or event (among others)" (p. 469). Ultimately, the distinguishing characteristic of Schatzki's theory is that rather than looking at social life and indeed learning in terms of individuals operating in contexts, the individuals are enmeshed or bundled in contexts that also include material arrangements. "Material arrangements" are simply "set-ups of material objects" and that: "Whenever someone acts and therewith carries on a practice, she does so in a setting that is composed of material entities. The material arrangements amid which humans carry on embrace four types of entity: human beings, artefacts, other organisms, and things" (p. 472). Schatzki makes it clear that social co-existence cannot be adequately accounted for by looking at practices and then material arrangements. Rather, these things are meshed together. These meshes then interlace with everything else: "all these meshes, nets, and confederations form

one gigantic metamorphosing web of practices and orders, whose fullest reach is coextensive with sociohistorical space-time" (ibid.).

As mentioned above, Schatzki claims that his theory of 'site ontologies' owes a debt to Heidegger. In one sense this seems plausible. It is true that Heidegger's philosophy would certainly not explain social life in terms of human (and only human) interactions, nor would it coincide with the notion that structures independent of humans act on humans to determine what they are and do. However, there are good reasons to believe that Schatzki's site ontologies are less inspired by Heidegger's thought than they might be and that this might be to their detriment and the detriment of Michael's understanding of her research drawings. For a start, Schatzki's approach to 'material arrangements', given his proclaimed debt to Heidegger, is perhaps particularly strange and simplistic. For example, it is surprising that he doesn't explain what the difference between artefacts and 'things' is. Stranger still is that Schatzki makes no reference to 'tools' or 'equipment'.

To push things on, it is worth looking at Heidegger's discussion of tools. Much of what follows remains close to Graham Harman's rather original reading of this discussion (Harman 2009). Heidegger's tool analysis was first published in 1927 in *Being and Time* and can perhaps be explained most clearly by looking at the way it departs from Husserlian phenomenology. When Husserl looks at objects he is concerned with their phenomenological status as things present to consciousness, not things in themselves that exist behind appearances. Science is simply an invention that distracts us from the phenomenological project. Though Heidegger is equally troubled by science's account of reality, his approach to phenomena makes a radical break with Husserl. Harman puts this nicely:

> For, as Heidegger famously observes, our most frequent mode of dealing with things consists not of having them within consciousness, but in taking them for granted as items of everyday use. If I observe a table and try to describe its appearance, I silently rely on a vast armada of invisible things that recede into a tacit background. The table that hovers visibly before my mind is outnumbered by all the invisible items that sustain my current reality: floor, oxygen, air conditioning, bodily organs. This is the meaning of Heidegger's tool-analysis. For the most part entities are not Husserlian phenomena lucidly present to view, but are hidden or withdrawn realities performing their labours unnoticed. (Harman 2009, p. 2)

For Husserl, phenomena are present to us as objects of consciousness. For Heidegger our usual every day coping in the world is best explained not by a relationship where objects are present to consciousness or 'present-at-hand' but rather by a situation in which "the less we just stare at the hammer-thing and the more we seize hold of it and use it, the more primordial does our relationship to it become, and the more unveiledly is it encountered as that which it is—equipment" (Heidegger 1962, p. 98). This readiness-to-hand involves a relationship with equipment whereby it is concealed from view until it breaks down. In a curious way this might be said to apply just as much to humans (or parts of humans) as other kinds of entity—self-consciousness tends to accompany embarrassment, guilt, therapy, illness and other such things. Anyway, all entities withdraw and then become accessible to consciousness. Consequently, all entities are in some way inaccessible and cannot

be brought to heal or 'grasped'. In the narrative accompanying 'Things of Her Practice', Michael seems to gesture toward this sensibility by drawing attention to her deliberate use of unfinished lines:

> The missing corners of the drawn coffee table do not mean that they do not exist; unseen ends of the bookcase and desk do not mean that they will collapse; and the table-top easel remains an easel despite the unfinished ends of its lines. (Michael 2012)

The practice of the artist is not taken for granted. The observation of practice is described in the drawing but the description relies on a myriad of assumptions seen and shared by the viewer: that the table stands on four legs and that the practice extends beyond the scene depicted. However, Heidegger is saying something more radical than this. Acknowledging the partiality of a depiction or vision will not capture the ontological otherness of the realm of the ready-to-hand. Due to the primacy of ready-to-handness: "Taken strictly, there is no such thing as *an* equipment. To the Being of any equipment there always belongs a totality of equipment, in which it can be the equipment that it is" (ibid., p. 121). In the ready-to-hand mode of being everything is involved with everything else to constitute 'world', a situation that is felt in the present-to hand mode of being where an object is a different thing depending on its context. Indeed, present-to-handness and ready-to-handness seem to be caught up in a sort of slippage: "Objects can withdraw into their hidden underground action or they can become objects of explicit awareness" (Harman 2009, p. 2). Moreover: "they do both simultaneously: the hammer is faintly felt even when we invisibly used it, and something withdraws in objects even when we explicitly stare at them" (ibid.). Harman believes that philosophers tend to make a common mistake in regard to present-at-hand and readiness-to-hand in that they believe that presence-at-hand refers to entities in their independence, whilst readiness to hand denotes their relation to humans. Harman thinks the opposite is the case, presence-at hand is always dependent on humans, readiness to hand never is.

'Present at hand' has three meanings. It refers to (1) phenomena present in consciousness, (2) broken equipment and (3) natural physical objects. Harman says that it is obvious that these things are dependent on humans. This is because there has to be an observer for things to become present in consciousness. Broken equipment must be a pain in the neck for someone. As for physical objects, they are "simplifications of real objects by means of mathematical formalisations" (Harman 2009, p. 4). Such formalisations are never equal to the reality of things. But then Harman makes what is perhaps a rather peculiar claim, namely that readiness-to-hand is not relational and is independent of human beings. He argues that though all equipment belongs to a unified system: "The fact that hammers and trees sometimes generate obtrusive surprises proves that they *are not* reducible to their current sleek functioning amidst the unified system of the world". Moreover, "They must have some excess or residue not currently expressed in the relational system of the world" (p. 5). 'Tool' beings don't just become immersed in human practice but rather the ready-to-hand must withdraw from the world itself. Otherwise it could never breakdown.

Harman recognises that Heidegger does not go this far. However, he argues that this is the logical extension of Heidegger's thought. Is this right? Surely for

something to be ready-to-hand there has to be a hand for it to be ready for? The fact that the hand cannot 'grasp' the residue does not mean that readiness-to-hand is independent from humans at all times unless, that is, that hands or indeed humans are understood as part of the equipment. In that case, presence at hand is as artificial as the notion of the human that it is present for. Perhaps that is Harman's point, that we are thoroughly unknowable to ourselves due to the withdrawal of Being and the breakage that makes us think of ourselves as consciously-directed subjects.

10.3.1 Technology, Nearness and Farness

In his later writings Heidegger's discussion of entities becomes more focused on the objects of modern technology such as aircraft and hydro-electric dams. The essence of modern technology is no longer aition but is enframing—we have come to see the land as some sort of resource or form of 'standing reserve'. We might think here of a term like sustainable development in regards to the environment. Sustainable development looks like something a good environmentalist should be for, but what the term seems to imply is simply that if we want to keep using the land as a resource we'd better make sure we don't ruin it—otherwise we won't be able to keep using it.

Heidegger says more about modern instances of technology, but like tools (if they are perceived as solid objects) this is not what he is interested in: The essence of modern technology is nothing technological. The essence is enframing—treating everything as standing reserve. Instances of modern technology reflect this enframing, but so do lots of other things. We often use the term human resources without thinking about what this entails. I recall a pupil telling me she was 'maximising her potential once'. Effectiveness and efficiency are the order of the day. This situation is coterminous with a false sense of nearness and farness. With, for example, air travel: "The hasty removal of all distances brings no nearness; for nearness does not consist in a small amount of distance" (Heidegger 1994, p. 5). Nearness and farness are scientific abstractions when understood in this way. An alternative, better way of understanding nearness and farness takes us back to what Harman says about readiness to hand and presence-at-hand. Once presence-at-hand becomes so dominant, we are in danger of losing touch with the true strangeness, distance and disconnection of readiness-to-hand. However, simultaneously it must paradoxically be the case that readiness-to-hand is also the site of true nearness—when we are disassembled amongst all other things in 'world'. This is what I take Heidegger to mean when he says: "Small distance is not already nearness. Great distance is not yet farness" (Heidegger 1994, p. 5). Good nearness and good farness happen simultaneously and they come together in the elusive concept (if that's what it is) of the 'thing'.

When reading Heidegger's work on the 'thing', it is necessary to resist the thought that particular entities are inherently 'things' (and good) whilst others are inherently objects (and bad). One has to resist this even though Heidegger makes a list of 'things' that seems to imply the opposite. Moreover, the expression 'the thing things' suggests that it cannot possibly be the case, for Heidegger anyway, that

whatever a 'thing' is becomes a thing through the 'context' in which it features. However, the opposite is actually the case. The notion of the thing 'thinging' has "a *negative* value. The fact that the things *thing* means that it does something besides sit around as a target for human awareness" (Harman 2009, p. 8). The thing's thinging is impossibly far away when we direct our conscious minds towards it and this is because it emerges out of the distant realm of readiness to hand that has an independent sense of relationality, a relationality that we do not have clear or conscious access to, but may have a sense of. Consequently, Dreyfus's attempts to explain the technological understanding of Being by looking at the differences between two entities, the Styrofoam cup and the Japanese tea-cup, gets things slightly wrong:

> A Styrofoam cup is a perfect sort of object, given our understanding of being, namely it keeps hot things hot and cold things cold, and you can dispose of it when you are done with it. It efficiently and flexibly satisfies our desires. It's utterly different from, say, a Japanese tea-cup, which is delicate, traditional, and socialises people. It doesn't keep the tea hot for long, and probably doesn't satisfy anybody's desires, but that's not important. (Dreyfus 1988, p. 273)

What Dreyfus implies here is that Japanese tea-cup becomes a 'thing' because it socialises us whilst the Styrofoam cup is an object. However, one only has to drive past a white van on the roadside and watch lorry drivers chatting over a coffee to get a 'sense' of a thing thinging. Both Japanese tea-cups and Styrofoam cups can be things or objects, but when they 'thing' we may 'know' it but we cannot access that thingness or bring it to presence in consciousness.

10.3.2 Returning to Schatzki

Having looked at Heidegger's treatment of entities, I want to turn to Schatzki's account of 'bundles' in relation to Heidegger's thought. It is perhaps true to say that, like Heidegger, Schatzki is not interested in the material differences between things. However, it would seem that Schatzki's 'bundles' treat what is ready-to-hand as though it were present to hand and generated by a kind of 'clearing' without concealment. Indeed, on occasions he simply lists items in the various arrangements that are meshed together as though this simple act revealed the key to social reality. Is Schatzki just guilty of reducing everything to presence, to an ontotheology? His bundles might be more flexible shifting entities unlike, say, Leibnitz's monads, but aren't they just artificial constructs employed to control the movement of concealment and disclosure that is central to Heidegger's account of 'world' therefore imposing one specific kind of entity (the bundle) as an explanation of reality?

For Schatzki, Heidegger's notion of a clearing (*Lichtung*), or open (Offene), is central to his own account of site ontologies: "For Heidegger, the clearing is an open place, prior to all determinateness (things being such and such) and representation, in which anything that is, including human beings, shows up (imagine a lit-up expanse on the stage of a darkened theatre, in which people, actions and entities

appear)". (Schatzki 2005, p. 469). What a strange metaphor to use—the deliberate casting of artificial light on to a stage. It is so unlike the images Heidegger uses to talk about clearing such as the woodpath:

> Wood is an old name for forest. In the wood are paths that mostly wind along until they end quite suddenly in an impenetrable thicket
>
> They are called 'woodpaths'.
>
> Each goes its peculiar way, but in the same forest. Often it seems as though one were identical to another. Yet it only seems so.
>
> Woodcutters and foresters know what it means to be on a woodpath. (Heidegger 1950, p. 3)

'To be on a woodpath' is (or at least 'was') a familiar expression in German denoting a path that does not really go anywhere. But this is not Heidegger's meaning. Remember, woodcutters and foresters know what it means to be on a woodpath, but such 'knowledge' might not be available to everyone. So what is at stake in Heidegger's use of this term? In a sense, woodpaths do lead us somewhere, but this is not a destination or fixed end point:

> … the function of woodpaths, which the woodcutters leave behind them as they cut and gather wood is not to lead someone from one point to another. Rather, the path is almost a necessary by-product of the woodcutter's activity. For those of us non-woodcutters walking in a forest, we don't know where the woodpaths are leading and if our primary aim were to arrive at some sort of fixed destination in the shortest amount of time then we wouldn't be on a woodpath. Thus, the philosophical meaning of being on a woodpath is not that it doesn't go anywhere but that the meaning of being on it is not to arrive at a known or predetermined destination. One does not necessarily know at the outset where one is going. For Heidegger, woodpaths express the fact that thinking is thoroughly and essentially a question not to be stilled or "solved" by any answer, a questioning that cannot calculate in advance the direction in which it will be led, let alone the destination at which it will arrive. (Stambaugh 1987, p. 80)

This sort of thinking is so different to the rationality of the Enlightenment: "To the modern mind, whose ideas about everything are punched out in the die presses of the chemical-scientific calculation, the object of knowledge is part of the method. And method follows what is in fact the utmost corruption and degeneration of a way" (ibid.). Heidegger's notion of the 'way' is not exactly a metaphor, but a metonym. Metonyms establish relationships of contiguity. The way of thinking enshrined in the notion of a 'way' is not a route to some 'metaphysical' absolute, not something "concrete and sensuous symbolising something abstract and non-sensuous" (Stambaugh 1987, p. 81). Rather, for Heidegger "the way is of such a nature that it originates with the movement of walking on it. Strictly speaking, one could almost say that the way is this movement" (ibid.). The metonym of 'the way' chimes with that of the woodpath—it is more than simply a metaphor for a way of thinking. The 'clearing' of the trees is a form of visceral, sensuous practical activity in the world which is coterminous with thought not distinct from it. Following Heidegger, Standish notes "The behaviour of the hand, as of language, is disclosive and integral to thinking" (Standish 1997, p. 446).

My feeling is that Michael 'is' on a woodpath where her handicraft 'is' disclosive and integral to 'thinking' and that such thinking involves the subtle and simultaneous procedures of movement towards something whilst withdrawing from it.

Moreover, my feeling is that this extends beyond the simple recognition that the picture is a fragment of a larger whole/bundle. However, Schatzki's categories and stage-lighting (which she toys with) may offer a sort of 'teleoaffective' route from one side of the forest to the other that may not be the road best travelled. So much educational research and its forms of representation might be seen to involve the degeneration of a 'way' in favour of a predetermined route to a relatively predetermined conclusion. Such procedures are often accredited with a kind of rigour which, in real terms, they do not possess.

10.4 Part Three. Wayfinding

The ontological leanings that I seek are unequivocally sociomaterial and the work of Schatzki resonates with such sensibilities. It seems however, that I blinker my imagination with that of Schatzki and thus limit the scope of my thinking, the scope of the drawings. Thinking again of the process of creating 'Things of Her Practice', I remember that when I am immersed in the act of drawing, my actions and the tools of those actions are indistinct from the emerging drawing. A collaboration of action and material combine towards the creation of the drawing, whilst at the same time, the drawing serves as a means to consider the activity and materiality of practice. This is the practice of drawing. In my attempt to understand the educational nature of that practice, the inherent knowing, I have brought attention to components of actions and materials through the use of Schatzki's practice bundles and material arrangements. In so doing I have vanished the tension that held them together as practice. Without the tension the practice is no more: it is not visible. So, despite this practice now rendered invisible I have insisted on the drawing 'Things of Her Practice' as a means of making the practice 're-visible' and present at hand. 'Things of Her Practice' is both ready-to-hand and present-at-hand. Extrapolating again from Harman (2009, p. 2) then, the materiality of the drawing is faintly felt even though it was created unseen, and something withdraws in the drawing even when we are purposefully attentive of it. And again, the sociomateriality of practice is experienced even though the creation of the drawing was without witness, and something of that practice eludes us even as we fix it to the materials of paper, ink and pen. My nascent theorising through Schatzki and the practice of drawing is shown here to be problematic. Material arrangements and practice bundles seem not to afford the simultaneous nearness and farness that Munday draws attention to.

The line drawing is a distinct entity from me, its artist but I am inseparable from its creation. The pen and paper are also distinct entities, again also distinct but inseparable from me. When I am absorbed in the act of drawing the distinction disappears. The pen, the paper and I are in relation—we are each the practice of drawing. When I am drawing I am tuned into the texture of the paper, the flow of ink, the quality of line. I am not attending to the pen as a discrete object, nor am I thinking of myself as distinct from the activity of drawing. These relations remain coherent whilst there is a sense of aesthetic harmony—when my emotional response to

the emerging drawing/image is constructive. But then there comes a point of non-coherence when the drawing no longer speaks to me and the relations between me, pen and paper are interrupted. The objects resume as separate entities and the practice of drawing must confront the interruption. The interruption emerges from an inner disquiet, a discontent with the image—an emotional response to the object.

As I write my way through these thoughts it becomes clear to me that yes, the drawing is an epistemic object but it also relates to other forms of itself. That is, the drawing is a figurative form and it exists simultaneously with other forms: the original tracing, the photograph, the digital software, the written papers, presentations and PowerPoint slides. These are each, Knorr Cetina tells us, instantiations—part of the whole that is the epistemic object and as their being unfolds so too does that of the epistemic object. The work of sociologist Karin Knorr Cetina (2001, pp. 175–188) brings attention to an unfolding ontology of epistemic objects—a theorising that allows for practice to be conceived as something not fixed to a specific time, location or set of actions; where the practice is conceived as epistemic—inherently knowing. The artefact of the drawing becomes an object of knowing, an epistemic object. Knorr Cetina offers a vocabulary with greater congruence for the 'woodpath' of my drawing-as-research methodology.

