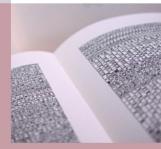
new formations

MATERIALITIES OF TEXT: BETWEEN THE CODEX AND THE NET

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MATERIALITIES OF TEXT: BETWEEN THE CODEX AND THE NET

Jeremy Gilbert

The cultural authority of the codex form of the book appears to be in a process of displacement ensuing from the rise of on-line digital media. The traditional material structures of the book - its physical forms and its institutional forms of production, circulation, and preservation - are often seen as being subject to dematerialisation; evaporating in the transitory appearances of the digital screen and in the proliferation of new systems of production. However, this issue of *New Formations* makes the case that the present historical juncture should be understood as a mixed media milieu, in which traditional and digital forms of writing and publishing coalesce and conflict in a complex array of textual materialities.

Such materialities of text are at once sites of political and aesthetic experimentation, and of intense capitalization, intersecting features which are approached in the articles collected here through a broad range of theoretical and empirical themes: diagrammatic writing; the material reading formations of a best-seller novel; grey literature in the institutions of cultural studies; Black Twitter; the politics of Open Access and the artists' book; digital humanities and its political problematics; the bibliopolitics of the passport; and the political and aesthetic forms of independent publishing.

New Formations has faced its own dilemmas in recent years around the politics of publishing and its materiality. Even during the relatively brief tenure of the current editorship, the nature of academic publishing has changed radically. Five years ago, the journal was still primarily a paper product; today only a tiny proportion of its readership will ever hold a bound and printed copy of the journal in their hands. This is in part because digitisation has made possible a very significant increase in readership, especially outside the UK, but it also because the key mode of distribution for scholarly journals has decisively changed: the vast majority of our readers now access the journal digitally, primarily through the vast bundles of electronic journal subscriptions that university libraries purchase from aggregators such as ebsco. Although this vastly increases the reach of the journal, it also massively decreases the effective income-per-subscription earned by the publisher.

New Formations is an almost unique position for a British scholarly journal, in that it is neither wholly self-published, like the much-admired Radical Philosophy, nor the property of one of the large international publishing conglomerates. Our publisher, Lawrence & Wishart is one of the last remaining, and possibly now the oldest, independent progressive publisher in the UK, responsible for the dissemination of large parts of the work of

writers such as Marx and Gramsci, among others; and university library subscriptions to the journal remain an important income-stream for them. As such, our obvious desire continually to expand the availability of the journal must always be balanced with the need to try to protect this important source of revenue for a great radical institution.

As such, the temptation to switch over to an open-access, free-content model is not one that we could succumb to without doing significant damage, although the political and conceptual commitments of many of the editorial board would tend to make full open-access an appealing option for us. By the same token, the intensive, largely unpaid labour of producing the journal requires the kind of support that only an experienced publisher can offer, and it would not be easy to replace this support with still more free labour if all income disappeared.

On the other hand, however, the mission of *New Formations* can ultimately never be a commercial one: it is to explore the interface between culture, theory and politics in new and often experimental ways, while maintaining the highest standards of rigorous scholarship. Any failure to take advantage of new technologies and distribution systems in order to improve and widen access to our content would be an abdication from the responsibility to pursue this project as vigorously and imaginatively as possible.

The strategies that we have recently adopted are all intended to meet, as far as possible, these competing demands on the journal. On the one hand we continue to make ourselves available through commercial digital aggregators and conventional paper subscriptions, and we would encourage all supporters to request any university libraries to which they have access to subscribe through one means or another. On the other hand, as well as having recently been accepted for inclusion by the main digital aggregator of non-commercial content in the Anglophone humanities and social sciences -Project Muse - New Formations has also launched its own independent online archive at http://www.newformations.co.uk with a fully searchable database of our entire back-catalogue. A large amount of that content has been made freely available on an open-access basis, while the remainder is available to all institutional or individual subscribers without further cost; we have also launched a new, highly-affordable digital-only subscription rate offering full access to the archive and all current issues at a rate which should be affordable by any interested reader without the privilege of access via a university library account, or simply to researchers who want the convenience of full access to the online archive.

We hope that by adopting these innovations, *New Formations* will continue to make its best possible contribution to international intellectual culture, while remaining open and sensitive to the possibilities and dangers inherent in new materialities of text. And we note with some satisfaction that our traditional format and lay-out, transferred without further amendment to PDF - already looks fantastic on the iPad ...

Introduction

Sas Mays and Nicholas Thoburn

The epoch of the codex, if it could be given a determinate origin or end, could be said to concern some two thousand odd years of world history. Nevertheless, sustained critical and political engagement with the ways in which the material and institutional organization of the codex has been, and still is, part of the very fabric of subjectivity, sociality, and cultural and economic life, has been relatively recent. For much of its history, the medium of the book appears to have generally inoculated itself against too much theoretical and political interrogation of the specificities of its material forms - where such are considered as the relations between a range of materialities, from the nominally literal materiality of bindings, papers and inks, to the material social and economic conditions of their production and consumption. Indeed, it appears to have been in part the very dominance of print media that has kept it away from critical attention; as if its ubiquity has had the normative effect of making the particular conventions of print appear to be universal features of textual expression. Yet this situation is changing. As N. Katherine Hayles argues, in her recent exploration of the co-emergence of thought and media form: 'The Age of Print is passing, and the assumptions, presuppositions, and practices associated with it are now becoming visible as media-specific practices rather than the largely invisible status quo'.1 According to this argument, then, it is only with the waning of print and the emergence of alternative digital media that the specificity of media forms - old and new alike - come into view. It is within this juncture, with its complex inter-relations of media, considered in the dual sense of their literal and institutional materialities, that this collection intervenes, by bringing together articles that investigate the many materialities by which today's textual media are constituted. Not focused on any one media form, but on their interrelations, these materialities of text exist between the codex and the net.

1. N. Katherine Hayles, How We Think: Digital Media and Contemporary Technogenesis, Chicago and London, University of Chicago Press, 2012, p2, http://doi. org/mst

BETWEEN THE CODEX AND THE NET

If print media, and the traditional codex forms of the book, are receding from their hegemonic interpenetration of the very fabric of cultural life, and if digital media appear in the ascendant in this regard, this juncture has spawned positive and negative responses to the question of the 'future of the book'. On the one hand, the printed book may be fetishised as a specific sensory, epistemological, and cultural unit, along with a nostalgia for its forms of collection - libraries, private and public - and the productive sureties and contingencies of their use. On the other hand, printed books, with their

traditional associations of authorial determination and canonical status, may be viewed as limiting and controlling devices linked to structures of economic and political power. On the one hand, the digital may be championed as the democratization of publication and the ownership of knowledge; on the other, it may be derided as that which points to the collapse of once-stable cultural and critical values. The future of the book might thus be the death of the book, as much as its transformation or rebirth. Nevertheless, what links these opposed positions is a tacit or explicit attachment to a sense of linear development from print to the digital - an evolution in technology and culture, positive or negative.