The whole, of which the drawing is a part, is here conceived as the visual methodology of the project of research. The drawing is an instantiation of the visual methodology. The visual methodology is an epistemic object. This methodology is always in the process of becoming. It is an imagined object because it is always becoming—it is subject to the unfolding nature of its instantiations. That this methodology is aesthetic is inseparable from its claim to be epistemic. The sensory and affective features of the relations between my actions and the objects of those actions imbue the methodology with aesthetic considerations. These aesthetic considerations relate in part to the ideas of incompleteness and lack already mentioned. Looking again at 'Things of Her Practice' I am reminded that it became retitled 'Things of Her Practice #1': I developed a series of four adaptations. The original line drawing had become mute in my inner dialogue about practice and I sought a catalyst for further exchange. I found that catalyst in washes of watercolour applied with soft sable brushes, the colour pooling on the surface of the smooth inkjet paper. I worked across these four images fixing upon a palette of colours for each. The first is a palette of damson purples and blues, obliquely gendered and generous. Layers of blue build a background, a depth that interrupts the flat dimensions of the lines. 'Paint with the colour, don't draw with the paint', I remind myself that the paint is a material of form not line. The handling of colour has differences to the handling of line. The brush carries the liquid colour from palette to paper and my eye selects the point of place. See how the paper absorbs that pale, pinky damson colour, how quickly the paper is saturated and the colour begins to form a tidal line around itself. Use the brush to wash the pool of colour further, move the liquid in such a way that those tidal lines of colour cannot rest and fix as marks on the paper. Reload the brush with the liquid colour and keep working wet into wet. A brush with smaller bristles, still rounded and soft but loaded with a concentrate of ultramarine that when it touches the surface of the wet pale, pinky damson it seeps in damp

directions of blurred edges. Coaxed and guided this concentrate of colour throws greater depth to the image, connecting depictions of background to foreground, suggesting relations across the space of page, the space of the image.

10.4.1 Enough

Munday suggests that Michael's art-based research on the practices of artists is indeed on a woodpath. Arts-based approaches to education research afford material and aesthetic sensibilities to social inquiry. The materiality of observing, inhabiting, explaining and analysing artists' practices is expressed in the drawing 'Things of Her Practice' and is used to move closer to an understanding of practice whilst simultaneously withdrawing from it. That practice can be observed and made visible is an assumption central to the contextualising doctoral research. The visible is made material in the form of drawings and their incarnations.

Following Stambaugh's (1987) take on Heidegger's woodpaths, the chapter draws to its conclusion. The function of the drawings, which Michael has left behind in tracing an analysis of practice, has been shown here not to serve as illustration or representation. Rather, the drawings are a necessary by-product of methodological activity. The audience of the drawings cannot know what the analysis is. If understood as an illustration of practice then the function of the drawing is misunderstood. The philosophical meaning of the drawing is not that it does not represent anything but that the meaning of seeing it is not about reaching a predetermined destination. We cannot know at the outset what we will see and understand.

That the drawings could be metonymical of Heidegger's 'way' liberates the research imagination to consider whether or not Schatzki and Knorr Cetina are engaged in woodcutting or following a predetermined path. However, as this chapter reveals, tensions exist not only in the aesthetic and material products of the art-based methods but in the ontological dispositions towards practice as a sociomaterial phenomenon. Art-based methodologies, such as that explored in Michael's 'Things of Her Practice', understand the representation of materiality as contiguous with sociomaterial approaches to education research. That very materiality also acknowledges the researcher's inextricable entanglement with the research. Art-based methodologies thus offer congruence with the ontological tensions that emerge in educational research on practice. The material representation of the social phenomenon of practice slides between what is known and unknown. 'Things of Her Practice' draws a woodpath not a destination.

References

Abbing, H. (2002). *Why are artists poor? The exceptional economy of the arts*. Amsterdam: Amsterdam University Press.

Barone, T., & Eisner, E. W. (2012). *Arts based research*. Thousand Oaks: Sage.

Becker, H. S. (1982). *Art worlds*. Berkeley: University of California Press.
Bourriaud, N. (2002). *Relational aesthetics.* Paris: Les Presses du Réel. (Original French publication 1998)
Cahnmann-Taylor, M., & Siegesmund, R. (Eds.). (2008). *Arts-based research in education. Foundations for practice*. London: Routledge.
Dewey, J. (1934/1958). *Art as experience*. New York: Minton Balch.
Dreyfus, H. (1988). Husserl, Heidegger and modern existentialism. In B. Magee (Ed.), *The great philosophers: An introduction to Western philosophy* (pp. 252–277). Oxford: Oxford University Press.
Eisner, E. W. (2002). *Arts and the creation of mind*. New York: Yale University Press.
Grady, J. (2001). Becoming a visual sociologist. *Sociological Imagination, 38*(1/2), 83–119.
Greene, M. (2004). Carpe diem: The arts and school restructuring. In G. Diaz & M. B. McKenna (Eds.), *Teaching for aesthetic experience: The art of learning* (pp. 17–31). New York: Peter Lang.
Harman, G. (2009). Technology, objects and things in Heidegger. *Cambridge Journal of Economics, 34*, 1–9.
Heidegger, M. (1950). *Holzwege*. Frankfurt am Main: V. Klostermann.
Heidegger, M. (1962). *Being and time*. New York: Harper & Row.
Heidegger, M. (1994). Einblick in das was ist. *Bremer und Freiburger Vorträge.* Frankfurt: Klostermann.
Heidegger, M. (1999). *Contributions to philosophy (from enowning)*. Bloomington: Indiana Press.
Heidegger, M. (2000). *Towards the definition of a philosophy*. London: Athlone Press.
Irwin, R. L., & de Cosson, A. (2004). *A/r/tography. Rendering self through arts-based living inquiry*. Vancouver: Pacific Educational Press.
Knorr Cetina, K. (2001). Objectual practice. In T. R. Schatzki, K. Knorr Cetina, & E. von Savigny (Eds.), *The practice turn in contemporary theory* (pp. 175–188). London: Routledge.
Knorr Cetina, K. (2007). Culture in global knowledge societies: Knowledge cultures and epistemic cultures. *Interdisciplinary Science Reviews, 32*(4), 361–375.
Michael, M. K. (2012, May 9–11). *Things of her practice: Exploring visual methods for the study of artists' work*. Paper presented at ProPEL international conference, Professions and professional learning in troubling times: Emerging practices and transgressive knowledges, University of Stirling. Retrieved May 30, 2012, from http://www.propel.stir.ac.uk/conference2012/hatcpftpc/PDFs/Paper062_Michael_Maureen.pdf
Sameshima, P. (2007). *Seeing red. A pedagogy of parallax*. New York: Cambria Press.
Schatzki, T. R. (2001). Introduction: Practice theory. In T. R. Schatzki, K. Knorr Cetina, & E. von Savigny (Eds.), *The practice turn in contemporary theory* (pp. 1–14). London: Routledge.
Schatzki, T. R. (2005). The sites of organizations. *Organization Studies, 26*(3), 465–484.
Schatzki, T. R. (2012, September 5–8). *Art practices.* Keynote address for the 7th international conference of the research network sociology of the arts, Vienna.
Springgay, S., Irwin, R. L., Leggo, D., & Gouzouasis, P. (Eds.). (2008). *Being with a/r/tography*. Rotterdam: Sense Publishers.
Stambaugh, J. (1987). Heidegger, Taoism and the question of metaphysics. In G. Parkes (Ed.), *Heidegger and Asian thought* (pp. 79–91). Honolulu: University of Hawaii Press.
Standish, P. (1997). Heidegger and the technology of further education. *Journal of Philosophy of Education, 31*(3), 439–459.
Strandvad, S. M. (2012). Attached by the product: A sociomaterial direction in the sociology of art. *Cultural Sociology, 6*(2), 163–176.
Thornton, S. (2009). *Seven days in the art world*. London: Granta.

Chapter 11
Olympification Versus Aesthetization: The Appeal of Mathematics Outside the Classroom

Kathleen Coessens, Karen François, and Jean Paul Van Bendegem

11.1 Introduction

Traditional mathematics education is characterized by (what we will call) an olympification process. Research on mathematics education and the educational process itself is driven by an obsession for high achievement and top scores at the international 'rankings'. An interesting excess of this orientation is the existence of National and International Mathematical Olympiads (IMO). This process has a feedback effect upon the implementation of mathematics education itself, creating loops from intent to output, from content to representation and amplifying the panoply of curricula, tests, competitions and Olympiads. At least, a first lecture of mathematical materials, representations and approaches in academia and education reveals this. The classroom seems to have absorbed this position, often reduced to the question of how to compete in mathematics. The result seems to be 'all at the start', but (preferably) few of these at the arrival, and hardly any (regrettably) in good condition.

However, outside the classroom, mathematics appears in different ways, triggering other senses and touching upon lived experiences. Experiential approaches, artistic approaches, embodied approaches offer a different view upon mathematics, based upon astonishment, curiosity, insight and sometimes revelation. From fractals in the arts to proofs in performance settings, from interactive situations to musical mathematics, from everyday life paradoxes to street mathematics, these approaches appeal to other capacities and competencies than the competitive-intellectual—they appeal to the aesthetic-intellectual or the sensorial-intellectual or the structural-emotional. Here mathematics cohabits with situated knowledge (Lave and Wenger 1991) and personal experience. Could this offer a 'warmer' entrance into mathematics, creating a fertile ground and allowing for a different link with classroom mathematics and better arrivals at the end in a condition, yet to be determined?

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Drawing upon examples, at one side of the 'olympification' or 'competitive' strive in mathematics and at the other side of 'aesthetic' and 'lived' mathematical representations and interactions, we will explore the tensions and estrangement of these representational contradictions.

In Sect. 11.2 we will explore the notion of olympification in mathematics at the general level and analyze the differences between the measurements of PISA and TIMSS. This will then be further detailed by the example of Flanders.

In Sect. 11.3 we consider the possibility of another perspective on mathematics, looking at a way of bringing classroom mathematics in interaction with other experiences in life. A small content analysis of eight international journals concerning mathematical education helps to understand the extent in which teachers and researchers take care of outside classroom experiences as possible input for a mathematical curiosity and understanding. Focusing on the relation between mathematics and art we will shortly explore different examples of mathematics within the arts.

Sections 11.4 and 11.5 bring experiential and artistic practices within mathematics, showing an example of how a mathematician can creatively bring mathematics outside the classroom, before turning to the conclusion (Sect. 11.6).

11.2 Olympification: Flanders Native Speakers Get the Gold Medal

Mathematics education is more than any other subject in education characterized by its National, Regional and International Mathematical Olympiads (IMO). The 'List of mathematics competitions' at Wikipedia gives an overview of hundreds of national, regional and international competitions on mathematics. They are of all kinds, going from 'the oldest and hardest', over the newest implemented to the top of the top competition which is an Olympiad for the selections of the 20 top countries in the IMO. The growing interest in the golden medal of mathematics goes hand in hand with the fact that the performance level of mathematics became the gate keeper within education. Critical voices within mathematics education are criticizing the Olympification of mathematics and the international comparative researches on the performance of students on mathematics. The central questions in the debate shifted from the more technical questions as 'What to measure?' and 'How to measure?' to the more ethical questions 'Why to measure?'; 'What's behind the figure?' and 'What is the constitutive effect on the curriculum itself?'. We will illustrate this critical questions first by presenting the discussion on the differences between the most respected international comparative researches on mathematical performance and second by a case study of the mathematics performance level of Flemish students.

Currently, two international surveys evaluate student performances on mathematics. The first one is the Program for International Student Assessment (PISA) organized by the Organization for Economic Co-operation and Development (OECD).

The second survey is the Trends in International Mathematics and Science Study (formerly known as Third International Mathematics and Science Study—TIMSS) funded by the International Association for the Evaluation of Educational Achievement (IEA). These two evaluation systems develop their studies and surveys using different approaches. In the analysis made by Hutchison and Schagen (2007) we can illustrate the technical questions 'What to measure?' and 'How to measure?' The two international surveys differ in four main ways. Firstly, TIMSS focuses on the curriculum-related tasks, whereas PISA is literacy based. Secondly, PISA items are aimed at life skills while TIMSS items are more knowledge oriented. Thirdly, TIMSS focuses on the extent to which students have mastered mathematics and science as they appear in school curricula, whilst PISA aims to capture the ability to use mathematical and scientific knowledge and skills to meet real-life challenges. Fourthly, TIMSS is explicitly organized around two frameworks, a curriculum framework (which envisages three layers: intended, implemented and attained curriculum) and an assessment framework. PISA focuses on skills for future life rather than on the grasp of the school curriculum.

PISA aims to assess reading literacy, mathematical literacy, scientific literacy and problem solving. The prime aim of the OECD/PISA assessment is to look "at young people's ability to use their knowledge and skills in order to meet real-life challenges rather than how well they had mastered a specific school curriculum" (OECD 2005, p. 9). Whilst PISA data emphasizes literacy and problem solving, TIMSS data is based on students achievement on the curriculum-related tasks. We can indeed conclude that TIMSS research is more focused on pure mathematical performances whilst PISA is focused on the practicalities of mathematical skills. It was within the framework of OECD/PISA that the general notion of mathematical literacy was developed as "an individual's capacity to identify and understand the role that mathematics plays in the world, to make well-founded judgments and to use and engage with mathematics in ways that meet the needs of that individual's life as a constructive, concerned and reflective citizen" (OECD, 2004, p. 37). At the same time we can observe a growing interest in the PISA survey. More and more countries are participating at the PISA survey, ranging from 43 countries at 2000 when PISA started its initiative to 64 countries at 2012. TIMSS started its initiative earlier, in 1995 with 23 countries and in 2011 it has a participation of 45 countries. The reason why PISA became more widespread and successful is not investigated.

Let us move to the second type of critical questions on 'Why to measure?'; 'What's behind the figure?' and 'What is the constitutive effect on the curriculum itself?'. Therefore in Fig. 11.1 we will have a closer look at the figures of the PISA 2003 results (were the focus of the PISA research was on mathematical literacy).

A first observation can be that the formalism typical for education (curriculum, tests, reactions to social problems) and more specific for mathematics education (curriculum, tests, international comparative researches and surveys, regional, national and international Olympiads), reflects itself in research and in research outputs. Conform the American Educational Research Association (AERA) *Standards for reporting on Empirical Social Science Research* this Fig. 11.1 should represent the educational reality in empirical quantitative statistical terms. How to

Wiskundige geletterdheid

Landen	Gem.	St. Fout
Vlaanderen	553	(2.1)
Hongkong	550	(4.5)
Finland	544	(1.9)
Korea	542	(3.2)
Nederland	538	(3.1)
Liechtenstein	536	(4.1)
Japan	534	(4.0)
Canada	532	(1.8)
België	529	(2.3)
Macao-China	527	(2.9)
Zwitserland	527	(3.4)
Australië	524	(2.1)
N-Zeeland	523	(2.3)
Tsjech. Rep.	516	(3.5)
IJsland	515	(1.4)
Duitst. Gem.	515	(3.0)
Denemarken	514	(2.7)
Frankrijk	511	(2.5)
Zweden	509	(2.6)
Oostenrijk	506	(3.3)
Duitsland	503	(3.3)
Ierland	503	(2.4)
Slow. Rep.	498	(3.3)
Franse Gem.	498	(4.3)
Noorwegen	495	(2.4)
Luxemburg	493	(1.0)
Polen	490	(2.5)
Hongarije	490	(2.8)
Spanje	485	(2.4)
Letland	483	(3.7)
Veren. Staten	483	(2.9)
Russ. Fed.	468	(4.2)
Portugal	466	(3.4)
Italië	466	(3.1)
Griekenland	445	(3.9)
Servië	437	(3.8)
Turkije	423	(6.7)
Uruguay	422	(3.3)
Thailand	417	(3.0)
Mexico	385	(3.6)
Indonesië	360	(3.9)
Tunesië	359	(2.5)
Brazilië	356	(4.8)

Flanders (553) is, together with Hongkong (550) (although there is no statistical significance) at the top of the international ranking. Flanders is well ahead of his neighbors e.g. The Netherlands (538), the German Community (515), France (511) Germany (503) and the French community (498). As one can observe the table shows the figures for Belgium together with the scores of Flanders (Vlaanderen), the French Community (Franse Gem.) and the German Community (Duitst. Gem.). Since Belgium is a federal state with three communities (the Flemish, the Walloon and the very small German community) and educational matters are under the control of the communities, national figures on mathematics education are subdivides into the averages of the communities. The community has the authority to decide on their own educational system and structures. They develop the curriculum that will be enforced by the parliament of the respective community. This is the main reason why Belgium's national figures are represented by community. Looking at the average scores of the countries/communities we can conclude that Flanders has the highest rate (553). But this is not the full story. Behind the success story there are differences and gaps hidden from view. By representing more details of Flanders' figures we will listen to another voice on the educational reality of Flemish native and non-native pupils (and will know more about who of them will get the golden medal).

Fig. 11.1 Mean scores on mathematical literacy by country (De Meyer et al. 2004, p. 5)

speak about the figures presented? The competence of mathematical literacy is defined in numerical steps and quantified categories. Mathematical literacy performance is represented by oversimplified average national scores disregarding the complex inferences by ethnicity, native language and family income. In line with Priem (Chap. 4, this volume) we can state that the PISA methodology and analysis transfer sociological concepts into modes of quantification which are not further

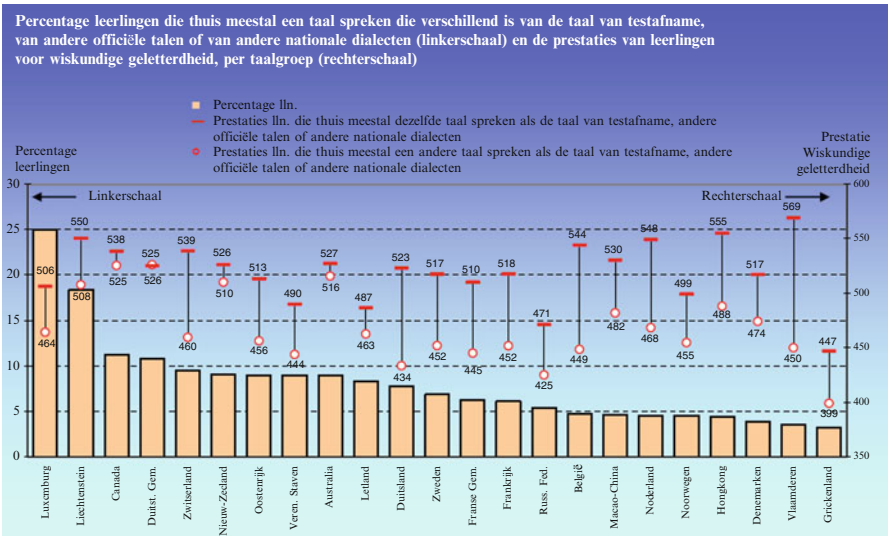

Fig. 11.2 Difference between native and non-native speakers (De Meyer et al. 2004, p. 33)

discussed. PISA methodology imports strong hierarchical and determined categories that cover the societal presence of differences.

A second observation is that the results on mathematical performance within an international and in the European context are very different. A third observation is that even within one national context the results can vary a lot and thus create a big gap between high and low achievers. In the following paragraph we will go into the third observation by elaborating on the example of Flanders, Belgium (François 2008; François et al. 2013). This example can be used to show what is at stake at the well developed countries with their high averages of mathematical literacy. National averages hide the differences within the country. Let us have a closer look at the figures which present the average scores of secondary school pupils on mathematical literacy.

Therefore in Fig. 11.2 we will present the differences in performance on mathematical literacy between native and non-native speaking pupils in the different countries of the PISA 2003 research.

How to read this (statistical descriptive) Fig. 11.2? The histogram represents the percentage of non-native speakers. The scale of the percentage non-native speaking pupils are at the left side, ranging from 0 to 30 %. The highest figure for percentage non-native speaking pupils is 25 % for Luxembourg. The scale at the right side represents the level of performance of mathematical literacy, ranging from 350 to 600. PISA result scores use 'Raw Test scores' based on the techniques of modern item response theory (IRT). This makes it possible to construct a scale of mathematical performance, to associate each assessment item with a point score on this scale according to its estimated difficulty and to assign each student a point score on the same scale representing his or her estimated ability. To facilitate the interpretation

of the scores assigned to students, the scale was constructed to have an average score among OECD countries of 500 points and a standard deviation of 100, with about two-thirds of students across OECD countries scoring between 400 and 600 points (OECD 2004, p. 45). The highest score on mathematical performance is 569 by Flanders native students. The vertical lines represents the differences between the achievements of native (red small horizontal line) and non-native (red small circle) speaking pupils. The figures indicate the score of mathematical literacy (referring to the scale on the right).

In the case of Flanders (Vlaanderen) the histogram indicates that Flanders has an average of 3.3 % of non-native speaking pupils. The score on mathematical literacy for native speaking pupils is 569 (red line), for non-native speaking pupils 450 (red circle) which makes a giant gap of 119 between native and non-native speaking pupils. The other voice on the educational reality behind the figures is that Flanders educational system confirms social inequality. This inequality already starts at primary education and it increases in secondary and high education (Groenez et al. 2003; Hirtt et al. 2007). Flanders can be called the champion in mathematical literacy, it gets the golden medal, but at the same time it is the champion in inequality. We have to conclude that inside the classroom mathematics education generates inequality. Time to move outside the classroom to get some fresh air. In a first move we will investigate the material culture of mathematics, both from an historical point of view and from a critical educational point of view. In a second move we investigate the relation between mathematics and its material culture from the perspective of art and experience.

11.3 Mathematics and Its Material Culture

Looking for the material grounding of mathematics is going beyond the phase of pure astonishment and trying to answer the question on the ‘nature’ of mathematical concepts and mathematical ideas. Therefore we have to leave the Platonic realm to bring mathematics down to earth. Philosophers of mathematics (Steiner 2011) suggest an anthropomorphic answer thereby looking back at the history of human kind. Egyptians indeed needed to know how many bricks to use to construct the pyramids and therefore they needed to know the volume of the pyramids. At the same time the Egyptians had to measure anew the land mixed with mud and silt to redistribute or attribute its parts after the Nile’s floods submerged the borders of tillable fields. Michel Serres (1989) argued the simultaneous emergence of law and geometry. Surveyors or geometers had to measure the disordered world to reorder nature and give it a new birth into culture based on the first principles of law.

The emergence of mathematics—or let us call it mathematical practices—can be understood as an answer to problems that arise within the environment of human being. This notion of mathematical practices coming from an historical investigation resonates in the research field of ethnomathematics and critical mathematics education.

D'Ambrosio (1990) analyses the concepts of mathematics as follows: "I call mathema the actions of explaining and understanding in order to survive. Throughout all our own life histories and throughout the history of mankind, technés (of tics) of mathema have been developed in very different and diversified cultural environments, i.e. in the divers ethnos. So, in order to satisfy the drives towards survival and transcendence, human beings have developed and continue to develop, in every new experience and in diverse cultural environments, their ethno-mathema-tics (D'Ambrosio 1990, p. 369). Based on this divers and local mathematical practices, our Western academic mathematics could arise. In his search for mathematical similarities and the relation of environmental activities and mathematical culture, Bishop (1988) identified six mathematical practices which he calls mathematics with a small 'm' being: counting, designing, explaining, locating, measuring and playing. He argues that the six key universal activities are the foundations for the development of mathematics. As a result of cultural developments and of different cultures interacting and conflicting, a particular line of development has emerged. This has produced the Western academic mathematics as we know it today. Bishop calls it mathematics with the capital 'M' where the small m stands for a set of mathematical basic competences and the large M stands for mathematics as the Western scientific discipline.

The challenge now is to introduce this 'anthropomorphic' turn and the material perspective on mathematics and mathematical practices into the curriculum of mathematics education. The perspective from art and experience gives a first glance.

11.4 Wanted: Mathematics Told by Art and Experience, or, Art and Experience Told by Mathematics

The central thought of this article is to consider the existing possibilities of moving towards a different position that favors an awareness of mathematical insights and perspectives outside the classroom, or at least outside the traditional mathematical curriculum. Why should we do that? Indeed, accordingly to the above, mathematical education has since long been (and more and more) part of a rational program in which competencies can be measured. Olympification of a knowledge domain can thereby be considered as an interesting approach as competition encourages the best to even become better. At the same time, mathematics in the classroom is most of the time experienced as a world in itself, not only abstracted from everyday experience but also as something only mathematicians do—something extra-terrestrial.

This assumption is confirmed by a short study of the following international journals on mathematics education: Research in Mathematics Education, For the Learning of Mathematics, Mathematics Education Research Journal, Journal of Mathematics Teacher Education, Mathematics Teacher, Educational Studies in Mathematics, The Journal of Mathematical Behavior, Mathematical Thinking and Learning. A qualitative content analysis of the title and abstract of the main articles of these journals was done over the short period of two recent years, 2010 and 2011.

Book reviews were not considered nor very small articles (less than 3 pages) or editorial texts. What we searched for was if and how educational journals implemented outside experiences in mathematics education and vice versa, which kind of mathematical experiences can be encountered in the outer world. This study showed a certain but still low interest of journal articles—research and teaching—for linking mathematics with everyday experiences or other domains like psychology, language and culture. It is also remarkable that all journals nearly approached the zero level for concerns and mathematical insights related to art. A short look at a broader time span proved that a consideration of the interaction of art and mathematics was not totally absent, but quite sporadically.

The following table gives an overview of the results of the content analysis. The overview is based on the categorization of four items. (i) The category of 'math within math' contains the articles that focus mainly on how to learn mathematics in the classroom from within mathematics, using no or very few (examples of) other disciplines or experiences. (ii) The category 'math and culture' embeds research and teaching that considers the interrelations of mathematics, identity and culture, but also concerns issues of psychology and creativity, semiotics, language, and sometimes the history of mathematics. Part of these articles are meta-educational—reflections of the researcher upon the practice rather than the practice itself. (iii) The category 'math and everyday experience' contains descriptions of mathematical education practices that use ordinary experiences in the classroom, or start from these to elaborate a mathematical topic. (iv) Finally the category 'math and arts' looks at how mathematics education can be enhanced by an interaction with the arts. We have decided not to list The Journal of Mathematical Behavior nor Mathematical Thinking and Learning in the table as these were totally focused on typical mathematical educational issues inside the classroom (Table 11.1).

The results are rather deceiving. Inside 2 years (2010–2011), publications in these educational mathematics journals have a slight interest in the interaction between mathematics education and mathematics outside the classroom, between mathematics education and other mathematical perspectives on/in the world or in a kind of mathematical spirit—often so important to professional mathematicians. It is interesting to note that reflections or practices concerning the interaction between the arts and mathematics education are rather lacking. Of course, this is but an analysis of a short-time random sample of eight journals out of the more than 30 on mathematical education. A further investigation would be needed to confirm this tendency on the whole or only partially.

However, we claim that, as literacy needs to be embedded in a world of communication not only to enrich the vocabulary and expression of users but also to open a certain curiosity for words, symbols and meanings, mathematical literacy—or should we say 'mathemacy'—needs to be embedded in a broader experiential world than the handbook, the explanation of the math teacher in the classroom and the individual competitive strive towards 'winning'. Certain perceptual or artistic experiences can trigger, awake or enrich mathematical consciousness by engaging us to explore the related or inherent mathematical qualities, concepts or contents of these experiences. The possible examples are abundantly in all directions; they can be

Table 11.1 Outside experiences in mathematics education

Theme of the article / Journal	Math within math	Math and culture	Math and everyday experience	Math and arts
Research in Mathematics Education	46	4 2 semiotics of the body and language) 1 cultural experiences 1 creativity	3 2 general, 1 T-shirt design	0
For the Learning of Mathematics	28	3 1 psychology and embodiment 2 ethnomathematics	2 1 everyday language 1 general	3 1 metaphors and poems 1 experience and art 1 ambiguity as creative practice in art, science and mathematics
Mathematics Education Research Journal	34	9 Whole number dedicated to rural/ cultural mathematical thinking	0	0
Journal of Mathematics Teacher Education	50	2 1 impact of culture 1 identity and self-reflection	0	0
Mathematics Teacher	186	2	42 Mainly interdisciplinary approaches or applied mathematics Real-life use of mathematics: examples are cooking, traffic, cards	0
Educational Studies in Mathematics	83	16 4 psychology/semiotics (Vygotsky 2 language 1 creativity 4 embodiment and gesture 3 intercultural context and ethnomathematics 2 history	2 Life experience	0

found in the different arts as well as in everyday life experiences, ranging from train numbers and traffic jams to paintings and string theory. How does traffic slow down and cars have even to stop, while at the end of the traffic jam nobody ever needs to stop? Which kind of symmetries are at work in the elaborate decoration of the walls of the Alhambra Palace in Granada? What says the golden bough principle and the linear perspective us about geometry and human perceptual capacities? Which different relations underlie the Arabic and Western music scales?

Different artistic experiences offer mathematical insights from concepts to practices. But where can a teacher, researcher or student—being not immersed in art—find this information? Which texts, articles, workshops lead him/her into a mathematical approach and discovery of the arts, or offer interesting materials? Apparently, as we saw, not really in the international journals on mathematical education. An inquiry into the topic of 'art and mathematics' in general international academic journals offers a diversity of other journals tackling sporadically that topic equaling the numbers of publications in mathematic educational journals on arts and mathematics: journals in the arts, in science, in education, in music and other interdisciplinary journals.[1] And of course, there is the Journal of Mathematics and the Arts, which is dedicated to the topic. Recently, international conferences with this theme are growing.[2]

Some short examples give an idea of the richness of the mathematical in artistic experiences. An observation of the decorations of the Alhambra Palace in Granada can lead to a fascinating discussion on the notion of symmetry and combinatorial geometry as well as invite to a practical approach to drawing and mathematics. The 17 different basic kinds of symmetry that can be present in a two dimensional plane are all part of the decorations of the Alhambra, built in the thirteenth century. They show the intuitive mathematical capacities of these Islamic artists (Polkinghorne 2011, p. 34). Investigating these forms of art could be an incentive for students to search designs and become pattern detectives, which increases their appreciation of art while reinforcing their perception of the use of math in their day-to-day lives (Wilders and VanOyen 2011).

Geometry related to infinity is explored in visual art starting with the Renaissance studies on perspective, both a mathematical and artistic endeavour.[3] Infinity as a perceptual experience in art is explored by different artists. For example, one of the artists of the 'Light and Space Movement' in the 1960s, Doug Wheeler, creates 'infinite spaces', in which his art triggers the experience and perceptual feeling of an 'infinite space'. Recently, in February 2012 he created his fourth infinity environment, called 'SA MI 75 DZ NY 12'. Ceilings and walls seem to recede during a 32 min exploration of light in infinity.

[1] E.g. American Scientist, Leonardo, European Review, Educational philosophy and Theory, Journal of Aesthetic Education, Nature.

[2] In 2008 the 2nd international symposium on Mathematics and its Connections to the Arts and Sciences; The Bridges Conferences on Mathematics and Arts (in 2006 in London, see Sharp 2012).

[3] E.g. For Albrecht Dürer (Silver 2012).

Explorations of space and the conflation of real and abstract ideas about its construction are present in different sculptors' works. A good example is Tony Smith's work creating a visible abstract space out of certain shape combinations (e.g. Tetrahedrons): *"The space we learn about when we understand a Smith sculpture is not the space we experience. Rather, it is the objective, abstract space of mathematics"*. (Noë 2000, p. 133). The artist explains himself: *"I don't make sculpture, I speculate in form"* (ibid., p. 134).

Mathematics clearly is a tool for a lot of visual artists. Artworks and art practices can offer perceptual/intellectual incongruities and trigger mathematical curiosity and interest. Escher's drawings, for example, offer a rich world in which notions of paradoxes and incommensurability become visible, and lead to the recognition of different perspectives and 'worlds'.

While we immediately think of the visual arts as using or representing mathematical ideas, we should not forget poetry and music which can hide a lot of fascinating mathematical elements. The mathematical and logical riddles in Lewis Carroll's literature works—Lewis Carroll was a mathematician—where nonsense rivals with mathematical paradoxes, or the mathematical combinatorial systems of the Oulipo movement as well as some paradoxical texts of Borges all reveal different perspectives. They seem to rival with Escher's drawings. Notions of recurrence and infinity are also re-defined in—the artistic elaboration of—the fractal-theory of Mandelbrot. A fractal is an irregular geometric shape that can be subdivided in parts that, each on its own, repeat the same range of shapes. Different computer programs allow to create music or visual images that explore that theoretical system (Sukumaran 2009).

Tiles in visual art, fractals in music, proofs in poetry, these discoveries of the mathematical departs from *within* the arts. A possible exchange and interaction between students, teachers and researchers of mathematic courses and schools of art could both benefit from these crossings. It is a first possible direction of the experiential interaction between mathematic and artistic practices. It considers existing art works and artistic practices which have a mathematical potential or ingredient or use mathematics as tool. The next, second perspective starts from the mathematical practice itself and takes it into the world—creating the conditions for explaining mathematics outside of the classroom. We present in this final section an example of how a mathematician can creatively bring mathematics outside the classroom.

11.5 Pythagoras Outside the Classroom

We start with the following question: is it possible to introduce the artistic within the mathematical thus making aspects of the mathematical activity visible that are otherwise not 'visible', both for the mathematician and the non-mathematician? Rather than presenting an abstract, theoretically based and argumentatively supported

discourse,[4] we will have a look at an attempt one of us[5] has made at rendering mathematics artistic. About 2 years ago, an exhibition was set up, named "0/10?", centred around Pythagoras' theorem. The title was meant to indicate people's 'fear' of mathematics, usually resulting in a low mark in class, thereby making the connection with the first part of this chapter, yet the question mark was an invitation to question this marking process and the resulting mathophobia. The choice of Pythagoras' theorem was motivated by the fact that, if any mathematical knowledge survives the 'torture' of secondary school, it is that theorem that, very often, remains stored somewhere in the deep corners of the brain, as a kind of symbolic mantra, $a^2+b^2=c^2$, without any or little understanding ("It has something to do with triangles and right angles and squares", is the comment which is most often made).

Before presenting some details about the actual set-up of the exhibition, a few words must be said about a new development in the philosophy of mathematics, namely the study of mathematical practice.[6] Roughly speaking the subfield of the philosophy of mathematics looks at all aspects of the mathematical process and not merely at the results, i.e., mathematical theorems, proofs and theories (possibly with a foundational theory attached to it, such as Zermelo-Fraenkel set theory, usually including the axiom of choice, for present-day mathematics). Inevitably a serious amount of attention is given to mathematical actions, which include of course writings signs on blackboards and on paper, exchanging information with colleagues who are working on similar problems, educating future mathematicians, and so on. The basic philosophical position is that some questions such as the explanatory value of mathematical ideas or the aesthetic qualities of mathematical proofs are better explained if the whole process is taken into account. Obviously all questions and problems concerning mathematical discovery can only be treated within a framework such as that of the study of mathematical practice.[7] We mentioned the aestheticalimension explicitly because that was the 'bridge' to allow the connection between the mathematical and the artistic within the mathematical.