But such a historical and teleological sense obscures the inherent complexities of media forms. As Derrida's discussion in *Paper Machine* suggests, for example, the supposed death of the codex is complicated by its forms of living-on: the internet may be haunted by the book in terms of the web*page*.² There will thus be no ruptural break, no simple event of the death of the codex. But neither will there be an original birth of the digital text. Indeed, the nominally endless vertical extension of the webpage could be not only seen as a technological progression, but as a regression toward the dominant material form of writing preceding the codex: the scroll. Likewise, if the codex form of the book owes something of its basic physical structure to the wax tablet, the inscribed clay slab might be thought to haunt the digital tablet. Slabs, scrolls, codices, and digital texts are thus not simply distinct: these material media forms are necessarily hybrid, despite their epochal significances.³

As this indicates the way in which chronology is complicated by media form, it is worth considering Ted Striphas' distance from the term *intermedia*, and his preference for the term *intermediation*, to express the complex social, economic, and historical relations between different media forms. The latter term indicates the inherent interconnectedness of media that are socio-economically produced and historically located, and it is deployed to militate against 'insular histories' of 'a medium in decline'.⁴ A comparative complexification of chronological development is also apparent in Hayles' discussion of the supposed shift from the temporality of textual narrative to the spatiality of the digital database. As Hayles argues, 'narrative and its associated temporalities have not gone into decline, as Lev Manovich predicts. Rather, they have hybridized with data and spatiality to create new possibilities for novels in the age of information'.⁵

The rise of the digital database is generally understood to be a key aspect of the development of new kinds of capitalist techno-science, for example in Lyotard's *The Postmodern Condition*. Hence, we should pause here to note some of the politico-economic complexities devolving upon the term *hybridity* in this context of media forms. Hybridity, of course, has been subject to prolonged discussion, for example, in postcolonial studies, concerning its function in terms of its subversion of or recuperation by normative cultural

2. See Jacques
Derrida, 'The Book
to Come' and 'Paper
or Me, You Know ...
(New Speculations
on a Luxury of
the Poor', in *Paper Machine*, R. Bowlby
(trans), Stanford,
Stanford University
Press, 2005, p9, p16,
p46.

3. It is argued, for example, that the codex form served to differentiate Christianity from Judaism - the Biblical codex superseding the scroll of the Torah. See Fred Lerner. The Story of Libraries: From the Invention of Libraries to the Computer Age, London and New York, Continuum, 2009, p23.

4. Ted Striphas, The Late Age of Print: Everyday Book Culture from Consumerism to Control, New York and Chichester, Columbia University Press, 2009, pxix, pp15-16.

5. Hayles, *How We Think*, op. cit., pp241-2.

values, and its status in the contemporary discourses of textual media is no less problematic.

The political potentiality for a hybridized digital and print publication system is marked, for instance, in Robert Darnton's The Case for Books. Darnton speculates on the possibilities of a pyramidal structure of print and digital forms that would be surmounted by a paperback publication; the lower stories being comprised of contextual, theoretical, and pedagogical texts, as well as accumulating user commentaries. This accumulation would be accessible online and printable according to a reader's specifications. 6 Effectively, then, Darnton imagines this kind of hybrid publication, with its accessibility and configurability, as a democratizing form - an opening of the canonical, final text to interpretation and transformation. With some comparability, on the side of popular forms of online engagement, rather than scholarship as such, Henry Jenkins discusses the political problems of the 'hybrid media ecology' produced by the convergence of media forms within the digital environment. While Jenkins affirms user-based interaction within this scene as the possibility of reconstituting a critical public culture, it is also recognised that such interaction can be adversely conditioned by economic forces.⁷

Indeed this is a key issue for this collection, as it articulates the problematic relation between media forms and capitalism. In order to mark this relation in terms of different conceptions of hybridity, we might turn to Johanna Drucker's distinction between *hybrid aesthetics* and an *aesthetics of hybridity*. As Drucker argues: 'Hybrid aesthetics ... induces a self-consciousness into the very practices of critical thought that shifts its ground toward the subjective and non-totalizing'. In comparison, 'The aesthetics of hybridity, of posthuman and cyborg conditions, especially when posed as *the* language of new media, merely extended the premises of system-building thought'. Indeed, Drucker argues that the aesthetics of hybridity runs risks of serving the 'normalizing interests' of culture and capitalism.⁸ Hybrid aesthetics, on the other hand, opposes such totalizing systematization: it aims to reconfigure the traditional aesthetics of print media *and* the developing aesthetics of digital media by reflecting each upon the other.

This scene of hybrid publication, then, concerns material relations - technological, economic, and social - as much as it concerns the formal properties of any particular text and medium, and its constituent raw materials - paper, ink, silicon, and all the metals contributing to screen technologies being the obvious initial examples. Research on the materialities of text needs to hold to all these dimensions if it is to be adequate to the scene of hybrid media, as we show in the following section.

TEXTUAL MATERIALITIES

Let us start with a focus on paper and the materialities of textual inscription, both print and digital. In a late meditation on paper, Derrida opens for 6. Robert Darnton, The Case for Books: Past, Present, and Future, New York, Perseus Books, 2009, pp76-7.

7. Henry Jenkins, Convergence Culture: Where Old and New Media Collide, New York and London, New York University Press, 2006, pp290-1.

8. Johanna Drucker, SpecLab: Digital Aesthetics and Projects in Speculative Computing, Chicago and London, University of Chicago Press, 2009, p184, p183, http://doi.org/msv

inscription, a view that betrays the Cartesian underpinnings of our social imaginary of text and the book: 'On this commonsense view, paper would be a body-subject or a body-substance, an immobile and impassible surface underlying the traces that may come along and affect it from the outside', 'an inert surface laid out beneath some markings'. But paper, rather, partakes in that which it supports. It is a multi-sensory medium, 'it gets hold of us bodily, and through every sense'. It is, in fact, a 'multimedia'.9

critique the common view of paper as an inert support for active textual

9. Derrida, 'Paper or Me, You Know', op. cit., p42.

We can pursue this further through the pioneering research on textual materialism conducted by Johanna Drucker and Jerome McGann. Exploring the dynamic field of graphical inscription, Drucker, with some comparability to Derrida, argues that the notion of textual 'support' or 'ground' generates a hierarchy 'in which the base is subservient to the presumably more substantive text and graphical elements placed "on" it'. Against this, Drucker sets out to build a framework in which there is no a priori 'page' for graphical construction, but a mutually constituting arrangement of material elements working together in a dynamic system, where 'physical materials and the graphically expressive arrangement of verbal materials [are] integral parts of the semantic value of any text'. 10 Paper, screen, page, letters, words, typefaces, headers, footers, margins, spacing, and white space all contribute to the material field of meaning that is the text, and all deserve analytic attention.