So how did this translate into an exhibition that, if all went well, could 'cure' at least some people from severe attacks of mathophobia? The choice of Pythagoras' theorem had an additional motivation besides the one mentioned above. At present

[4] Which we could of course do, witness our contribution to one of the previous conferences of this research community and published in the related book series, see Van Bendegem and Coessens (2009).

[5] Namely Jean Paul Van Bendegem. Karen François was present at preparatory meetings. The initiative came from the department for cultural activities of the Vrije Universiteit Brussel and the set-up of the exhibition was in hands of Beeldenstorm, an artistic project group based in Anderlecht, also in Brussels.

[6] For a presentation of what the study of mathematical practice is about and how it is situated in the larger field of the philosophy of mathematics, see Van Bendegem and Van Kerkhove (2007), De Vuyst et al. (2010), and Giardino et al. (2012).

[7] The starting point of this development is to be found in Lakatos (1976) where for the first time a method or, in his own words, even a logic of mathematical discovery is proposed.

there are close to 400 (sufficiently) different proofs for the theorem.[8] This allowed for a nice form of unity and diversity: on the one hand, one single mathematical statement, on the other hand, a diversity of proofs. The basic scene would always be the same: someone is explaining to someone else a proof of the Pythagoras' theorem. If one imagines this situation then probably the first thing that comes to mind is the classroom setting. But, as soon as one takes some distance, and thinks about all possible situations then the variety becomes almost bewildering. I just list a few such possibilities:

- It is not necessarily the case that the one explaining the theorem is him- or herself a mathematician. What would happen if that is indeed not the case. Would we recognize immediately that the person does not know what he or she is talking about? What if the person is somebody else altogether in the sense that we make no association with mathematics when we see this person?
- It is not necessarily the case that both participants are on an equal footing. In fact, in terms of the teacher-pupil setting, this is definitely not the case. But what if we exaggerate this situation? How does that affect the understanding of the proof?
- Do we necessarily need words to explain a proof? Can it be done by gestures? Can it be done by other visual or aurol means?
- Do we need to use the mathematical symbols we currently use? Could we use any set of symbols? And how unrestricted can this be?

The object of the exhibition was quite simply to show these possibilities by creating them. This resulted in a set of nine short films, average duration about 7 min, illustrating several such cases. Some examples:

- A proof is explained by a professional actor[9] who presents the proof as if it is a cooking recipe;
- A proof is explained by an actor dressed as a prostitute;

[8] See http://www.cut-the-knot.org/pythagoras/index.shtml (retrieved Friday 2 November 2012) for almost 100 different versions.

[9] Who in addition is locally very famous in Flanders thus for most visitors there is the immediate realisation that it is indeed an actor who is explaining the proof.

- A proof is explained by a professional actor who is extremely angry and almost shouts the proof all the way through (see picture);
- A proof is explained by a teacher of deaf children in sign language;
- A proof is translated into musical language and performed on piano;
- A proof is translated into dance gestures and performed;

So far the outcome has been that visitors to the exhibition have amused themselves, especially the mathophobes who now realized that mathematics can be fun, but also became aware that the standard picture of how mathematics is taught and learnt is just one among many. Due to the simple fact that the whole was presented as an exhibition, the artistic side was immediately highlighted. The question "Yes, but is it art?" was heard as often as "Yes, but is it mathematics?", suggesting that an 'in-between' form had been created. Perhaps the most interesting feature to mention is that in many cases the proofs presented, although correct in terms of their mathematical content, nevertheless lost a great deal of the power of conviction. This raises the important question what the source of this certainty is. Does it indeed require a very specific setting, namely the classroom, and a quite explicitly defined power relationship between teacher and student, to make the proof 'work'? If so, then the status of mathematics outside the classroom *must* be different from the one inside.

The exposition 0/10 takes part in a tradition of research looking for 'informal' mathematical practices outside schools. One of the first projects on outside school mathematics—'later on labelled as street mathematics'—was carried out by Terezinha Nunes during a 10 years research at the Federal University of Pernambuco, Brazil. Nunes Carraher et al. (1982) first reported on this project in a local journal of the Federal University of Pernambuco with the self-explanatory title 'Na vida dez, na escola zero' (literally translated 'in life ten, in school zero'). They later published the book 'Na vida dez, na escola zero' (Nunes Carraher et al. 1988). We had to wait until 1993 for the reworked book and the English translation which introduced the notion of street mathematics. With the new title 'Street mathematics and school mathematics' the old title 'Na vida dez, na escola zero' was removed although the meaning remained the same: 0/10. A context that still seems to prevail.

11.6 Conclusion

During the 1985 conference on the Psychology of Mathematics Education (PME), Frederik van der Blij, presented a series of pictures and asked mathematicians and mathematics teachers in the audience whether the pictures were presenting works of art or the constructions of a geometer. Many pictures were 'misinterpreted' by the audience. Van der Blij, a mathematician from the Netherlands, founded in 1983—together with Bruno Ernst—the 'Foundation of Ars and Mathesis' (Stichting Ars et Mathesis) to promote the interest in art inspired by mathematics. The central question he asked during the conference was 'where art ends and geometry starts'. A cynical answer to this question could be 'when entering the classroom'.

However … An insight into the mathematical content or form of 'outside classroom' experiences helps to question, understand and often enjoy the experience. Even if this understanding means that we enter into paradoxical claims where rules of life seem to contradict rules of thought, like in Escher's stairs or in Zeno's paradoxes, in a musical form or by way of an angry actor. Indeed, the element of surprise and pleasure involved in the encounter with or exploration of a mathematical perspective in the world augments even when our intellectual reflection does not coincide with our sensorial experience. A growth of signification arises in this conflation of the intellectual and the experiential. This means that an inner process of intellectual construction or representation can be enriched or defied by an outer world experience.

In the first place, considering mathematics as part of a broader experiential world would shift the attention from a dry, difficult matter and its complementary competitivity to a curiosity—both intellectual and aesthetic—for mathematics. This aim offers an alternative to a competition- and ability-based mathematics. Secondly, this would enhance the perception of and reflection upon mathematical knowledge, as part of daily experience. As such, mathematics would not be a strange abstract 'five times an hour a week' world, but an integral part of our way of thinking and interpreting the world. Just think of the numbers, the relations, the diverse categorizations and the space-time confrontations you encounter daily by taking a train or by walking to your work place. Thirdly it would promote creativity instead of competition. By exploring, discovering and reflecting upon mathematics in different experiential situations, a field for experimentation can be opened where both rational and aesthetic, practical and intellectual commitments come together. Such a position means that one considers also mathematical knowledge outside one's own (intellectual and abstract) perspective, as a tool for creation, understanding and discovery. Both intellectual and aesthetic experiences continually relate our inner representations to the things around us in the environment, extending definitely the classroom.

References

Bishop, A. J. (1988). *Mathematical enculturation, a cultural perspective on mathematics education* (Mathematics Education Library, Vol. 6). Dordrecht: Kluwer Academic Publishers.

D'Ambrosio, U. (1990). The history of mathematics and ethnomathematics. How a native culture intervenes in the process of learning science. *Impact of Science on Society, 40*(4), 369–377.

De Meyer, I., Pauly, J., & Van de Poele, L. (2004). *Leren voor de problemen van morgen. De eerste resultaten van PISA 2003, OECD/PISA*. Gent: Ministerie van de Vlaamse Gemeenschap, Departement Onderwijs, Universiteit Gent, Vakgroep Onderwijskunde.

De Vuyst, J., Van Kerkhove, B., & Van Bendegem, J. P. (Eds.). (2010). *Philosophical perspectives on mathematical practice*. London: College Publications.

François, K. (2008). *Politiek van de wiskunde*. Brussel: VUBPRESS.

François, K., Monteiro, C., & Vanhoof, S. (2013). Mathematical and statistical literacy. An analysis based on PISA results. *Revista de Educação Matemática e Tecnológica Iberoamericana, 4*(1)*,* 1–16.

Giardino, V., Moktefi, A., Mols, S., & Van Bendegem, J. P. (Eds.). (2012). From practice to results in mathematics and logic (Special issue). *Philosophia Scientiae*, *16*(1).

Groenez, S., Van den Brande, I., & Nicaise, I. (2003). *Cijferboek sociale ongelijkheid in het Vlaamse onderwijs, Een verkennend onderzoek op de Panelstudie van Belgische Huishoudens*. Onderzoek in opdracht van de Vlaamse minister van Onderwijs en Vorming, in het kader van het programma, Steunpunten voor Beleidsrelevant Onderzoek, Leuven: LOA-rapport nr. 10.

Hirtt, N., Nicaise, I., & De Zutter, D. (2007). *De school van de ongelijkheid*. Berchem: EPO.

Hutchison, D., & Schagen, I. (2007). Comparisons between PISA and TIMSS: Are we the man with two watches? In T. Loveless (Ed.), *Lessons learned: What international assessments tell us about math achievement* (pp. 227–261). Washington, DC: Brookings Institution Press.

Lakatos, I. (1976). *Proofs and refutations. The logic of mathematical discovery*. Cambridge: Cambridge University Press.

Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge: Cambridge University Press.

Noë, A. (2000). Experiment and experience in art. *Journal of Consciousness Studies, 7*(8–9), 123–135.

Nunes, T., Dias Schliemann, A., & Carraher, D. W. (1993). *Street mathematics and school mathematics*. Cambridge: Cambridge University Press.

Nunes Carraher, T., Carraher, D. W., & Dias Schliemann, A. (1982). Na vida dez, na escola zero. Os contextos culturais da aprendizagem da matematica. *Do Mestrado em Psicologia—Universidade Federal de Pernambuco—Brazil, Cad. Pesq, 42*, 79–86.

Nunes Carraher, T., Carraher, D. W., & Dias Schliemann, A. (1988). *Na vida dez, na escola zero*. São Paulo: Cortez.

Organisation for Economic Co-operation and Development. (2004). *Learning for tomorrow's world: First results from PISA 2003*. Paris: OECD.

Organisation for Economic Co-operation and Development. (2005). *PISA 2003 technical report*. Paris: OECD.

Polkinghorne, J. (2011). *The meaning of mathematics*. Oxford: Oxford University Press.

Serres, M. (1989). Gnomon: Les débuts de la géométrie en Grèce. In M. Serres (Ed.), *Eléments d'histoire des sciences* (pp. 95–153). Paris: Larousse.

Sharp, J. (2012). Mathematics and art. *Mathematics Teaching, 226*, 20–23.

Silver, D. S. (2012). Slicing a cone for art and science. *American Scientist, 100*, 408–415.

Steiner, M. (2011). Getting more out of mathematics than what we put in. In J. Polkinghorne (Ed.), *Meaning in mathematics* (pp. 135–143). Oxford: Oxford University Press.

Sukumaran, S. (2009). Generation of fractal music with Mandelbrot set. *Global Journal of Computer Science and Technology, 9*(4), 127–130.

Van Bendegem, J. P., & Coessens, K. (2009). Arguments and proofs about arguments and proofs. In P. Smeyers & M. Depaepe (Eds.), *Educational research. Proofs, arguments, and other reasonings: The language of education* (pp. 27–42). Dordrecht: Springer.

Van Bendegem, J. P., & Van Kerkhove, B. (Eds.). (2007). *Perspectives on mathematical practices. Bringing together philosophy of mathematics, sociology of mathematics, and mathematics education*. Dordrecht: Springer.

Wilders, R., & VanOyen, L. (2011). Turning students into symmetry detectives. *Mathematics Teaching in the Middle School, 17*(2), 103–107.

Chapter 12
Signs of the Times: Iconography of a New Education

Paul Standish

12.1 A Semiological Displacement

Some 20 years ago I published a paper (Standish 1992) in which I tried to examine an aspect of educational discourse that had troubled me for some time, at least, say, through the 1980s. This was the way that certain signs or signifying practices seemed to assume a force that was other than their purported descriptive value. This was reminiscent, of course, of practice in advertising, the kind of unsavoury connection that academic writing about education at the time tended studiously to avoid. But it was more specific than that, I found, and it seemed amenable to analysis along semiological lines, so this is what I tried to do. Let me give some examples.

In the first place it had become a feature of many of documents regarding procedures of assessment, for example, that a certain vocabulary, even a certain kind of layout of the text, was *de rigueur*. The word 'skill' or later 'competence' must be reiterated wherever possible, and the aims of a course must be enumerated in lists of competences, numbered in decimal terms. Being adept in such discourse became a marker of professional rectitude; failure to speak the language carried the mark of shame. All this—the language and equally its critique—has now become so familiar that it scarcely needs mentioning. Indeed it would be easy to amplify the point to include the discursive forms that have become current in the procedures of application for research funding where, to be sure, a certain vocabulary and particular stylistic features are the *sine qua non* of being taken seriously. Practices and procedures of these kinds have really become normal in so many respects. I take the naturalisation of these practices not to invalidate but rather to prove the point.

The second example I chose was less obvious. In order to show that what was going on in such cases could not be explained simply in terms of there being a fashion for a new jargon, I referred to a quite different aspect of educational practice,

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one less obviously vulnerable to criticism. The focus of this was a scene from an elementary school classroom that I had happened to come across. I had noticed in particular, the nature of one of its wall displays. The display depicted the stages in an activity the children had presumably been engaged in recently, the making of bread, and this was presented in what was in effect a series of panels. These showed the various stages in the process—preparing and mixing the flour and yeast, kneading the dough, allowing it to rise, placing it in the oven—each represented in a large diagram or picture and each with a caption along the lines of "We mixed the flour with some water", "We kneaded the dough". But what, I began to wonder, was this display for? Certainly its purpose might be to reinforce in the children's minds what they had learned about the making of bread. It was an attractive enough display, over which the teacher had obviously taken some trouble, and so over and above this reinforcement of learning there was a celebration of what the children had achieved. The illustrations depicted a success story—no mistakes were recorded, nothing was spilled, no bread was burned. This recording of success was sufficient then to impress any visitors to the classroom: this was a class that was happily engaged in learning, and this was a teacher who cared for the children—the care that had been taken over the display was an expression of this. The function of the signs—the colourful combination of words, diagrams pictures—was not then purely descriptive of what the class had been doing: the signs suggested a particular educational ethos, and they carried an aura of good practice.

If this is right, it seems that there is, in both the examples I have cited, a moralism behind the operation of signs, and this leads me to describe them in terms of iconicity. I say 'moralism' because, while aspects of the ethos described are surely desirable, the expression of them in this idealised form is tainted with hubris—that is, not pride in making bread but pride in being virtuous, and, by extension, not pride taking pride in teaching well but taking pride in being seen to teach well. I say that the signs are 'iconic' in order to draw attention to the way that they have acquired this aura, where their reiteration carries this peculiar force. My adoption of this term is intended not to evoke C.S. Peirce's technical usage of the expression in his semiotics rather to suggest its more familiar, religious connotations.

In that paper I tried to analyse this functioning of signs against the background of Roland Barthes' writings on what he calls 'myth today'. Barthes takes an everyday item such as milk and shows the way that, far from simply being understood as food, it is invested with a chain of associations through a signifying system that does not merely name the object but concatenates with other signs expressive of a certain life-style and set of values. Barthes expresses this in terms of the sign's functioning not only through *denotation* but through *connotation*. He illustrates this especially in relation to visual signs, as here in his celebrated reading of a cover of *Paris-Match*:

> I am at the barber's, and a copy of *Paris-Match* is offered to me.[1] On the cover, a young Negro in a French uniform is saluting, with his eyes uplifted, probably fixed on a fold of the tricolour. All this is the *meaning* of the picture. But, whether naively or not, I see very well

[1] The cover image can be found at: https://www.google.co.uk/search?q=images+barthes+paris-match&hl=en&newwindow=1&client=firefox&hs=e9r&rls=org.mozilla:en-GB:official&tbm=isch&t

> what it signifies to me: that France is a great Empire, that all her sons, without any colour discrimination, faithfully serve under her flag, and that there is no better answer to the detractors of an alleged colonialism than the zeal shown by this Negro in serving his so-called oppressors. I am therefore again faced with a greater semiological system: there is a signifier, itself already formed with a previous system (*a black soldier is giving the French salute*); there is a signified (it is here a purposeful mixture of Frenchness and militariness); finally, there is a presence of the signified through the signifier… In myth (and this is the chief peculiarity of the latter), the signifier is already formed by the signs of the language… Myth has in fact a double function: it points out and it notifies, it makes us understand something and it imposes it on us… (Barthes 1972).

Barthes describes a double structure of signification, where the first operation of the sign, involving signifier and signified, is incorporated into a second structure of which it as a whole becomes the signified. Signs then acquire their force not through their denoting of objects in the world but, in a kind of lateral displacement, through their connotation of other signs. Thus,

> In myth there are two semiological systems, one of which is staggered in relation to the other: a linguistic system, the language (or the modes of representation which are assimilated to it), which I shall call the language-object, because it is the language which myth gets hold of in order to build its own system; and myth itself, which I shall call metalanguage, because it is a second language in which one speaks about the first (p. 100).

In such discourse, then, signs are about signs, and the fabric of our world is displaced. Characteristically, this happens at a level that we can only partially acknowledge, if we do at all.

In the essay, "The Plates of the Encyclopaedia",[2] Barthes writes about the interplay or vibration between, on the one hand, stylised drawings, depicting genre scenes, say in a factory, and, on the other, diagrammatic representations of its manufacturing processes; captions to the pictures extend the interplay. These are idealisations very much in the manner of the wall display, with its captions, depicting the bread-making. There is a kind of debased Platonism in their evocation of a harmonious world that is presented as somehow more real or authentic than the one we ordinarily know.[3]

12.2 The Matter of Circulation

The kind of analysis offered above depends upon attending to material aspects of the world in the form of verbal and pictorial signs. So far I have mentioned educational research only in respect of general stylistic features of research funding applic ation,

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bo=u&source=univ&sa=X&ei=jR8mUY3gEKOp0QWc04GwDw&ved=0CDAQsAQ&biw=1366&bih=588. Accessed 20 March 2013.

[2] The reference is to the *Encyclopédie* of Diderot and d'Alembert.

[3] Here and in what follows the allusion is not to Plato or even to Socrates himself but to the fossilised Platonism of the Forms that has come down to us in various ways.

including its lexical characteristics. Language—and *a fortiori* thought[4]—depend necessarily upon a certain materialisation: they depend upon a circulation of signs, and these must have a material form (visible marks, audible sound-waves). In the sections that follow I shall turn more directly to some candidates for analysis as myth today, in Barthes' terms, or in terms of iconicity, in my own.[5]

It is worth adding, however, that the material forms we are talking about here are mostly a matter of language, and this is never just language but rather *languages*—that is, particular languages, in all their difference. There is perhaps then reason to remember that imported words can carry with them an extra aura. Think of '*Bildung*' or '*paideia*' or '*praxis*' in English, where the terms surely have their value and where, up to a point they can remain exotic; think also, however, of the more surreptitious and unrelenting, sometimes systematic incorporation of English words into other languages. As an illustration, in the discourse of social justice in Japan the authentic Japanese expression *shakai seigi* is progressively replaced with *soshiaru jasutisu*, a Japanese adaptation of the English term. The inscription of these terms reveals a further material difference: the former term is written as a Chinese character (社会正義), while the latter requires the *katakana* syllabary (ソーシャル・ジャスティス). The costs of this need to be weighed in the growing critical discussion of policy-borrowing.

I shall return to questions of language difference, but first let us turn our attention to questions of iconicity in Anglophone contexts of educational research.

12.3 Pious Procedures

In one of her contributions to the work of this Research Community, Lynda Stone has provided an amusing critique of the induction into educational research that is the norm for doctoral students in the United States. Early on they are required to self-identify as 'quantoid' or 'qualoid' and to name the theoretical perspective they are working within. In handbooks to educational research, there is typically a chapter that provides synoptic accounts of the range of theoretical perspectives that are available, sometimes in tabulated form, and this makes it easy for students to identify and sign up.

Stone describes a normalisation of practice that, for all its apparent internal rivalries and disputes, in fact shores up an orthodoxy, driven by the dominant notion of 'what works'. Students learn that they must be strategic in their approach in a number of ways:

[4] Of course there is thought without language, in the minds of animals. In the human mind, by contrast, thought is so pervasively conditioned by language that it is appropriate to put matters this way.

[5] In "The Education Concept" (Standish 2008), which was written as a contribution to the Research Community's work on educationalisation, I tried to show the way that the most central terms in educational research (especially in philosophy of education) had themselves become mobilised in ways that parted company with their ostensible function. This was a development from the lines of argument in my 1992 paper.

> One message is to "get in and get out". A second is the necessity of funding and to locate projects and methods in order to "get grants". Still a third is to move quickly to focus on a research question and to narrow one's topic as one learns one's method. A fourth value is to adopt and perfect standardized routines and formats. These range from designing and conducting studies to reporting their results. All of these values are woven through courses and research experiences, through course papers and projects, articles and finally dissertations. All are constitutive of induction into a broad education research culture. (Stone 2006, p. 9)

Stone vividly calls to mind a practice that has become absurdly self-referential and stubbornly self-perpetuating, in which the operation of key signifiers is critical to the whole procedure. This is evident at a micro-level in the approach to procedures of citation and reference, which, in lesser institutions at least, are sometimes treated as matters of scholarly piety, compensations perhaps for the lack of anything of real substance in the research itself. While these are perfectly legitimate and reasonable parts of scholarly activity, they are plainly prone to narcissistic forms: self-referentiality or deferential citation can easily become the norm, and then the iteration of names acquires something like a moralistic force, coming to sound more like a liturgy.

The kind of aura that the terms gather interlinks with other procedural aspects of the practice. Naomi Hodgson and I drew on Stone's account to amplify the idea that research methods induction was akin to initiation into a religious order (Hodgson and Standish 2008). Hence, this brings us back to the idea of the material signs' acquiring a kind of iconic force.

Let us turn from the functioning of signs at this more or less methodological level to a matter of more substance.

12.4 Equal Opportunities Evangelism

I heard of a case recently where a colleague of a colleague was expressing the concern that course teams ensure that they are developing strategies for teaching and an environment that allows for class, race, and gender differences to be acceptable and celebrated as offering different forms of learner identities. The colleague acknowledged that this was 'standard stuff' but pointed out, accurately enough, that it is all too easy to pay lip-service to this, without anything much being achieved.

Attention was drawn, in support of this point, to a recent study funded by the Higher Education Academy, the aim of which was to call attention to the dangers of neglecting the equality issues that arise in contexts of widening participation, especially in respect of masculinised and ethnocentric pedagogies.[6] The research itself acknowledges that these are familiar enough principles, but it is precisely because of this familiarity that the dangers of complacency arise. Its recommendations include:

[6] The research was carried out with a team of staff, mostly from Roehampton University. See: http://www.roehampton.ac.uk/Research-Centres/Centre-for-Educational-Research-in-Equalities-Policy-and-Pedagogy/Current-Research-Projects/Formations-of-Gender-and-Higher-Education-Pedagogies-%28GaP%29/

- Universities and policy makers must provide support and resources for lecturers in understanding the ways pedagogical relations are profoundly shaped by inequalities of gender, class and race particularly in terms of the widening participation agenda. This might be in the form of CPD programmes, participatory research opportunities and the provision of forums or meeting spaces to discuss the significant challenges around developing inclusive pedagogies in HE.
- Universities need to develop Communities of Practice in order to create the space and opportunities whereby lecturers can collaboratively develop critical and inclusive pedagogies, contributing to a form of awareness raising about the intricacies of the impact and implications of social inequalities.
- Universities, through this curriculum, should provide the opportunity for staff and students to deconstruct masculinised and feminised forms of identity and practice which often have oppressive effects.
- Universities should enable staff and students to reflect critically on and interrogate their own perspectives of and relationships to cultural, social and political forms of marginalisation and exclusion.

To suggest that universities can easily fall into the practice of paying lip-service to these matters is surely reasonable enough. But one should be struck by the somewhat heavy-handed, complex sentence structure, which imparts an earnestness and worthiness, where key phrases must be included, almost, so it seems, compulsively. Yet it would be wrong, would it not, to imagine that there *is* a way in which some of these problems *could* simply be overcome? We can, to be sure, redefine the subject matter and adjust the approach in, say, the history curriculum, but what cannot be undone is the violence and injustice of the past out of which history inevitably has unfolded. This is true of the institutions of education themselves, including the development of the subject called philosophy. Consider philosophy's collusion with slavery. Consider the fact that the economic prosperity that enables the pursuit of academic enquiry in the forms most familiar to us today depends in large part upon huge inequalities in wealth and forms of exploitation across the globe. It is right to think of these matters in perfectionist terms: things are not fair and there will always more to be done, more in acknowledgement of injustice, more in the way of finding the means of redress. But it is not so clear how this is best pursued.

It is a telling point in this respect that perfectionism can become distorted into perfectibility—that is, into the view that perfection is not just an ideal by which we might be oriented and in the light of which we might avoid complacency but rather something to be realised. Such perfectibility would harbour the view that inequality, and the inheritance of inequality, *can* ultimately be eradicated, if we would only take the right steps. With this latter way of thinking there typically comes an over-reliance on the reiteration of key signifiers, which in the above I take to be found in the reference to 'inclusive pedagogies', 'Communities of Practice', 'identity' and 'widening participation' itself. Advocacy for these matters can then take an evangelical form, in which the exposure of any falling short from good practice becomes an obligation, which in turn encourages a retreat, on the part of teachers, students and researchers themselves, into the observance of a repeating of principles and away

engagement in those 'wisdom traditions', to press the analogy with religion a stage further, that are more richly educational and ultimately more resourceful in respect of these matters. The research we are considering is significantly message-driven, and I do not think this is necessarily a bad thing. But it is telling that one can scarcely imagine in present circumstances its having come to the opposite conclusion—that is, that there was now no longer need for concern over how far these inequalities are being addressed. To the extent that this is true, the research becomes more an expression of commitment than the finding of something new.

If this is right, we find here the inflation of signifiers that may themselves provide the means for paying lip-service to these matters. This appears to be a matter of substance, but it may end up just as a circulation of signs. Ironically, then, the power of these signs may work counter-productively in relation to the matters of real significance that the research was intended to address. Let us turn to similar inflation in respect of iconic terms relating to the institution of the university itself, in the work of Bill Readings. Here it is the impoverishment of such overworked terms as 'excellence' and 'quality' that is exposed. Readings' discussion will help us to consider the extent to which the iconising of words is unavoidable.

12.5 Overcoming Nihilism

Readings' *The University in Ruins* (1996) attempts to identify the current state of the university by means of a comparison with earlier conceptions, but while the latter are described in respectful terms, specifically as the Kantian "University of Reason" and the "University of Literature" inspired by Von Humboldt, the institution of today is represented satirically as the "University of Excellence". 'Excellence'—one might substitute the word 'Quality'—is intended to mimic the dominance of this signifier in mission statements and curriculum and policy documents of various kinds. Following his critique of the way that this becomes, in effect, the replacement of anything substantive with a form of lip-service to the idea, Readings attempts to reassert a commitment by constructing an iconic signifier of his own. He seeks to displace the ideal of Excellence by restoring the *name* of Thought.

Attempting to avoid the suggestions of mystical transcendence that connotations of this might have, he argues for a pedagogy that not only avoids the ethos of quality control but, conversely, "refuses to justify the University in terms of a metanarrative of emancipation, that recognises that thought is necessarily an addiction from which we never get free" (p. 128). He speaks of the name of Thought (and capitalises the word) precisely to avoid any presumption that the term has a precise signification, that there is a clear referent. What is required of Thought is not all of a piece, and even in a specific context it is open to question. The modern university has lived with the apparently substantial though in fact vacuous referent of Excellence: Excellence masquerades as an idea. It is necessary to replace this not with a new referent but with the overtly empty *name* of Thought. It is the name, he emphasises, that must come to be used again, it being always open to question, to thought itself,

quite what Thought amounts to.[7] Undermining presumptions of autonomy, Thought is neither a recipe for an empowerment of learners (in the manner of Freire or Knowles) nor a restatement of the centrality of subjects or the authority of the teacher. Readings acknowledges that he writes as a university teacher but that he does not know in any absolute sense what the signification for the name of teacher is: indeed, if there were a clear signification, if the role and duties of a teacher, the nature of the job, were cut and dried, this would imperil precisely that bracing uncertainty and challenge that should be at the heart of education. And one might say as much for many of the other contestable terms that characterise education: "Thought is one of many names that operate in the pedagogic scene, and the attribution of any signification to it is an act that must understand itself as such, as having a certain rhetorical and ethical weight" (p. 160). The alternative to this heightened sensitivity to the demands of Thought is to provide an anachronistic or misleading debilitating referent: Culture is outmoded by globalisation; Excellence etiolates and immobilises the substance of learning by sealing it with a thick veneer of commensurability.

While Excellence brackets the question of value, Thought in contrast invites its exploration, at the same time recognising that there is no homogeneous standard of value—hence no single scale of evaluation. While Excellence conceals its emptiness, seeming to underwrite the university with something substantial, Thought acknowledges it: "The name of Thought, since it has no content, cannot be invoked as an *alibi* that might excuse us from the necessity of thinking about what we are saying, when and from where we are saying it" (p. 160). It neither redeems us from the ruins nor provides formulaic ready responses for the inevitable occasions for judgement with which we are confronted. Thought functions as a question and enjoins a conception of pedagogy and of study that is agonistic, where a difference is opened concerning the nature of discourse and where this is not to be resolved through any systematic methodology. Its absolute requirement is an attention to what is other to ourselves, where that other is not represented as the opposite pole in a binary coding, where, in fact, it is not to be *represented* at all: in this it explores an open network of obligations that never wraps up or forecloses the question of meaning. It responds to an incompatibility in ways of speaking that is not dissolvable by any philosophy, system, or practice. Thought, then, names a differend. Different phrase regimens, different language-games[8] meet, and there is no system for adjudicating

[7] Readings follows Jean-François Lyotard in drawing attention to the kind of thinking that is called for when the frameworks of our understanding cannot contain the events that confront us, when we have neither received ideas, nor formulae, nor rules to guide us. The use of 'event' here is not casual: events are not those things we plan, they do not fit neatly into any predetermined schema, they come from outside the sphere of our mastery. It is in this sense that Thought, the thinking that we most need, is empty. When we are confronted by such events, the temptation is to adapt them to our existing frameworks. The imperative on us not to give into this temptation is especially acute in the university in view of the fact that the university is the place where the languages we have for understanding the world are to be pushed to their limits.

[8] As is well known, Lyotard borrows Wittgenstein's term, but then uses it in a rather different and contentious way. Concerning Lyotard's usage of the terms 'language games' and 'phrase regimens'

between them. They are heterogeneous such that neither way of speaking and no 'higher' analysis can accommodate their difference.

There is a sense that something important is being said here, though as yet this remains suggestive rather than clear. After Readings' powerful critique of the University of Excellence, moreover, there is something frustrating, even disappointing, about the idea of Thought with which we are left. This is, let us acknowledge, an attempt to iconise a signifier but in a way that blocks its too-easy filling out with simplistic sets of connotations or formulaic received ideas. And this is noble enough in intention. Does it not succumb, however, to some of the problems it attempts to subvert? In particular, the emphasis on Thought might be yet a further turn in the understandable, contemporary preoccupation with procedure over content and, hence, fail to resist the nihilism that is the object of Readings' attack.

I want to conclude by turning to a range of signifiers that illustrate the ways in which some of the harmful effects identified in the previous sections might be resisted. This will be a matter not of avoiding the iconising of key signifiers but of examining the nature of the connotations they evoke, and it will maintain the religious connections of this term.

12.6 A *via negativa*

Consider the following sets of terms, and imagine then to be arranged on an axis between, on the left, explicitness, directness and positivity, and, on the right, implicitness, indirectness and hiddenness from view.

(i) unit of learning, module, course, subject
How is the structure of the curriculum to be conceived? To speak of 'units of learning' is to endorse an understanding of the curriculum in terms of clearly identifiable and realisable learning outcomes that are transparent to students and that provide more or less immediate feedback and reinforcement. This reductive vocabulary purports to demystify learning—though, in fact, its jargon may betwitch its more ardent proponents as well as students for whom it becomes the norm. On the other hand, we have a vision of a subject as something to which the learner and the teacher might understand themselves to be in service, where learning is oriented towards goods that cannot be fully spelled out, and with the sense that the subject's potential is endless.

James Williams explains: "In *The Differend* the somewhat vague concept of incommensurable language games is replaced by the concepts of incommensurable or heterogeneous (Lyotard has an unfortunate tendency to use both terms in similar circumstances) phrase regimens and genres. Phrase regimens are the syntactic types phrases can belong to." (Williams 1998, p. 79) In *The Differend* Lyotard writes: "Incommensurability, in the sense of the heterogeneity of phrase regimens and of the impossibility of subjecting them to a single law (except by neutralizing them), also marks the relation between either cognitives or prescriptives and interrogatives, performatives, exclamatives … For each of these regimens, there corresponds a mode of presenting a universe, and one mode is not translatable into another." (Lyotard 1988, p. 128).

(ii) facilitator, teacher, *maître*, *sensei*
How are we to think of the teacher? The French word, *maître*, says something more than 'teacher', and more than 'facilitator': it embodies notions of authority and trust, which 'teacher' may or may not carry. The Japanese, *sensei*, is not only a descriptive term but a standard form of address to, and respect for, those from whom one expects to learn, in educational institutions and beyond.

(iii) research, scholarship, enquiry
The extension of the range between the two poles is less obvious here, but I am referring, of course, to the tendency for the term 'research' to be associated primarily with empirical work and to carry with it the expectation of an explicit methodology. In part the idea is drawn from the model of research in the physical sciences, and in English the expression 'social science' inevitably bolsters this.[9] The connotations of these terms are further complicated in the assessment regimes of the contemporary university by the equation of 'research' with 'publication', where 'research' is sometimes contrasted with 'scholarship'. Setting aside such technical definitions, however, there are connotations to 'scholarship' that suggest a different, less instrumental, more open orientation, which the more relaxed term 'enquiry' also suggests. In contrasting with the amassing of data and the accumulation of results, or even with the earnest advancement of 'theory', this suggests a dwelling with the objects of study, as if, once again, in service of them.

We are, then, looking at signifiers that become central to these practices, but whose range and whose connotations are markedly different—those towards the left end of the axis presuming an explicitness and control of the field of concern, those towards the right opening to a sense of the subordination of enquiry to something beyond the full control of teacher or student. The latter orientation suggests a responsibility to what cannot be made explicit, in which trust and the virtue of humility will be of crucial importance. There are religious icons that function in such ways, gathering the sense of something important that cannot be fully spelled out. And in religion and educational research and practice alike, this suggests the need for something other than directness. This is then a *via negativa*, characteristic of the wisdom traditions.