10. Drucker, SpecLab, op. cit., p161, p162.

> But Drucker and McGann insist that thus far this description is still too much a literal or 'mechanical' materialism. As McGann puts it: 'for the scientist and scholar, the media of expression are primarily conceptual utilities, means rather than ends'. But 'To the imagination the materialities of text (oral, written, printed, electronic) are incarnational, not vehicular, forms'.11 That is to say, the textual materialism Drucker and McGann develop is 'emergent', for the arrangement of textual materialities requires the interjection of interpretation, of the reader, which renders the arrangement uncertain, 'quantum', or 'probabilistic'. 'Think of the page or screen', Drucker suggests, 'as a force field, a set of tensions in relation, which assumes a form when intervened in through the productive act of reading'. 12 Interpretation is not, of course, undetermined. McGann, after Bakhtin, suggests that a text is a 'discursive field' in which conflicting and overlapping expressive and graphic forms structure the meaning and experience of the text, with primary and latent effects, themselves ordered by readers' own competencies and experiences. But the point to stress is that this field of meaning is a product of many materialities - as much concerning a graphical inscription and material mesh as a semiotic system - and that such 'Textual fields arise co-dependently with interpretative action'.13 The purpose of critique and experiment is to bring all this into the interpretation of 'text'. Drucker and McGann's work at SpecLab (Virginia Tech's Speculative Computing Laboratory) is especially appealing in this regard because they have developed archival, interpretive, and communicative projects based in digital platforms that express, model,

the World Wide Web, New York and Basingstoke, Palgrave, 2001, p54.

Literature after

11. Jerome McGann, Radiant Textuality:

12. Drucker, SpecLab, op. cit., p164.

13. Jerome McGann, 'Texts in N-Dimensions and Interpretation in a New Key', TEXT Technology 2 (2003): 1-18, p4, p6.

14. For examples of these projects, too technically and ideationally complex and extend these ideas of emergent textual matter.14

These projects, broadly speaking, stand in opposition to the fetishisation of print in the digital context, as much as the misunderstanding of the functional possibilities of that latter realm. In Drucker's understanding, digital simulacra of the materiality of the codex (covers, pages, fonts and inks) are grossly reductive. They miss the way in which the formal organization of the codex functions as a *programme* for performative, imaginative (and thus 'virtual') interpretations. As much, they miss the specificity of digital media: the ability to record and mark 'the continual transformation of artifacts at the most fundamental level of their materiality - their code'. ¹⁵ If code is thus considered in a material sense, it is linked to another: as Drucker argues, 'the pattern of stored values on a silicon chip is ineluctably physical'. ¹⁶ We might also note here Hayles' understanding of the computer as an 'inscription technology' at the level of electronic polarities. ¹⁷

The complexity of this claim to the literal materiality of the digital demands closer attention; a point we will now pursue via Mathew Kirschenbaum's intersection with Paul de Man. Kirschenbaum makes a distinction between forensic materiality - based in the physical differentiation of materials at an atomic level - and formal materiality - based on the symbolic manipulation of 'bits' of information, which gives the impression of immateriality in the digital environment. Files appear to traverse the internet as discrete objects, yet in fact they are materially instantiated at every point of their transit, because every instantiation requires changes in polarities in digital memory forms. Each instantiation is thus subject to possible physical fluctuations in computer components that may cause symbolic degradation - that is, data corruption. In fact, then, the sense of the perfect transmissibility of digital files is an illusion created by 'hyper-redundant error-checking machines' - computer-to-computer communications programmes that reconstitute symbolic degradation by comparing instantiations of files, or 'packets' of data, for example.¹⁸ In this sense, then, the stability of formal materiality is superimposed on forensic materiality, yet this latter may interrupt the former where those error-checking routines fail. Thus, formal materiality 'is not an absolute term' - it is a hybrid term that indicates the problematic connection of the literal and symbolic.¹⁹ Hence, despite Kirschenbaum's selfreflexive distancing from de Man's articulation of formal materialism, there is in fact some comparability here: de Man's terms indicate an essentially meaningless and chaotic substratum that radically disrupts signification.²⁰ Such an understanding of materiality as a problematic resistance to meaning would also find comparison to the sense suggested by Derrida that the retreat of the page behind the mark is not merely passive, but indicates a resistance to the act of inscription.²¹ We might also note here McGann's citation of William Morris: 'You can't have art without resistance in the materials'. 22 Yet, if literal materiality is here associated with resistance, we should recognise that resistance is also an institutional matter for de Man - it concerns conflicts

for brief paraphrase, see the description of 'The Rossetti Archive', in McGann, Radiant Textuality, op. cit., pp10-19, and the description of the interpretive game 'Ivanhoe', in Drucker, SpeeLab, op. cit., pp65-97.

15. Drucker, *SpecLab*, op. cit., pp168-9, p173.

16. Ibid., p134.

17. N. Katherine Hayles, Writing Machines, Cambridge and London, The MIT Press, 2002, p24.

18. Mathew G. Kirschenbaum, Mechanisms: New Media and the Forensic Imagination, Cambridge, Massachusetts and London, The MTT Press, 2012, pp11-12.

19. Kirschenbaum, *Mechanisms*, op. cit., p13.

20. See Rodolph Gasché, 'In-Difference to Philosophy: de Man on Kant, Hegel, and Nietzsche', in Lindsay Walters and Wlad Godzich (eds), Reading de Man Reading, Minneapolis, University of Minnesota Press, 1989, p278.

21. See Derrida, 'Paper or Me, You Know', op. cit., pp42-3, p46-7.

22. McGann, *Radiant Textuality*, op. cit., p54.

23. See Paul de Man, 'The Resistance to Theory', in The Resistance to Theory, Minneapolis, University of Minnesota Press, 1986.

24. Originally published in 1982, Darnton's essay is reprinted in *The Case for Books*, op. cit.

25. Ibid., p180. For a recent critique of Darnton's thesis in favour of this more materialist understanding of the complexities of book production and consumption, see Claire Squires, Marketing Literature: The Making of Contemporary Writing in Britain, London, Palgrave, 2009.

26. See Richard Maxwell and Toby Miller, *Greening* the Media, Oxford, Oxford University Press, 2012.

27. Lucien Febvre and Henri-Jean Martin, The Coming of the Book: The Impact of Printing 1450-1800, D. Gerard (trans), London and New York, 1997 [1958]; Elizabeth L. Eisenstein, The Printing Press as Agent of Change, Cambridge, Cambridge University Press, 1980.

between interpretive cultural institutions.²³ We might think, then, that the literal organization of electromagnetic polarities in a computer chip is a *forming* of materiality that is directed by ideological forces, and of an already formed materiality; a material - silicon - whose value and meaning is clearly culturally and historically constructed. Hence, we need to consider the way in which such institutions of meaning *construct* concepts of materiality, and the way in which such constructions are themselves directed by wider cultural and economic forces, much as they may be resisted.

A clearer purchase on the place of these cultural and economic forces in the materialities of text can be gained if we draw back from the textual artifact and turn to consider the social relations and institutions within which material texts are produced and circulate. Robert Darnton's influential essay 'What Is the History of Books?' is a useful way in.²⁴ For Darnton, the proper object of study is the 'communication circuit' of books - the circuit through which books emerge and are distributed and consumed. It incorporates the author, publisher, printer, shipper, bookseller, and reader of a work, the latter completing the circuit since they influence the author before and after publication and because authors are themselves readers, a practice through which they form notions of style, genre, and the literary enterprise. Darnton's thesis is not wholly adequate for our purposes, for it seeks to model the circulation of *meaning*, and in so doing it abstracts from the many competing forces and agendas involved in the production and consumption of books. But it indicates nonetheless the possibilities for thinking a more complex and discontinuous circuit, where the circulation of meanings form 'relations with other systems, economic, social, political, and cultural, in the surrounding environment'.25 It complicates this picture considerably, but does not overturn its logic, to register that the communication circuits of digital media include a broad range of new features - social media platforms and marketing conglomerates, for instance, or, to highlight the destructive ecological dimensions of communication circuits, the server farms and precious metal mines that accompany the flows of digital information.²⁶

Darnton's essay in turn recalls Lucien Febvre and Henri-Jean Martin's canonical work in the history of the book, *The Coming of the Book*, and Elizabeth Eisenstein's *The Printing Press as an Agent of Change.*²⁷ These works share an understanding that while the *meaning* of texts must certainly be a central focus of research, their impact is considerably broader, for texts are enmeshed in manifold social and technical relations, of which they are both product and bearer (relations that do of course also impact upon the meaning of texts). The most influential example here is Eisenstein's argument that the printing press and 'print culture' was an agent of standardisation, dissemination, and preservation that had significant impact on the progress and intellectual structure of the Protestant Reformation, the Renaissance, and the Scientific Revolution. It is an intriguing, if contested, feature of Eisenstein's argument that the specific materialities of print culture served as it were to *dematerialise*

the medium of the book, as effects of stabilisation meant that, as Daniel Selcer aptly presents Eisenstein's thesis, 'texts were no longer defined by the particularity of their material form':

Rather, their ubiquity, their (in principle) infinite reproducibility, and the stabilization of the conventions governing their format and appearance allowed for what we might call their *dematerialization*, whereby particular books and other printed matter became mere exemplars of a now inviolate authorial content that reappeared as an identical page each time another object with the same title and printing-house genealogy was examined or a new print run undertaken.²⁸

Such dematerialising reconstitution should here remind us of Kirschenbaum's understanding of the merely apparent immateriality of digital files, and of the socio-economic forces implicated in such mechanisms.

Keeping with this theme, interest in the social forms of the materialities of text need not stay only with the immediate features of the communication circuit but may extend into the broader circulation of cultural values. For Deleuze and Guattari, for instance, the dematerialised nature of the modern book is a product of an essentially religious semiotic structure inherited from Judaic, Christian, and Islamic culture. Here the 'classical' book functions as a self-enclosed totality which is constituted through an imitative relation to the world, of which the book is the agent of truth and the location of authority the 'book of scripture' is thus a mimetic complement to the 'book of nature', and the encyclopaedic pretensions of the book attains spiritual unity with the totalizing word of God.

Nonetheless, sympathy for the dematerialisation thesis should not risk in over-playing it. Indeed, in response to Eisenstein, Adrian Johns in The Nature of the Book makes the convincing case that the complexities of production and consumption associated with the explosion of print may, rather, have 'destabilized texts', to quote Selcer again, by 'opening a myriad of new avenues through which readers may approach texts and by rendering more complex the chain of sovereign authorial production that connects authors to their texts and texts to their readers'.29 If we think in terms of broad patterns of social determination - Eisenstein's standardization of textual form, Deleuze and Guattari's classical book as 'image of the world' - we need also, then, to simultaneously employ a fine grained appreciation of the immanent and particular materiality of the social life of textual media; a situation that calls for close attention to the specificities of media form, as reciprocally constituted with text, or what Hayles calls 'media-specific analysis'. 30 That is very much the shared concern of the essays assembled here; but before introducing them we will sketch some general features of the changes to the materialities of text that are associated with digital media, for the digital is a significant part of the matrix within which their interventions occur.

28. Daniel Selcer, Philosophy and the Book: Early Modern Figures of Material Inscription, London and New York, Continuum, 2010, pp13-14.

29. Selcer, *Philosophy* and the Book, op. cit., p15.

30. Hayles, Writing Machines, op. cit., pp29-34.

DIGITAL TEXTUAL MATTER

31. Roger Chartier, 'Languages, Books, and Reading from the Printed Word to the Digital Text', *Critical Inquiry* 31 (2004): 133-152, http://doi.org/fbx8nz