It would, however, plainly miss the point of the present discussion if it were supposed that the favoured terms, the ones to the right of the axis in each case, should simply be restored to their rightful place. For here once again there would be an orthodoxy, and here, given dutiful reiteration, they could easily get stuck, becoming little more than badges of allegiance. It is true that the restatement of the idea of a liberal education found in the work of Michael Oakeshott offers much that would weigh against the mechanistic and instrumental ways of thinking about education being criticised here, but the phrase 'the conversation of mankind' is not enriched

[9] 'Science' has a different range from *Wissenschaft* or *Wetenschappen*, and when the *Geisteswissenschaften* are understood as 'social sciences', a subtle shift occurs. The use of the term 'research' in English colludes with this shift in meaning.

where it is over-exercised. It is true that the celebration of authentic experience in the *Reformpädagogik* movement and in 1960s progressive education in the UK also militates against any tidy setting of objectives, but the lexicon of child-centredness too can degenerate into a jargon, repeated endlessly by the faithful. And here again there is reason to suspect the quasi-religious aspects of these enthusiasms. Comparing the place of Ovide Decroly with that of Maria Montessori amongst the Montessorians, in an earlier publication of this Research Community, Angelo Van Gorp writes that "Decroly became the patron saint of the Decrolyens. The 'child-centred approach' in other words gave way to 'the hero-centred approach': the distinction between 'pioneers' and 'others' translated into a distinction between 'heroes' and 'adepts', between the 'saints' and the 'faithful'" (Van Gorp 2006, p. 41).

To see these matters in terms of an iconography is in part to recall that the icon is a window to heaven, to a realm of stability and timelessness, free from the flux of experience. Whatever the original depth of such religious associations, whatever openings to thought they provided, their present manifestation, in education no less than in other aspects of the contemporary, secularised world, is likely to work rather towards the reification of ideas. These are the vestiges of a debased Platonism. They arrest movement of signs, upon which our thought and our education depend.

References

Barthes, R. (1972/1957). *Mythologies* (A. Lavers, Trans.). London: Paladin.

Hodgson, N., & Standish, P. (2008). Network, critique, conversation. Towards a rethinking of educational research methods training. In M. Depaepe & P. Smeyers (Eds.), *Educational research: Networks and technologies* (pp. 105–120). Dordrecht: Springer.

Lyotard, J.-F. (1988/1972). *The differend. Phrases in dispute* (G. Van Den Abeele, Trans.). Minneapolis: University of Minnesota Press.

Readings, B. (1996). *The university in ruins*. Cambridge, MA: Harvard University Press.

Standish, P. (1992). Educational discourse: Meaning and mythology. *Journal of Philosophy of Education, 25*, 171–182.

Standish, P. (2008). The education concept. In P. Smeyers & M. Depaepe (Eds.), *Educational research: Why 'what works' doesn't work* (pp. 217–226). Dordrecht: Springer.

Stone, L. (2006). Kuhnian science and education research: Analytics of practice and training. In P. Smeyers & M. Depaepe (Eds.), *Educational research: Why 'what works' doesn't work* (pp. 127–142). Dordrecht: Springer.

Van Gorp, A. (2006). Ovide Decroly, a hero of education. Some reflections on the effects of educational hero worship. In P. Smeyers & M. Depaepe (Eds.), *Educational research: Why 'what works' doesn't work* (pp. 37–50). Dordrecht: Springer.

Williams, J. (1998). *Lyotard. Towards a postmodern philosophy*. Oxford: Polity Press.

Chapter 13
The Paradigmatic Differences Between Name/Date and Footnote Styles of Citation

Nicholas C. Burbules

13.1

There is a significant body of work on the epistemic and social-political implications of various standard citation systems, normally clustered as name/date (or parenthetical) and footnote styles of citation. Most journals and publishers are moving from footnote-based systems to some version of name/date (in the U.S. the dominant parenthetical forms are APA style, from the American Psychological Association). There are a range of hybrid styles, such as MLA style, from the Modern Language Association, which use parenthetical references in text but also allow for footnotes.[1]

This general shift in orientation away from footnotes is not neutral or just a matter of convenience, I will argue, but a substantive shift in views on the nature of knowledge and, indeed, on the purposes of citation itself. This shift has real institutional consequences. In addition to the format of how citations are marked in the text, the format of bibliographic references are also mandated by these conventions (for example, the use of full names or initials)—and as we will see here too there are hidden social and political assumptions at work.

In this chapter I want to review some of these differences, discuss the general rhetoric of citations and what they are meant to accomplish, and then conclude with some reflections as a journal editor about the impact of these changes for scholarship in the history and philosophy of education.

[1] APA style allows for, but heavily discourages, the use of footnotes.

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13.2

I will focus here primarily on the APA format because it is becoming so dominant in educational research in the United States (and, increasingly, in other countries around the world), and because it displays especially clearly the empiricist assumptions underline the name/date style. The APA style guide began as a seven-page set of suggested guidelines, published in 1929 in the *Psychological Bulletin*.[2] By the latest edition, the *Publication Manual of the American Psychological Association (6th Edition)*, published in 2009, had grown to 272 pages and evolved into a closely detailed and highly prescriptive set of standards covering everything from the use of active and passive voice to whether to capitalize the use of 'black' as a racial category. 'APA Style' is in fact a registered trademark, and the standard shorthand for referring to this set of conventions (some schools, for example, require faculty to use APA style as a way of organizing their CV's).

While I focus on the APA name/date citation convention here, it is also worth highlighting other aspects of APA style. Much of the APA Manual is given over to the format of the research article itself: beginning with a section entitled Methods, a section entitled Results, and a section entitled Discussion. While other research methodologies have strained to shape themselves into that format, the design is clearly one based on a model of experimental psychology.[3]

A related issue concerns the putative value of standardizing on *any* particular format. The APA format is clearly designed to allow for a quick reading of the basic elements of a study and its conclusions. The reader knows exactly where to look in the article for particular kinds of information, and if one is only concerned with the empirical results, can identify those immediately without having to read through a lot of troublesome context and detail. This focus on finding information quickly and efficiently (as opposed to, say, 'reading') highlights two aspects of this format that are echoed in the name/date form of citation itself, as I will discuss later: first, the conception of the research article as the substantiation of an empirical fact; and second, the de-emphasis on discursive argument as a rhetorical form.

The other area with which a good deal of the APA Manual concerns itself is the language of research writing. APA style tends to be flat and descriptive. Authors are told to avoid 'jargon', to write in a depersonalized voice, to avoid long sentences,

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[2] Robert J. Conners, "The Rhetoric of Citation Systems, Part II: Competing Epistemic Values in Citation," *Rhetoric Review 17* (1999), p. 229. For historians reading this, Conners' study, Parts I and II, provides a close genealogical reading of the conventions of citationality, beginning in the fifteenth century.

[3] This is a separate issue from the matter of name/date format, and is worthy of exploration in its own right. See: G. Scott Budge and Bernard Katz, "Constructing Psychological Knowledge: Reflections on Science, Scientists, and Epistemology in the APA Publication Manual," *Theory Psychology 5* (1995), pp. 217–231. See also Charles Bazerman's classic essay, "Codifying the Social Scientific Style: The APA Publication Manual as a Behaviorist Rhetoric," in Charles Bazerman, *Shaping Written Knowledge: The Genre and the Activity of the Experimental Article in Science* (Madison: University of Wisconsin Press, 1988), pp. 257–277.

and to shun strongly evaluative or pejorative terms in describing the research of others. As Audrey Thompson points out, these seemingly 'neutral' edicts of style have definite implications for the kind of research study that can be managed within these conventions, as well as the authorial voice that is deemed suitable—and in this she finds a systematic bias against critical scholarship generally and the voices and styles of specific gender, racial, and ethnic scholars and their concerns.[4]

It is also worth noting that the APA Manual strongly discourages the use of metaphors, although elsewhere it writes:

> Like a wall that is built one brick at a time, the peer-reviewed literature in a field is built by single contributions that together represent the accumulated knowledge of a field. Each contribution must fill a place that before was empty, and each new contribution must be sturdy enough to bear the weight of contributions to come.[5]

This preliminary survey already shows, I think, the far-from-neutral effects of the APA Manual, which is becoming the de facto standard for social science and educational research journals in the United States. Let me turn now to my main topic: the conventions of citation themselves.

13.3

Citational references serve at least eight distinct rhetorical functions, though these are not all incompatible with each other and several can function in concert. But some can be confused with one another, due to their surface similarity—even though their intended proposes are quite different. Hence the value in distinguishing them:

First, some citations function as empirical confirmation. If one writes something like, "In elementary school, girls do as well as or better in math than boys. But in middle school girls with an inclination for math begin to lose interest and fall behind, mostly due to peer pressure and societal expectations", the standard practice is to reference an article (here Janet Mertz and her colleagues, from 2008).[6] The citation is an anchor, basing the claim in an empirical study that supposedly documents that fact. I say 'supposedly', because what often happens is that the article one cites is itself citing another article (which one does not go to the bother of tracking down); and if you did track it down perhaps it was citing another study, and so on. Several projects have traced these 'citation chains' down to the original sources, and found that the very first article did not in fact say what was

[4] Audrey Thompson, "Gentlemanly Orthodoxy: Critical Race Feminism, Whiteness Theory, and the APA Manual," *Educational Theory 54* (2004), pp. 27–57*;* see also Budge and Katz.

[5] Quoted in Thompson, p. 44.

[6] The full citation is Titu Andreescu, Joseph A. Gallian, Jonathan M. Kane, and Janet E. Mertz, "Cross-Cultural Analysis of Students with Exceptional Talent in Mathematical Problem Solving," *Notices of the American Mathematical Society 55* (2008) pp. 1248–1260.

alluded to; like the parlor game 'Telephone', the 'fact' changes with each transmission, to the point where it becomes unrecognizable.[7]

There is a broader lesson here about how standard citations, especially in name/date format, become a widely accepted talisman that 'shows' certain results. Thereafter the citation itself becomes the rhetorical marker, the proof of the point (even for people who haven't read the piece). In speech or print, authors refer to '(Jones, 2002)' as having proven a point, and the discussion moves onward from there—because everyone 'knows' that Jones's paper in 2002 settled the issue. Every field has these unquestioned iconic markers, whose use can become in this sense cyclical and self-perpetuating. This also relates to the sometimes-misleading metrics of citation when used as 'impact factors'. There can be a dynamic of the 'rich getting richer', as indirect citations grant credence to studies based on, in effect, a kind of hearsay.[8]

Second, some citations function as tools of persuasion. Empirical confirmation, above, is one tool of persuasion. But here I also mean other rhetorics, such as citations to authority (with or without direct quotation). A standard device is to begin a sentence with, "As Foucault has shown/written/argued/demonstrated …" Here the allusion may not be to a specific empirical claim, but to a line of argument, an interpretive insight, a provocative assertion, and so on. The primary author typically uses this reference as support for their own argument (directly through the force of the cited author's authority), or as a jumping-off point for further arguments of their own. Sometimes these citations have the near-force of the first type, above, where the claims of the cited author are taken as conclusive, or at least implied to be so. The aura of authority of the cited author provides a kind of splint for the primary author's claims, because they are parallel, similar, or linked in an associative way. But as I am describing it here, this is something short of the confirmational force of the first sort of citation (although as I have said there is a danger of confusing them). In fields such as philosophy, which are heavily argumentative and not empirical, this type of citation is quite common.

Third, all citation styles require references when another text is directly quoted or paraphrased. In such cases, citation is part of a professional ethos of avoiding plagiarism. Having said that, there are very different intentions that can be at work in quoting others. One kind of quotation or paraphrase is used as confirmation (the first type of citation). Another is a tool of persuasion (the second type), in which the exact language and force of writing in the original is used to express a compelling argument or insight that gains force by being quoted verbatim.

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[7] One study that does this, for political purposes I do not support, is Christina Hoff Sommers, *Who Stole Feminism?* (New York: Simon & Schuster, 1994). Sommers tries to show how certain oft-cited 'facts' from feminist authors cannot be traced back to an original source that confirms them. I feel obliged to cite here a couple of responses that take issue with her analysis: http://mith.umd.edu//WomensStudies/ReadingRoom/AcademicPapers/stolen-feminism-hoax and http://chronicle.com/blognetwork/tenuredradical/2009/07/and-your-little-dog-too-christina-hoff/

[8] Paul Smeyers and Nicholas C. Burbules, "How to Improve your Impact Factor: Questioning the Quantification of Academic Quality," *Journal of Philosophy of Education 45* (2011), pp. 1–17.

Yet another use of quotation is to present an original text and then use it as a basis for the primary author's interpretation, exegesis, commentary, or (see below) critique.

Fourth, some citations are acknowledgements of intellectual debt. These can particularly overlap with the second or third types, but they function differently. Here the force of the citation is moral more than epistemic; there is a sense of obligation, growing out of the awareness that none of our ideas is ever fully our own. In broader usage, such citations can even provide a kind of genealogy (in the classic sense) of the primary author's ideas: the ancestral lines of influence and development that led to the emergence of something new. The idea or claim itself is not being cited, but rather the networked lines of influence that gave rise to it. In certain fields, these sorts of interdependent and cross-citing communities are quite vigorous, each author explicitly identifying him or herself as simply one member of a group or movement whose ideas continually influence and invigorate one another. In some areas of scholarship, for example many feminist projects, this collectivist ethos is a matter of political principle: No scholar is an island.

Fifth, some citations function in exactly the opposite way, citing other works as foils for contrast or critique. I think this point is relatively straightforward and does not need extended analysis, but it does show that the *assumption* that heavily cited works are important and authoritative (which underpins the metrics of 'impact factors', already mentioned) needs to be questioned. In every field there are heavily cited works that are widely panned, or taken as examples of misconceptions that must be refuted. Frequent citation in this context is far from complimentary!

Sixth, and again comprising several of these instances, citations function as a means of establishing the credibility or erudition of the primary author (for example, in a literature review). By demonstrating a broad, even encyclopedic familiarity with relevant sources the primary author shows the reader that he or she is a qualified scholar. Since most readers will not be familiar with all those sources, this establishes a certain implicit status, even trust, that the reader should defer to the author as an authority. Conversely, a lack of relevant references, when the reader *is* aware of them, operates in the opposite fashion. However, encyclopedic references can be counterproductive when comments in their text show that the primary author has not read these cited texts—as when, for example, the author makes a point directly contradicted by one of their cited sources, without acknowledging so. The incorporation of a literature review is one way to require authors to substantively engage cited texts and not just list them—and it often provides for the reader a primer on the dominant positions and disputes within a field as a context for the new article they are about to read.

Seventh, citations can also be a guide to the reader for further reading on a subject. It is always a good initial step in researching a new topic to look at the sources cited in the first articles one finds. (Indeed, to be fair, this is one of the advantages of the list of references provided at the end of name/date articles.) Some citations, as in the previous type, intentionally function bibliographically, identifying the major texts underlying a particular area of investigation. Many authors add to their citations such comments as "For more on this subject, see…" or "For a contrasting point of view…" Here we touch upon one of the specific differences

between name/date and footnote styles, since the latter form *encourages* such suggestions and the former does not. In fact, in strict name/date format it is not acceptable to list references that are not directly quoted or cited in the main text. This makes the bibliographic or intellectual debt (type four) sorts of citations much less likely in that citation style.

Eighth, footnotes also allow for author commentary that may be tangential to the main text. (Strictly speaking these are not really 'citations' at all.) For example, "I have addressed this issue in another paper, published as…" or "I plan to return to this theme in a later project but do not have the space to deal with it adequately here." Sometimes this commentary provides a set of personal observations, or even humor; it provides a sense of the author as a writer, and not just as an experimentalist presenting data.

13.4

Looking specifically at the two dominant models of citation, name/date usage is overwhelmingly oriented to the first type of citation described above. A name/date reference is in standard use the documentation of a fact. Such usage reinforces the idea that research is about the examination and testing of empirical claims, and that citation is a process of buttressing those claims through referencing supporting studies. There is nothing wrong with that kind of citation, but as we have seen it is an inadequate model for all the other sorts of functions we want citation to serve.

Such citations are also, in the APA style, holistic: the use of specific page numbers within the name/date citation is discouraged; direct quotations are discouraged in favor of paraphrasing the findings.[9] In many cases, as noted, the name/date citation is colloquially equated with the well-known 'fact' that it substantiates. The awkwardness of this convention can be seen in the following example: "In the *Critique of Pure Reason*, Kant criticized Hume's empiricism (Kant, 1781)." There is nothing false in the information, but it is seriously distorting of the original text, all that it says, and the many nuances in Kant's engagement with Hume. Furthermore, the whole point of a lengthy book as a 'name/date' citation is strange: books, even in empirical disciplines, are rarely about the documentation of particular empirical facts, as individual research studies might be.

The discouragement of direct quotation has direct bearing on disciplinary differences. If a citation documents a fact, paraphrase is usually sufficient: but where scholarship is more about the nuance of language and argument, as it so often is in the humanities, restating a claim in the author's own words can be indispensible to the investigation to follow.[10]

[9] This is not true of MLA and other "hybrid" styles that do allow for footnotes, for quotations, and for reference to specific pages numbers in cited texts; although the references are often listed as endnotes, not footnotes.

[10] Robert Madigan, Susan Johnson, and Patricia Linton, "The Language of Psychology: APA Style as Epistemology," *American Psychologist 50* (1995), pp. 428–436. See also Thompson, pp. 36–37.

The bricks in the wall metaphor used by the APA also reveals a conception of knowledge as cumulative.[11] The name/date style is well-suited to long lists of cited studies in text. The function of the list is to document a line of empirical investigation in the same way that a single cite documents a fact. The list and the homogeneity of citation style (Coffi, 2003; Altgeld, 2005; Mueller and Albertson, 2010; etc.) also functions visually as a marker of 'established' lines of investigation: coherent, sustained, and (presumably) conclusive—if also always subject to further investigation. On a related theme, such citation tends to privilege newer citations because of an unstated presumption that in a cumulative knowledge discipline, the most recent work is often of greatest interest.

Another aspect of name/date style is an implicit preference for citing prominent scholars—more than might already be the case, because the name cited becomes part of one's text. It can be a kind of citational name-dropping. As noted, certain scholars are viewed as 'owning' certain conclusions or key ideas; it is expected to acknowledge them as a mark of one's own credibility.[12] However, the very idea of citing individual sources needs to be questioned here; as Thompson points out, it privileges individual, citable influences over the discussions within a community, which are impossible to cite in this manner—and this difference bears especially upon certain disciplines, certain theoretical/political orientations, and certain cultural conceptions of knowing.[13] Consider also here the practice of using 'et al.' to summarize the (presumably) subsidiary authors within a list of contributors; the first author is usually the more senior and better known. Furthermore, some citation styles discourage citing forms of influence, such as personal communications, that represent other models than published articles for the dispersion of ideas and influence within a scholarly community.[14]

Yet another aspect of name citation, however, pertains to the bibliographic reference itself: APA insists on initials only, MLA and footnote style allow full names. As Audrey Thompson notes, initials only might be seen as preferable because it makes the gender of an author less visible (unless one knows who "G. Robinson" is). From one standpoint this forces the reader to evaluate the claim without knowing whether it comes from a man or woman. From another standpoint, however, in which one's identity position is inseparable from the recognition and assessment of one's writing, concealing that information creates a falsely 'neutral' identity.[15] All of these issues bring in social, political, and institutional issues as well as epistemic ones.

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[11] Douglas Vipond, "Problems With a Monolithic APA Style," *American Psychologist 51* (1996), p. 653; see also Bazerman.

[12] Thompson, p. 36.

[13] Thompson, pp. 40–41.

[14] Thompson, p. 44.

[15] Gregory A. Smith, "Documentation Style as Rhetorical Device: A Comparative Analysis of Two Bibliographic Systems," Faculty Publications and Presentations, Paper 26 (2007): http://digitalcommons.liberty.edu/lib_fac_pubs/26. See also Thompson, p. 37.

Footnote style, on the other hand, allows for a broader range of citational conventions and purposes. In terms of my previous taxonomy, footnotes particularly allow for, even encourage, multiple ways of engaging the material cited. Sources can be summarized in further detail than might be desirable in the main text. Tangential topics of interest and relevance can be explored. References can be put into context. The intellectual debt of the author to another author, a colleague, a text, or a tradition can be elaborated. References can be commented upon, including critical or corrective comments (not all citations are favorable!). Additional sources can be suggested for further reading.

All of these practices, and others, go beyond the merely substantiating function of citations, or the avoidance of plagiarism. As Robert Connors puts it, footnotes allow for a *dialogic* engagement between what is in the main text and what is in the footnotes.[16] Connors traces the evolution of citational practices from marginalia and commentary, printed directly alongside the main text, to footnotes, printed at the bottom of the page, to endnotes, printed at the end of the article.[17] This shift in proximity makes extra work for the reader in reading footnote material; from being given nearly equal prominence with the main text, to being posted lower on the same page, to being printed at the end—which requires significant effort in thumbing back and forth, and which many readers will not bother to do. This shift in proximity reflects both a growing sense that footnote material is optional, non-essential, or even distracting; and an increased consideration of layout and printing convenience, since listing all the footnotes at the end is far easier to produce than adjusting the layout of page after page to accommodate them.

It is worth noting here in passing that digital publishing makes possible a far more convenient way of handling references as hyperlinks, which replaces spatial arrangements on the printed page with the ease of clicking a citation marker and being taken directly to the footnote text or (if desired) even to the full text of the original source. With no longer needing to worry about scarce physical space, footnotes can be of any length. While earlier conventions of scholarship still hold sway, we have not seen the full potential of hyperlinking text segments in a complex way, in which even the order of priority between primary and secondary (cited) material might be blurred.[18]

13.5

All of us who have published in different journals have gotten used to adjusting our references to fit the required style. The *Journal of Philosophy of Education*, for example, uses name/date style and certainly publishes outstanding philosophical work.

[16] Conners, "The Rhetoric of Citation Systems, Part II, p. 220.

[17] Robert J. Conners, "The Rhetoric of Citation Systems, Part I: The Development of Annotation Structures from the Renaissance to 1900," *Rhetoric Review 17* (1998), pp. 6–48.

[18] An essay in which these conventions are played with a bit is: Nicholas C. Burbules, "Aporias, Webs, and Passages: Doubt as an Opportunity to Learn," *Curriculum Inquiry 30* (2000), pp. 171–187. See also Nicholas C. Burbules and Bertram C. Bruce, "This is not a paper," *Educational Researcher 24* (1995), pp. 12–18.

Nor do you have to implement name/date style in a way that bars footnotes: APA does, other hybrid conventions do not. So my argument is not meant to be determinative, and not all citation regimes are as rigid and prescriptive as the APA, whose growing hegemony in the U.S. poses a real threat to more humanistic studies in education.

It is my contention that philosophical work (and a good deal of historical work and other scholarship in the humanities) thrives better in a footnote format. The dialogical character of footnote content better captures the spirit of contending ideas, as opposed to the cumulative stacking of empirical bricks in a wall. The variety of different kinds and purposes of citation can be more easily maintained in the more flexible discursive space that footnotes allow. And placing footnotes on the same page tells the reader that their content is significant, not peripheral, to the main text.

As a journal editor I have adopted a variation of footnote style from the *Chicago Manual of Style* as the standard for *Educational Theory.* But I have struggled at times with requests from authors to allow them to choose the footnote style they prefer. Some have made principled arguments for the desirability of some other standard style; in other cases I half suspect it is just a reluctance to do the extra work of redoing all their references. In more than 20 years, though, I have only had one author absolutely refuse to change over to footnotes. In now approaching a 100 issues, it is the only essay we have published in APA style.

Acknowledgement Thanks to Joyce Tolliver for suggestions, and to the Research Community for feedback and constructive questions.

Chapter 14
Conversation—In the Construction and Representation of Research

David Bridges

14.1 Conversation and Discussion

Huge importance is attached in the educational (and other) research communities to the published work; the paper, the monograph, the book; the tangible outcome that you can count, measure, even weigh; the enduring legacy of research—the product, perhaps, of the 'material culture' referred to in the title of this set of papers.

This contribution sets out to explore the idea of research as something perhaps more ephemeral less tangible, but still on-going, enduring: a discussion, a part of what Michael Oakeshott memorably referred to as the great 'conversations of mankind'. In this sense the conversation is not just the means to an end (which is some sort of product or 'deliverable'), but its sustaining and enriching is itself what research is about.

In this chapter I am going to use the term conversation for what I am writing about rather than discussion, though for these purposes they are more or less interchangeable. When I first wrote about the concept of discussion, I was at some pains to distinguish it from conversation, I argued that:

> Discussion differs from the social art of conversation in that what the talk is about is a matter of some serious importance in discussion and to discussants, whereas conversation and conversationalists may, and perhaps are conventionally expected to, expected to address their subject lightly or indeed playfully. In staff rooms and common rooms in educational institutions the uninitiated or the obstinate create all sorts of social tensions by approaching conversation with the seriousness of discussion or discussions with the playfulness of conversation (Bridges 1979, p. 14).

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though I did go on immediately to acknowledge that the distinction was a "not altogether unproblematic one" (ibid). Montaigne's presentation of *The art of conversation* is a picture of what on the whole we might recognise as a fairly robust and serious discussion. He marks the distinction between such 'serious' conversation and "the brief and pointed repartees exchanged between friends under the influence of mirth and intimacy, when they briskly and pleasantly chaff and poke fun at one another" (de Montaigne 1958/1595, p. 305) but he also makes a plea that this be included under the heading of social conversation because of its potentially serious contribution to our understanding: "In our frivolous moments we sometimes pluck some secret string of each other's imperfections, which we cannot touch without offence when sober. Thus one points out the defects of another, to our mutual profit" (ibid., p. 306).

Oakeshott goes further in collapsing the distinction between the playful and the serious as quickly as he observes it:

> The excellence of conversation … springs from a tension between seriousness and playfulness. Each voice represents a serious engagement (though it is serious not merely in respect of its being pursued for the conclusions it promises); and without this seriousness the conversation would lack impetus. But in its participation in the conversation each voice learns to be playful, learns to understand itself conversationally and to recognise itself as a voice among voices. As with children, who are great conversationalists, the playfulness is serious and the seriousness in the end is only play (Oakeshott 1962, p. 202)

So, let me not be over-exercised by the niceties of any possible distinction between discussion (serious) and conversation (playful). Conversation and discussion have their most significant features in common:

They require interaction between the expressed thoughts of two or more people[1];

- About something (i.e. there is a topic of conversation or a subject under discussion);
- This interaction calls for at least a measure of listening, of mutual responsiveness and hence acknowledgement and respect for the contributions of the other;
- It also calls for at least some level of shared understanding of, in the Wittgensteinian sense, "how to go on" (Wittgenstein 1953, I, # 155)—of the 'rules' under which the conversation or discussion proceeds "the discipline of a discipline, by which I mean the rules of conduct governing argument within a discipline, does have a worthy function. Such rules make a community of arguers possible." (Hunt 1991, p. 104).[2]

[1] Of course it is also common to refer to a person writing a piece such as this as 'discussing' a topic, where he or she presents an interaction between different ideas, but I suggest that this use is parasitic on the primary case of interaction between two or more people.

[2] This is not intended to suggest that there is only a single set of rules governing any discussion. For Oakeshott in particular, it is important to acknowledge the different 'voices' in the conversation of mankind, the voice of poetry as well as that of science, of history as well as philosophy. Of course this raises interesting questions about conversations running across these different traditions and the language in which these conversations are conducted. Oakeshott resist any sense of a hierarchy among these different discourses, however, and sees their relationship in different terms: "[Conversation] is impossible in the absence of a diversity of voices: in it different universes of discourse meet, acknowledge each other and enjoy an oblique relationship which neither requires nor forecasts their being assimilated to one another" (Oakeshott 1962, pp. 198–199).

Henceforth I shall refer to this sort of human interaction as conversation. This preference is influenced by the association of this term with what Michael Oakeshott refers to as 'the conversations of mankind',[3] the historic and universal conversations of, for example, poetry and science and philosophy which are part of the dynamic of the evolution of human thought—conversations, participation in which define our humanity. I argue that the dinner table, the pub, the seminar room, the conference as all sites of this larger conversation and as part of the continuum across space and time that constitutes its broader expression. I shall return to this theme in what follows.

14.2 The Role of Conversation in the Origination and Development of Research

My first claim is for conversation as a key part of the process of doing research. Whether as a student researcher in a supervision, tutorial or seminar or an experienced researcher in a meeting with a sponsor or group of colleagues or at an academic conference, we formulate and refine our research project and research questions through conversation with others; we discuss possible approaches to the conduct of the research; we gather new sources of reference; we talk to others about how to interpret the evidence we are collecting or the sources we are reading and through this talk we start to get clearer about what it all might signify or we construct its meaning. Our conversations point us towards new understandings and new sources of information; and then as we begin to order our ideas we present them for critical discussion among close colleagues or to a wider and more critical audience of our peers or of those that we hope to inform or influence through our work.

At least, this is the way it seems to me. There are relatively few empirically grounded accounts of how exactly researchers *do in fact* go about their work in practice in contrast with the plethora of texts prescribing how they *should do* so. It is, however, not difficult to find references to conversation in such accounts as we have of academic work—from Plato's symposia to Watson's account of the discovery of the double helix. Watson makes clear, over and over again, the importance of his and Crick's conversations to their achievement—not least those in the Eagle pub in Cambridge (which has a plaque commemorating its part in their scientific achievement). Watson celebrates what he refers to as "the conversational life" (Watson 1968, p. 47) and he exulted when he was released from some laboratory work for which he felt no enthusiasm that: "No obstacle thus prevented me from talking at least several hours each day to Francis [Crick]" (ibid., p. 47).

Latour and Woolgar, who studied the work of scientists in the Salk Institute for 2 years, also came to understand research as conversation. Scientists, they argued, "construct knowledge in conversation about their work over lab benches and in

[3] A number of references in this chapter come from a period before the gendered nature of the language used was properly appreciated. I have left the language intact and hope that colleagues will not find this offensive.

hallways and offices and by revising what they think in the course of that conversation. This is the conversation of conjoined intelligence… made by confluent, simultaneously raised human voices, explaining things to each other" (Latour and Woolgar 1979). When a new building was planned to house mathematics and applied physics in Cambridge's Newton Institute it was designed to maximise the opportunities for just such conversations with alcoves along corridors where passing words could be turned into a serious conversation and white boards in the lifts to assist those whose communications required the instant scribbling of an equation.

Paulus, Woodside & Ziegler provide an account of their research practice that certainly reflects a conversational model: "Through our collaborative experience, we have redefined what we understand to be research: a group process of active meaning-making through dialogue rather than a 'discovery' of new knowledge" (Paulus et al. 2008, p. 231). They go on to describe the writing of research findings as not so much a product representing ideas created and owned by individuals as "one part of an ongoing conversation among scholars" (ibid.).

A few years ago, in response to a request for a paper about methods of doing philosophy I decided to keep a log of what I actually did over an 8 month period (including a lot of time when I did nothing) in order to produce a paper for an educational research conference about the ethical issues which confronted researchers operating under commercial contracted research. The log is littered with notes about conversations—with colleagues who had ideas about useful sources, with a professor of law who was a specialist on intellectual property with another colleague who had written from a sociological perspective about programme evaluation etc. etc. In the paper I wrote about my log I noted with some satisfaction: "The university [this was the University of East Anglia] served, in fact, as universities are supposed to—as a source of ideas, as a community of conversation within and across disciplines of study" (Bridges 1999, p. 225).

The reference to philosophical work in this context cannot but remind us of the example of academic work afforded by Plato's (or Socrates's) dialogues. Though these feature carefully crafted philosophical argument they are almost always set in the context of a conversation. *Ion* begins with Socrates asking about Ion's travels and his success in a recent competition. In another contribution to this volume Richard Smith describes how *Parmenides* is set in a chance meeting in the agora which is followed by an extensive exchange of pleasantries before Pythodoros tells Antiphon of a conversation between Socrates, Zeno and Parmenides that took place 'many years ago'. "Antiphon, now much more interested in horses, somewhat unwillingly relates this conversation … to Cephalus…" and etc., though Smith observes that many philosophers seem to be professionally committed to ignoring (and in some cases to editing out) this contextual and conversational framing of the discussion. The *Symposium* is the most obvious example of Plato/Socrates' attachment to conversation not only because it describes a conversation set in a banquet (including an extensive discussion about how much they had to drink the night before and how much they might or might not drink on this occasion—Montaigne would have felt very much at home) but also because the text we now have was the product of a conversation between Apolodoros and a friend with whom he was out

walking in which Apolodoros recalls a further conversation with Aristodemos, who attended the banquet with Socrates some 15 years previously (Warmington and Rouse 1956). It is a conversation that recalls a conversation about a conversation…. which we still talk about today.

Of course, different scholars have different ways of pursuing their inquiries, and some may be more isolated, more heavily focussed on reading perhaps than on conversation, but it is conversation which provides an immediacy of interaction of ideas and the opportunity for early critical and creative engagement by others, it is conversation which brings the individual work into the community of discourse and conversation that gives energy and spontaneity to the intellectual life.

> The study of books is a languid and feeble process that gives no heat, whereas conversation teaches and exercises at the same time. If I talk with a man of strong mind and a tough jouster, he presses on my flanks, he pricks me right and left, his ideas stimulate mine. Rivalry, vanity and the struggle urge me on and raise me above myself. And agreement is an altogether tiresome constituent of conversation (Montaigne 1958, p. 287).

It would require more than I have provided here to provide a conclusive argument for the centrality of conversation to the actual conduct of research, though I think this might be widely acknowledged. This is not however what I am primarily concerned to argue in this context. The collection of papers to which this is a contribution is about different kinds of representation of research in 'a material culture'—different forms of product or (the term I am required to use by my current sponsors) 'deliverables'. I want to argue that the conversation is not just the means to the end (which is perhaps some form of publication) but is itself the end: the conversation is the thing.

I have a concrete example of this turn in one context of educational inquiry. In the 1980s, the UK government introduced a rapid sequence of initiatives for educational 'reform' including different approaches to the sponsorship of the in-service training of teachers. These were managed through local education authorities (LEAs). In every case the LEA had to produce an evaluation of the programme for which they had received government funding and I found myself involved in conducting a number of these evaluations—each duly emanating in an evaluation report (Bridges 1989). It became rapidly clear, however, that no one was really interested in these reports. By the time the evaluation had been completed, the initiative on which it was reporting had already been replaced by a new one, which was now the focus of attention. Given the haste with which these initiatives were introduced, the short time in which their impact was supposed to be evaluated, the multiplicity of changes that were taking place simultaneously and the inherent difficulty in attributing change in children's learning to a particular piece of in-service training, the evaluation reports tended in any case to say that there was not yet any much evidence of the initiative having any impact, that it was too early to make any judgement or even that the sponsors would frankly never know what effects their input had had. These were not messages that anyone at the local level or in government wanted to hear, so they instinctively found a variety of strategies for burying the evaluation reports in a remote corner of LEA land.

Towards the end of this period I persuaded Suffolk LEA to adopt a different approach to evaluation. There would be no final report. The evaluators would join with the project management committee and participate in their meetings, feeding into the discussion any evidence, perceptions or questions which arose from their visits to the field. This immediately reduced the threat that was represented by an external evaluation, enabled us to feed evidence into the management of the initiative while it could still exercise some influence and also provided opportunity for on-going critique of the evaluation as well as of the programme. The conversation was the process and the output.