32. Ibid., p142.

33. Hayles, *How We Think*, op. cit., pp55-79.

Following Roger Chartier, we can examine these changes along three axes: the order of discourse, the order of reasoning, and the order of property.³¹ The most fundamental change according to Chartier is the shift in the order of discourse. The order of discourse for pre-digital print culture is a product of three interlaced innovations: the codex, which establishes the book as the basic unit of written work and as a textual object distinct from all others; the unitary work, which integrates book, work, and author; and the printing press, which generalizes print and the book as the dominant technology for the reproduction of the written word. This structure is called into question by digital media. Consuming diverse textual forms through the one medium of the computer screen, we now experience a 'textual continuity' that is no longer differentiated on the basis of its materiality. Scholarship on the basis of more recent experience would problematise Chartier's thesis here to the degree that it implies an undifferentiated material field of digital text or, even, that digital text lacks specific materiality. As we noted above, all text is materially instantiated, whether it is printed on a page or stored in silicon. But Chartier captures here the definite experience that text has a new mobility across platforms, considerably less bound and identified by any one media form or publishing technology. By the same token, the identity of an individual work becomes less distinct, and instead we are more likely to consume 'fragments' of a work. Chartier and Hayles both point to the rise of the database in this regard: 'one might say that in the digital world all textual entities are like databases that offer fragments, the reading of which in no way implies a perception of the work or the body of works from which they come'. 32 This is associated with an oft noted change in the mode of reading, where the 'close reading' of conventional, immersive narrative is joined by new forms that Hayles names 'hyper reading' (scanning, skimming, and the distracted reading of many data streams at once) and 'machine reading' (the use of computer algorithms to analyse patterns in large volumes of text).³³ While concerned about the reduction in the capacity for close reading that is attendant with the rise in skills and neurological habits of hyper reading, Hayles' distinctive contribution here is to make the case for the integration of all three modes toward an expanded repertoire of reading adequate to diverse media environments.

As regards Chartier's second axis, the *order of reasoning*, he argues that the hypertextual affordances of digital media introduce fragmented and nonlinear reasoning into an authorial practice previously structured by the linear inscription required by the page and the book. Recent work in the digital humanities has been especially inventive in this regard, moving considerably beyond advocacy for hypertext (which functioned for a time as something of a fetishised value in digital media theory) into making use of the computational and associational capacities of digital media to construct critical practices that are starting to have significant impact on the established methods and

domains of humanities research. We have already noted the significance of SpecLab's experiments in this regard, but, more generally, Hayles identifies six emerging features of such knowledge work in the digital humanities: a dramatic increase in the scale of research enabled by digital methods for the analysis of text; the formation of new dialogues between critical theory and design and programming practice; the necessity of collaboration for projects that now draw on multiple fields of knowledge and practice; the rise of the database as method and object of research; multimodal scholarship incorporating visual images, graphics, animations, and other digital effects; and practical engagement with computer coding.³⁴

The role or place of the reader too is changed by the new order of reasoning, since digital access to research materials means that the reader is 'no longer constrained to trust the author; he or she can in turn carry out all or part of the author's research'. This is certainly part of the intention of SpecLab's projects like Ivanhoe, where the reader can access documents and other bibliographic materials associated with a particular novel and its critical reimagining and textual transformation in the game. Moreover, insofar as readers can also become participants in the Ivanhoe game, they do so in a decentred fashion, partaking only in character and in so doing 'encounter themselves as part of the subjects they address and the problems they want to solve'. Granted, there are significant problems with the discourse and practice of user participation associated with Web 2.0 and social media, but this should not blind us to the opportunities that projects in digital humanities and speculative computing open up for progressive intervention in the structures of readership and the means of textual production.

Chartier's third feature of digital transformation concerns the *order of property*. As the digital text becomes an 'open work' allowing for reworking of text by the reader, this leads, Chartier suggests, 'to the disappearance of the name and presence of the author because the text is constantly modified by a multiple and collective writing'.³⁷ This we find to be the least convincing of Chartier's theses, along with his related point that the property form of copyright - dependent as it is on the identity of the work - is seriously challenged by the collaborative and malleable nature of digital text. Digital media undoubtedly contain a considerable potential in this direction, and we champion the possibility for a politics of collaboration and anonymity in digital textuality. But the structures of authorship and copyright appear if anything to be emboldened and extended today by recent developments in proprietary software and digital marketing. And so the question of the order of property in digital media is one we will pursue in a different direction to Chartier, through an understanding of the place of capitalism in the materialities of text.

PUBLISHING CAPITALISM

There is a strong tendency in the popular imaginary to see books and the

34. Ibid., pp23-54.

35. Chartier, 'Languages, Books, and Reading from the Printed Word to the Digital Text', op. cit., p143.

36. McGann, 'Texts in N-Dimensions', op. cit., p13.

37. Chartier, 'Languages, Books, and Reading from the Printed Word to the Digital Text', op. cit., p144. 38. See Laura J. Miller, Reluctant Capitalists: Bookselling and the Culture of Consumption, London and Chicago, University of Chicago Press, 2007.

39. Febvre and Martin, The Coming of the Book, op. cit; Striphas, The Late Age of Print, op. cit.

40. Striphas, The Late Age of Print, op. cit., p105, quoting from Robert Spector, Amazon.com: Get Big Fast, New York, HarperBusiness. 2000.

41. Striphas, The Late Age of Print, op. cit., p102.

42. Darnton, The Case for Books, op. cit. At the time of writing, the latest status of the legal challenge to Google Books is covered in Alison Flood, 'US Authors Seek Damages in Google **Books Copyright** Row', the Guardian 7 August 2012, http:// www.guardian.co.uk/ books/2012/aug/07/ authors-damagesgoogle-bookcopyright

43. Ted Striphas, 'Acknowledged Goods: Cultural Studies and the Politics of Academic Journal Publishing', Communication and Critical/CulturalStudies 7, 1 (2010): 3-25, http://doi.org/ d9qd9s

44. Ibid.

culture of text as forms and practices that transcend the realms of capital.³⁸ But this is far from true; for the codex has been deeply entwined with the emergence and development of the capitalist commodity. The printed book was itself the first mechanically produced, standardised and reiterable mass commodity. Publishing has subsequently been a prime mover in industrial innovation - in the instantiation of the hourly wage, consumer credit, and the privatisation of language through copyright - and it remains today fully enmeshed in the latest technological developments.³⁹ Take Amazon.com, for example. Placing the company's order-fulfilment facilities at centre stage, Ted Striphas shows in The Late Age of Print how Amazon has been an industrial pioneer in the integration of computer-controlled warehousing and inventory, sorting machinery, and labour surveillance in the creation of a "spectacularly capital-efficient" just-in-time operation'. 40 It is telling that Jeff Bezos' decision to found Amazon on the sale of books was largely driven by his appraisal of the advanced capitalist structure of books and the book industry: 'Books, he reasoned, were "more meticulously organized" than almost any other type of consumer good owing to the book industry's decision to adopt the ISBN twenty-five years earlier'. 41 We could also consider Google Books, where the world's largest library is being assembled under monopoly conditions. The surprise early success of the legal challenge to Google only goes so far to assuage our concern, with Robert Darnton and others, that Google's commercial interests will overwhelm the public gain that such a digitization project promises.42 But it is more pertinent to this journal issue to follow Striphas and look, closer to home, at the capitalisation of the journal publishing industry and consider how this has impacted on the discipline of cultural studies.

The dominant journal publishing firms are Reed Elsevier, Springer, Wiley-Blackwell, and Taylor and Francis/Informa, who publish about 6,000 titles between them. The trend toward consolidation that this list indicates is linked to price inflation: the average price of a Taylor and Francis/Informa cultural studies journal is, for example, more than three and a half times that of one published by Duke University Press.⁴³ As such consolidation and inflation proceed apace, academic integration with this industry through research publication, and the labour of peer review and editorial, produces a marked disjunction. This concerns the difference between the claims of cultural studies to be a reflexive and critical discipline committed to the broad circulation and politicisation of knowledge, and a publishing practice that is increasingly exclusive and skews university funding toward the profits of multinational corporations.44 Forays of the publishing industry into the control of digital text through proprietary software will of course further consolidate the commercial capture and constraint of journal publishing. The picture is not, however, all gloomy in this regard. From the ongoing academic boycott of Elsevier to the spread of 'open access' publishing, it is clear that academics in diverse disciplines are not only questioning the commercial constraints of publishing but also developing alternative models. ⁴⁵ Open Humanities Press stands out here as an example, but we would mention also smaller presses like Punctum Books, re.press, Open Book Publishers, and Minor Compositions; all of which employ an open source business model where books are simultaneously available for free download and purchasable hard copy.

The intimate relation between capital and academic publishing has significant effects, then, on the structure of research, and this is part of the broader neo-liberalisation of the university. But it is amidst more popular arenas that the transformative effects of capital on materialities of text become most striking. While publishing practice was once seen 'only occasionally, out of the corner of one's eye', as Andrew Murphie puts it, it is now best understood in the broadest terms as an immanent feature of social life: 'Publishing is now a generative, recursive network of events, with multiple forms of feedback into the ongoing mutation of forms of publishing themselves'. As we participate in Facebook, Twitter, blogging, and numerous social media and web publishing platforms, it is perhaps no great exaggeration to say that 'Everyone is now a publisher' in one sense or another. 46 Murphie argues in McLuhanite vein that, to understand this condition, content should be put aside and initial focus should be on the effects of publishing practice and media on social, somatic, and psychic formations. What do we find when we do this? In the case of the blog, Jodi Dean argues in *Blog Theory* that blogging constructs a techno-cultural field where textual expressions are severed from their content and commitments, and converted into quantitative values and graphic representations that themselves become the principal source of value (value both personal and affective, for the blogger, and commercial, for the marketing economy of attention). The more we blog, it seems, the more what is blogged tends toward abstraction, and the evacuation of consequence save for the perpetuation of communication - 'whatever blogging' as she calls it. The technical structure of posts, hits, and links plays its part here:

The measuring and counting, the hits and rankings, remind bloggers that we are set in intensive, reflexive, communication and entertainment networks. It's as if the compulsion to make the mass speak, to poll and survey it, now takes whatever being as its target. Blog stats don't track truth or meaning. They track blogging, the addition of posts, responses, and page views. Differently put, they track the fact of the spoken as they direct us away from what is said.⁴⁷

These patterns of whatever blogging are of course caught up in broader dynamics of capital and control. Consider how Web 2.0 functions in the capitalisation of communication, as public textual production is incited, formatted, data-mined, profiled, and monetized for private profit. Or consider the proximity of whatever blogging to neoliberal governance - the

45. Gary Hall,
Digitize This Book!
The Politics of New
Media, or Why We
Need Open Access
Now, London
and Minnesota,
University of
Minnesota Press,
2008; For the
Elsevere boycott
see: http://
thecostofknowledge.
com/

46. Andrew Murphie, 'Ghosted Publics: The "Unacknowledged Collective" in the Contemporary Transformation of the Circulation of Ideas', *The Mag.net Reader 3*, Alessandro Ludovico and Nat Muller (ed), London, OpenMute, 2008, p102, p105.

47. Jodi Dean, Blog Theory: Feedback and Capture in the Circuits of Drive, Cambridge, Polity Press, 2010, pp88-89.

48. For aspects of these arguments see Robert W. Gehl, 'The Archive and the Processor: The Internal Logic of Web 2.0', New Media and Society 13, 8 (2011): 1228-1244; Greg Goldberg, 'Rethinking the Public/Virtual Sphere: The Problem with Participation', New Media and Society 13, 5 (2010): 739-754; Hall, Digitize this Book!, op. cit.

49. http:// archivingcultures.org This project is part of the University of Westminster's Institute for Modern and Contemporary Culture, and is supported by the University's Department of English, Linguistics and Cultural Studies.

self-enterprising compulsion to 'participate'; the depoliticising fixation on the 'new' and the 'now'; the modelling and management of populations as meta-stable data. 48 The communication circuits of digital media have become complex indeed.

THEMES, CONTRIBUTIONS, AND INTERVENTIONS

It is within this field of convergent and conflicting media, necessarily hybrid and complex within themselves, and the issues of the problematic relations between formal and institutional materiality, that this collection resides. In this context, the printed version of this journal issue, in contiguity with the problematic duality indicated in its title, began in the form of an online colloquium, which was hosted and archived by the online and offline research events and publications project 'Archiving Cultures'. 49 Using the Wordpress platform for this event allowed for the posting of participants' abstracts and papers, and for commentary on such to be uploaded by users. The aim of the online colloquium was to allow a sense of the remits of the collection, and the articles constituting it, to form, as well as facilitating the development of the editorial process. But it was also designed, in a more experimental sense, to generate thought concerning the differences in communication provided by synchronous, face to face discussion and asynchronous textual engagement, whether these are digitally mediated or not. The sequence of the combination of the two components of this project, from digital to print forms (notwithstanding the existence of this journal in digital form also), while ironically reversing the apparent shift in textual culture from the codex to the net, was not intended as a nostalgic return to the notion of the book. Rather, it figures an attempt to render change in the understanding of the codex form, through its complex relations to the digital, as much as an attempt to render change in the understanding of the digital text by a recursive analysis through print. In order to provide a sense of how the articles constituting this collection engage with this doubled recursion, and in order to summarise their remits, we will here provide a series of particular issues that are also designed to provide initial linkages between its component articles.