Unfortunately, however, I have to rely on my memory of these events to provide an account—because there was no report and because at that time there was no expectation on a lecturer in a teacher education institution to publish their research (or even to do research). So the reader has no independent way to verify this account. But if this suggests the ephemerality of conversation as the product of research, it does not in itself demonstrate its inconsequence or its discontinuity. We quickly lose track of where conversations move, what direction they take, how they re-surface in unlikely and wholly unpredictable circumstances as other people take their recollections of one conversation into another context—and continue it there—sometimes re-joining with the original source. 40 years after the work of the Humanities Curriculum Project in the UK (a project which on most standard criteria would have been deemed to have 'failed') I can see an ex-pat member of the staff of Haramaya University in Eastern Ethiopia smiling at my reference to Lawrence Stenhouse. "That was the most formative experience in my professional life; it is still central to my teaching" he says, after my talk. But who would have known that that conversation goes on in this as in many other unrecognised places and forms?

14.3 Conversation as a Metaphor[4] for Academic Work

> Universities began as conversations. Changing lives through conversations is perhaps the best way to describe the purpose of a university, and the role of the university professor (Common undated, p. 1).

I have illustrated some of the ways in which conversations have constituted part of the practice of research within communities of scholars, 'communities of arguers' as Hunt describes them. These are conversations in a straightforwardly literal sense that I think we can all recognise. Oakeshott extends this idea to something much larger, and in his essay *The voice of poetry in the conversation of mankind* (Oakeshott 1962) he presents a picture of conversation in the form of traditions

[4] I hover between thinking of conversation as a metaphor for academic work (Burke's account below fall clearly in this category) and recognising it as a literal description (Watson's account of his work with Crick on DNA clearly describes this as heavily dependent on conversation in a very ordinary sense of the term). Ian Munday has suggested that perhaps conversation is a metonym rather than a metaphor in the sense that it is a way of describing something indirectly by referring to things around it, but I think I see it as being more integral to academic work than that.

of thought that extend over historical time and universal space, participation in which constitutes our membership of humanity:

> As civilised human beings, we are the inheritors, neither of an inquiry about ourselves and the world, nor of an accumulating body of information, but of a conversation, begun in the primeval forests and extended and made more articulate in the course of centuries. It is a conversation which goes on in public and within each of ourselves (Oakeshott 1962, p. 199).

Burke provides a helpful alternative metaphoric account of such conversation:

> Imagine that you enter a parlor. You come late. When you arrive, others have long preceded you, and they are engaged in a heated discussion, a discussion too heated for them to pause and tell you exactly what it is about. In fact, the discussion had already begun long before any of them got there, so that no one present is qualified to retrace for you all the steps that had gone before. You listen for a while, until you decide that you have caught the tenor of the argument; then you put in your oar. Someone answers; you answer him; another comes to your defence; another aligns himself against you, to either the embarrassment or gratification of your opponent, depending upon the quality of your ally's assistance. However, the discussion is interminable. The hour grows late, you must depart. And you do depart, with the discussion still vigorously in progress (Burke 1957, pp. 110–111).

A metaphor, perhaps, but also, I think, an instantly recognisable account of our passage through an academic life and, soberingly, our fleeting presence in the conversation.

This view of what we might call intellectual work has particular significance for the theme of our own seminar which is focussed on alternative conceptions of the 'products' of research, because it subordinates material products like books and journals (or even artistic or dramatic representations of research, web-sites or performances) to the on-going conversation (of which they might, however, form a constituent part). It is the process, the conversation itself which is the thing.[5]

The idea that it is the conversation itself that matters, rather than any other outcome, is clearly evidenced in Oakeshott's account. "Conversation" he says, "is not an enterprise designed to yield an extrinsic profit, a contest where a winner gets a prize, nor is it an activity of exegesis; it is an unrehearsed intellectual adventure", and later, "It is with conversation as with gambling, its significance lies neither in winning nor in losing, but in wagering" (Oakeshott 1962, p. 198). He explains:

> In conversation 'facts' appear, only to be resolved once more into the possibilities from which they were made; 'certainties' are shown to be combustible, not by being brought in contact with other 'certainties' or with doubts, but by being kindled by the presence of ideas of another order; approximations are revealed between notions normally remote from one another. Thoughts of different species take wing and play round one another, responding to each other's movements and provoking one another to fresh exertions (Oakeshott 1962, p. 198).[6]

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[5] The Glasgow painter, Richard Wright, won the 2009 Turner Prize for art with a beautiful painting, which, as is his custom, he painted over within months of the award. In a BBC *Imagine* documentary he explained to the presenter, Alan Yentob: "It seemed to me to make the action more poignant, more sharp, whereas [previously] it was the object—it was the painting—which was the thing" and then "I liked the idea of there being nothing left when I had gone". But of course there was something left, though not the original painting, and, as the TV programme illustrated, the conversation goes on.

[6] This is a very different view of conversation from that presented for example in the psychological literature on 'conversation theory' in which the requirements of a conversation are "two cognitive systems seeking agreement" (Ford 2004, pp. 773–774 and in its original source Pask 1976). The kind of conversation that Oakeshott is describing requires (and is indeed defeated by) such consensus.

In such conversational conditions, then, each participant arrives with a unique perspective which is uniquely changed through the conversational encounter. But of course the conversation does not end there, it continues, perhaps with the same participants, perhaps elsewhere and with a different group, and, as in the picture presented by Burke (above) it goes on even when we no longer take part, taking forward, perhaps, some traces of our own participation, though their source will almost certainly be lost among the myriad of voices which have shaped any one person's understanding at any one time.

Nine years after *The voice of poetry in the conversation of mankind* Oakeshott contributed an elegantly rhetorical paper to the annual conference of the Philosophy of Education Society of Great Britain on *Education: the engagement and its frustration* (Oakeshott 1971). In this he had dropped the specific language of conversation, but nevertheless managed to present a very powerful picture of education itself as an 'initiation'[7] into what were, effectively, these 'conversations of mankind', the historically constructed and evolving ways in which human beings had given meaning to their existence and the means to share in this meaning as well as their different ways of understanding themselves and their experience.[8] But note that here too it is the taking part that is important, rather than any extrinsic purpose, outcome or product:

> This transaction between the generations cannot be said to have any extrinsic 'end' or 'purpose': for the teacher it is part of his engagement of being human: for the learner it is the engagement of becoming human…. Each in participating in this transaction takes in keeping some small or large part of an inheritance of human understandings. This is the mirror before which he enacts his own version of a human life, emancipated from the modishness of merely current opinions…. (Oakeshott 1971, p. 51).

The research community—and its conversations—are simply an extension of this educational community of teachers and learners, and it is shaped by the same practices. Its own conversations, however, are explicitly framed by ambitions to interrogate and to expand the understandings that participants have inherited—but, again, not for any extrinsic purpose or with a view to any material production, but because that is in the nature of conversation at a sophisticated level, that is what makes the conversation stimulating, interesting, worthwhile.

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[7] This was, of course, a term that also endeared itself to Richard Peters: chapter 2 of *Ethics and Education* was entitled "Education as initiation" (Peters 1966).

[8] Compare, too, John Passmore: "To be educated one must be able to participate in the great human traditions in critic-creative thought: science, history, literature, philosophy, technology…" (Passmore 1967, p. 200). Later Passmore uses the language of 'discussion' more explicitly to refer to these 'critico-creative traditions': "Critical discussion … of accepted rules can begin at a very early stage in a child's life: what happens later, as he begins to enter into the great traditions is that the area of discussion widens and the difference between different types of discussion more clearly emerges" (ibid., p. 209).

14.4 Conversation and the Written Word

All of this may, however, present academic work as unpalatably ephemeral, "inconsequent adventures" (Oakeshott 1962, p. 201). Do we not need to fix parts of this conversation, to hang on to some what we might judge to be the most valuable contributions so that people in different places and at different times can access them? After all, I could not have written what I have done here, had, for example, Oakeshott's work not been published and made accessible in print or on-line.

I am not proposing, however, that we should dispense with the publication of ideas, argument, perceptions etc. It is rather a matter of how we perceive these and the priority we give to them. On my argument these become simply part of the wider conversation, the one that also takes place in bars and seminar rooms and long walks in the country. They are notes that remind us of things said at different times and places, but they are not the point of the conversation, which moves on even before they are published.[9] They remind us that our conversations have a history, and of course that history can continue to illuminate our present, but they themselves always have to be interpreted and re-interpreted in terms of our new understandings and the shifting contours of our conversation. Gadamer reminds us that our relationship with a text is itself dialoguic, conversational. For Gadamer this is more than a metaphor: reading is always interpretation and means bringing the text "into the living present of conversation" (Gadamer 1989, p. 368; and see also Gallagher 2002).

The form of academic texts and the expectations we have of them reinforces this view of their place as voices in a wider conversation. We expect them to locate themselves in the conversations which have preceded them (hence, for example, the literature review in the doctoral thesis); we expect them to 'discuss' their findings or conclusions by showing what they contribute to the on-going conversations, what new insights they provide, what old assumptions they challenge; and we expect them to suggest the directions that the conversation might take in the future (compare Burke's account above).

So the publication, the text, has a role, but its issuing is neither the objective nor the end of the conversation; it is just a note of a passing phase in the conversation, to borrow Wittgenstein's phrase, "assembling reminders for a particular purpose" (Wittgenstein 1953, I, # 127). It is a note which some at the time may have seen as of particular significance, but for the vast majority, even this importance will be quickly lost (after all how many academic papers ever get read, let alone cited or

[9] In my (1999) reflections on the process of writing a philosophical paper for a conference (and subsequent publication) I wrote: "On this evidence [i.e. the evidence of my log], writing philosophy is a temporary rendering at a point in time of a continuing conversation. For a short period it diverts a social activity of conversation into an individual activity of representation, but even in that activity the writer continues to reach out to the sources of the conversation for help" (Bridges 1999, p. 226).

referenced and for how long are they remembered?) or the ideas will be absorbed untraceably into diverse imaginations, like the words we exchange in the bars of Cambridge or Leuven.

So research is not about the material product that may or may not be one of its outcomes, whether this be book, paper, image or web-site; it is about participation in an on-going conversation, enriching the conversation and keeping the conversation alive. "The object of the game is to go on playing it" wrote the distinguished mathematician, John von Neumann (Neumann 1958 cited in Boyd 2004). It is through such participation we share in the intellectual adventure which is part of the richness of human living, and in keeping the conversation alive we make it available to another generation.

14.5 Quality

In contemporary practice across the globe huge attention is given to the assessment of research quality (see, for example, Besley 2009) and the overwhelming focus for the assessment of such quality is on the products of this research, that is, for most purposes, on publications—the number of them, the location in which they are published, the extent to which one publication is cited in another, etc. etc.… As far as this is possible, and I have argued that it is not possible without considerable perversion of the research practice (Bridges 2009), the quality of the material products of research is measured.

The shift that I make in this paper towards thinking of research as a conversation does not remove the need to think in terms of quality, but it does change significantly how we might interpret such quality. Quality now enters as a set of criteria against which we might the quality of the conversation itself and its outcomes, what it offers by way of 'food' for thought (an appropriate metaphor in the context of this paper), the new understanding that participants take away from the conversation. Without over-extending this part of the discussion I suggest that we might value in a conversation:

- the openness and honesty of participants;
- the freshness, insightfulness, subtlety, cogency of their contributions;
- the wit, elegance or style of their expression;
- their attentiveness and responsiveness to our own and others' contributions.

What we take away from a good quality conversation is importantly something which to a significant degree we have co-constructed with our interlocutors—new insights and ways of looking at things that we have, however, found meaningful in our own terms. And finally we may also consider that a hallmark of a good conversation has been our own ability to contribute in a way that is appreciated by others.

There is perhaps an extra criterion of quality that is required when we locate this discussion in the context of Oakeshott's 'conversations of mankind'. This has to do with the historical locatedness and continuity of these conversations. Thus we might look for:

- awareness of what had gone before in the conversation:
- a grasp of the language and the rules of the game:
- a readiness to engage in a sustained way.

None of these are qualities entirely removed from those we might look for in published work—indeed these last three in particular are directly echoed in formal assessments of the quality of published research (Bridges 2009). Perhaps a difference between what we might think of as an 'amateur' conversation and a 'professional 'conversation (echoing the distinction between inquiry and research proper) would be to do with the rigour with which these criteria of quality were pursued and satisfied.

There is, however, more emphasis in this account on the interactive nature of research viewed as conversation, though it would be a legitimate critique of much published work that it rarely does justice to the wealth of contributions on the same theme that others have made before (i.e. the researcher has not 'listened' attentively). Even the major research conferences provide in practice very few formal opportunities for discussion, such is the pressure to fill the programme with presentations of research. Perhaps a shift in the direction of conceiving of research as conversation would at least have the benefit of changing the balance in favour of more interactive research conferences; research papers which are more fully and sensitively located within ancient and on-going conversations; and more acknowledgement of the role of all participants in constructing their own meaning out of the plurality of voices in the research conversation.

14.6 The Material Conditions for Conversation

I began by contrasting the contemporary emphasis on the material products of research (journal articles, books, new drugs or other products) with the immaterial even ephemeral character of the on-going conversation. There are, nevertheless, material conditions which are seen as 'facilitating' (literally, making easier) or enabling good conversations to take place. I have referred already to architectural design features of the Newton Institute in Cambridge. The Judge Institute of Management Studies in the same university was planned so as to create a meeting and mixing space for staff at its centre. The University of East Anglia was constructed as a unified built environment in which the very architecture encouraged all sorts of social and academic interchange. At the micro level, textbooks on e.g. classroom discussion and manuals for trainers will describe the arrangement for chairs and tables that will best facilitate discussion and working in groups. The sophisticated dinner party host or hostess will devote careful attention to who will sit where and next to whom with a view to promoting interesting conversation. And the facilitative benefits of

the material conditions of an easy flow of alcohol and good food have not been lost on either Plato, Montaigne or Watson, nor indeed on the organisers of the seminars from which this collection of papers is drawn. After all, Oxford and Cambridge universities have both traditionally defined presence in the university community not by attendance at lectures but by the taking of dinners in college hall.

This said, conversation—even good conversation—does not depend at all critically on such material conditions, even if they might favour it. It can be found on a country walk, on a chance encounter in a railway carriage, in a student flat or an airport lounge or in the conference coffee queue—anywhere where two or more people with a shared language (I use this term in the enriched sense of playing the same language 'games') have time to discover common interests and where they are prepared to listen to and learn from each other. In a material culture in which the significance of research is measured, in part at least, by reference to how much it costs to carry it out and therefore how much income it brings to the university the very immateriality of conversation threatens its sustaining. On my argument, however, it is this conversation that is at the very heart of an educated life, of an intellectual culture and of the practice of research.

Discuss?

References

Besley, A. C. (2009). *Assessing the quality of educational research in higher education: International perspectives*. Rotterdam: Sense.

Boyd, G. M. (2004). Conversation theory. In D. H. Jonassen (Ed.), *Handbook of research on educational communications and technology* (2nd ed., pp. 179–197). Mahwah, NJ: Lawrence Erlbaum.

Bridges, D. (1979). *Education, democracy and discussion*. Slough: National Foundation for Educational Research/Nelson. (Also reissued 1988 by University Press of America, Lanham)

Bridges, D. (1989). Evaluating the LEA Grant Scheme. In R. McBride (Ed.), *The in-service training of teachers* (pp. 108–126). Lewes: Falmer Press.

Bridges, D. (1999). Writing a research paper: reflections on a reflective log. *Educational Action Research, 7*(2), 221–234. (Also in Bridges, 2003)

Bridges, D. (2003). *'Fiction written under oath'? Essays in philosophy and educational research*. Dordrecht: Springer.

Bridges, D. (2009). Research quality assessment in education: Impossible science, possible art? *British Educational Research Journal, 33*(4), 497–519.

Burke, K. (1957). *The philosophy of literary form*. New York: Vintage.

Common, D. L. (undated). *Conversation for education: The tool of pedagogy for universities*. Retrieved September 15, 2012, from www.ufv.ca/rr/RR21/article-PDFs/common.pdf

de Montaigne, M. (1958/1595). *Essays*. Harmondsworth: Penguin.

Ford, N. (2004). Modelling cognitive processes in information seeking: From Popper to Pask. *Journal of the American Society for Information Science and Technology, 55*(9), 769–782.

Gadamer, H.-G. (1989). *Truth and method* (2nd Rev. ed., J. Weinscheimer & D. G. Marshall, Trans.). New York: Crossroads Press.

Gallagher, S. (2002). Conversations in postmodern hermeneutics. In H. Silverman (Ed.), *Lyotard: Philosophy, politics and the sublime* (pp. 49–60). London: Routledge.

Hunt, L. (1991). History as gesture; Or the scandal of history. In J. Arac & B. Johnston (Eds.), *Consequences of theory* (pp. 97–113). Baltimore: John Hopkins University Press.

Latour, B., & Woolgar, S. (1979). *Laboratory life: The construction of scientific facts*. Princeton: Princeton University Press.

Oakeshott, M. (1962). The voice of poetry in the conversation of mankind. In *Rationalism in politics and other essays* (pp. 197–248). London: Methuen.

Oakeshott, M. (1971). Education: The engagement and its frustration. *Journal of Philosophy of Education* [at that time *Proceedings of the Philosophy of Education Society of Great Britain*], *5*(1), 43–76.

Pask, G. (1976). *Conversation theory: Applications in education and epistemology*. New York: Elsevier.

Passmore, J. (1967). On teaching to be critical. In R. S. Peters (Ed.), *The concept of education* (pp. 192–212). London: Routledge & Kegan Paul.

Paulus, I., Woodside, M., & Ziegler, M. (2008). Extending the conversation: Qualitative research as dialogic collaborative process. *The Qualitative Review, 13*(2), 226–243.

Peters, R. S. (1966). *Ethics and education*. London: Routledge & Kegan Paul.

von Neumann, J. (1958). *The computer and the brain*. New Haven: Yale University Press.

Warmington, E. H., & Rouse, W. H. D. (Eds.). (1956). *Great dialogues of Plato*. New York: Mentor Books.

Wittgenstein, L. (1953). *Philosophical investigations*. Oxford: Basil Blackwell & Mott.

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