We might begin with the relation between digital and traditional media as it appears in Johanna Drucker's essay, 'Diagrammatic Writing', which concerns how an understanding of the spatial and visual qualities of written expression could be utilized in order to develop a more refined, critical, and inventive organization of screen-based information, considered as a form of poetics. This turn toward the complexity of page space can be contextualised through Drucker's argument that the recursive reading experience of the printed book is considerably more non-linear than the simple fact of linking pages in a horizontal progression, for all the talk of hypertext as a liberation from the linear structure of the book. Relations between traditional and digital media also concern Richard Burt's essay, 'Life Supports', which combines analysis of the effects of the construction of page-space and the codex form with the way in which media are enmeshed within the construction and control of individual subjects. In this context, Burt discusses the function of a number of book and book-like forms - the codex, the wallet, and the digital passport - through Derrida's writings in *Paper Machine*, among others. At issue here, then, are questions of the relations between the subject and the state, as they are mediated by such textual-archival forms; these mediations being contextualised through issues of concentration, holocaust and diaspora. In development of these themes, Burt turns, toward the end of his essay, to Adorno's thought on the relation between emigration and the physical degradation of books, and the phenomenology of paratexts.

This attention to the materialities of the book form and the complication of the traditional image of its physical and ideational unity might then be linked to Hanna Kuusela's discussion of the way in which the digital circulation of a novel's paratexts may determine its popular and critical understanding, as much as its marketisation. In her essay, 'On the Material Construction of a Literary Work', Kuusela's method is to analyse the scene of the technological forms that may construct the generation of interpretive meaning through the lens of Barthes' distinction between the open *text* and the totalized *work*, and the tendency, in the digital sphere, toward the closure of the latter. The discussion thus significantly and productively problematises that unreflective image of digital media as the vehicle of decentralization and differentiation.

This problem, of the homogenizing effects of capitalised media, and possibility of constructing through them some kind of cultural difference, is the remit of Janneke Adema and Gary Hall's discussion of the interconnected issues in the publication of printed artists' books and digital open access texts. Here, despite the radical attempts of the artists' book in the 1960s and 1970s to change the rules of art, Adema and Hall argue that they nevertheless came to support a number of entrenched institutions of cultural and economic control. This example, then, provides a historical sense of the problems facing radical open access publishing, specifically as it relates to the commercial incorporation of open access by predatory publishers. This issue of the relation between art and capital is also the subject of Sas Mays' essay, which discusses the figure of the archive in that part of digital humanities broadly defined in terms of literary, aesthetic discourses. Given a shared attention to deconstruction, this essay also intersects with Burt's engagement with texts (as specifically archival forms) and the construction of subjectivities, as an issue of the relation between the archive and the humanist subject. What is at stake in Mays' essay is a specific conceptualisation of the problematic relation between humanism and capitalism, as it is articulated in terms of the aesthetic function of digital archives.

The attention to the digital environment and its operations of control and determination has a key place too in 'Materialities of Independent Publishing', a conversation chaired by Nicholas Thoburn between practitioners of

independent political media - Pauline van Mourik Broekman, Jodi Dean, Sean Dockray, Alessandro Ludovico, and Dmitry Vilensky. The materialities of text are here approached from critical perspectives derived from the concrete experience of publishing, as this pertains to the online archive and conversation platform AAAAARG, the print and digital publications of artist and activist group Chto Delat?, the blog *I Cite*, and the hybrid print/digital magazines *Mute* and *Neural*. As with Adema and Hall's discussion of the artists' book, this conversation seeks to bring the aesthetic forms of publishing to the foreground, while probing the limits of independent publishing in new media and neoliberal environments.

A number of the essays constituting this collection thus engage explicitly with the complex relations between print and digital media. Other contributors focus on one medium or the other, but in a way that, in the context of the collection, provides markers for further critical understanding of relations between the book and digital texts. Ted Striphas and Mark Hayward concentrate on the Birmingham Centre for Contemporary Cultural Studies' production of printed 'grey literature', a Libraries and Information Sciences term referring to 'pamphlets, conference proceedings, reports, white papers, newsletters, self-published journals, and other types of fugitive publications that lack high production values, the endorsement of blind peer review, or both'. This is at once a speculative and materialist analysis, for it considers 'ways in which textual production in cultural studies might be reformulated to allow for more productive engagements with the contemporary conjuncture', and de-emphasises 'the conceptual and biographical aspects of the work that took place at the Centre ... to underscore instead the form and function of that work'. Issues of the circulation, function, and authority of such grey literature are, of course, key to the digital environment - not only in the context of popular forms of publication and commentary (blogging, posting, etc), but also in the context of scholarly work, as is indicated in Darnton's affirmation of the digital collation and archiving of grey literature.⁵⁰

50. Darnton, *The Case for Books*, op. cit., p50.

Conversely, Sanjay Sharma concentrates on the construction of racialised subjectivities and collectivities in the digital medium of Twitter. The argument here is that 'techno-cultural assemblages - digital networks, communication platforms, software processes - are constitutive of online racialised subjectivity and activity'. It is an approach that understands race as an 'assemblage' of connections, informatic flows and affects. Rather than merely gesture toward the associational and communicative properties of new media, Sharma takes up the materialist theme of this journal issue in focusing on the particular affordances of Twitter (its network structure, trending algorithm, and hashtags), arguing that it is only through such close attention to media form that a fully contemporary understanding of race can be developed. This analysis of the digital sphere could clearly be reflected back on the assemblages of traditional media forms, and the complex relations between them, in the context of colonial and postcolonial power. As much, this analysis

could be extended into the emerging presents of contemporary capitalist neocolonialism, and the multiplicities of digital communication platforms, civilian, military, and interstitial, that operate in this context.

It is at this point, of the opening of possibilities of connection and understanding beyond those explicitly registered here, that we should draw this introduction to a close. We have remarked more than once upon the importance of assessing the political dynamics and effects of media forms, as well as the need to understand theories of textual matter as themselves expressive of tacit or explicit political positions. But this emphasis also gestures toward another key feature of this project: a concern to foreground practical interventions in contemporary materialities of text. In that respect we understand this issue of New Formations to carry something of the political imperative of cultural studies - the imperative to grasp, interrogate, and critically re-imagine the social world while also intervening within it. Cultural studies' close attention to the 'popular' in this regard is important and necessary, but we do not consider that to preclude the significance of interventions in specialist or technical fields, as a number of articles in this collection attest. Finally, then, the issues articulated by the component essays of this collection matter because they collectively open, in their disparate ways, the difficulties and potentialities for developing *praxes* of socio-cultural engagement in the contemporary scenes of technological knowledge, memory, and communication.

SHELF-LIFE: BIOPOLITICS, THE NEW MEDIA Archive, And 'Paperless' Persons

Richard Burt

Abstract Through the writings of Adorno, Benjamin, and Derrida, and the films of Alain Resnais, this essay considers the construction of the subject through statesanctioned forms of inscription - passports, for example. Such forms, traditionally speaking, are aspects of the technologies of the book - the biblion - and they indicate that 'biopolitics' merges with bibliopolitics. Indeed, the subject is a matter of 'shelf-life': it is constructed through archival forms of collection; by the bibliotekhe - the 'slot' or shelf where documents are placed. Yet peoples and texts may not fit normative taxonomies, in traditional and digital media contexts. In the context of historical diasporas, for example, we might recall Derrida's argument that, like the peoples referred to as the sanspapiers, those without state-sanctioned documents, we are all becoming 'paperless', as external memory becomes virtual. The essay is concerned, then, with what happens when the subject is no longer substantiated by traditional legal papers, but by digital files and memory chips; while it argues also that the distinction between traditional and digital media cannot be reduced to a linear history.

Keywords biopolitics, media, archive, paper, passport, Derrida, Resnais, Adorno, Benjamin, Agamben, Nazi concentration camp, library

It is possible that I now know something that he did fear. Let me say how I arrived at this assumption. Well inside his wallet was a sheet of paper, folded long since, brittle and broken along the creases. I read it before I burned it. It was written in his finest hand, firmly and evenly; but I perceived right away that it was only a copy. 'Three hours before his death', it began. It was about Christian IV. I read it several times before I burned it ... I now understand very well, by the way, that a man will carry, for many a year, deep inside his wallet, the account of a dying hour ... Can we not imagine someone copying out, let us say, the manner of Felix Arver's death? ... He became perfectly lucid, and explained to her that the word was 'corridor' not 'collidor'. Then he died.

Rainer Maria Rilke, Notebooks of Malte Laurids Briggs

In his text, the writer sets up house. Just as he trundles papers, books, pencils, documents untidily from room to room, he creates the same disorder in his thoughts. They become pieces of furniture that he sinks

1. Sigmund Freud, 'Note upon the "Mystic Writing Pad", in The Standard Edition of the Complete Psychological Works of Sigmund Freud, William Strachey (ed and trans), London, Hogarth Press, 1961, Vol. 6, pp226-32; Jacques Derrida, 'Freud and the Scene of Writing', Yale French Studies 48 (1972): 74-117, republished in Jacques Derrida, Writing and Difference, Alan Bass (trans), Chicago, Chicago University Press, 1978, pp196-231; Jacques Derrida, Archive Fever: A Freudian Impression, Eric Prenowitz (trans), Chicago, University of Chicago Press, 1998, pp13-19, henceforth \widehat{AF} in the text; and Jacques Derrida, Paper Machine, Rachel Bowlby (trans), Stanford, Stanford University Press, 2005, pp48-50, henceforth

into, content or irritable. He strokes them affectionately, wears them out, mixes them up, re-arranges, ruins them. For a man who no longer has a homeland, writing becomes a place to live. In it he inevitably produces, as his family once did, refuse and lumber. But now he lacks a storeroom, and it is hard in any case to part from leftovers. So he pushes them along in front of him, in danger of filling his pages with them. The demand that one harden oneself against self-pity implies the technical necessity to counter any slackening of the intellectual tension with the utmost alertness, and to eliminate anything that has begun to encrust the work or to drift along idly, which may at an earlier state have served, as gossip, to generate the warm atmosphere conducive to growth, but is now left behind, flat and stale. In the end, the writer is not even allowed to live in his writing.

Theodor Adorno, 'Memento' in Minima Moralia

In Jacques Derrida's later work one frequently encounters notable semantic shifts in terminology with regard to writing, storage devices, the archive, and paper, as he addressed the effects of the shift from the era of paper to multimedia technologies of writing. In Archive Fever, Derrida returned to his essay on Sigmund Freud's 'Note upon the "Note Upon Mystic Writing Pad" in 'Freud and the Scene of Writing' to ask what difference it would make to psychoanalysis had Freud sent faxes and email rather than postal letters, and in Paper Machine, Derrida returns to his rereading of Freud in Archive Fever to ask what difference the shift from paper as a material support to virtual 'paper' might make. Moreover, in 'Typewriter Ribbon: Limited Ink (2)', Derrida returned to the account of archive fever he had formulated 'elsewhere' in Archive Fever.² The writing machine and typewriter ribbons, the answering machine, word processor, tape recorder, and other storage devices, such as the photograph, and the 'subjectile', the material support or 'technical substrate', all came to matter increasingly to Derrida in ways they did not in his earlier accounts of non-phenomenal arche-writing, the trace, and the supplement to which he contrasted phenomenal 'writing in the general sense' (hieroglyphs, ideograms, alphabets, and so on).3

While rethinking the archive in relation to new media, Derrida was also rethinking, on a different channel, a biopolitical and ontological question about paper documents that put deconstructive pressure on seemingly unquestionable oppositions between materiality and virtuality (or spectrality), the human and the machine, the human and the animal, the document and the work of art (*PM*). In a chapter of *Paper Machine* entitled 'Paper or Me, You Know... (New Speculations on a Luxury of the Poor)' Derrida deconstructed a distinction between persons with papers and persons without them, 'undocumented' or *sans-papiers* in French:

The 'paperless' person is an outlaw, a nonsubject legally, a noncitizen or

PM in the text. See also Derrida's parallel comments on bank notes, checks, and credit cards in 'Priceless', Negotiations: Interventions and Interviews 1971-2001, Elizabeth Rottenberg (ed and trans), Stanford, Stanford University Press, 2002, pp326-328. Derrida earlier returned to 'Freud and the Scene of Writing' in The Post Card: From Socrates to Freud and Beyond, Alan Bass (trans), Chicago, University of Chicago Press, 1987, pp262; 346; 407.

- 2. Jacques Derrida, 'Typewriter Ribbon: Limited Ink (2) ("within such limits")' in Tom Cohen et al (eds), Material Events: Paul de Man and the Afterlife of Theory, Minneapolis, University of Minnesota Press, 2001, pp302-03, p359, n11. This essay was published in Papier machine, Paris, Galilée, 2001, 35-150 but was not included in the English Paper Machine, op. cit.
- 3. On the 'technical substrate' or subjectile as a material support, see Jacques Derrida, Archive Fever, op cit., p25; on archewriting and writing in the general sense, see Jacques Derrida, Of Grammatology: Corrected Edition, Gayatri Chakravorty Spivak (trans), Baltimore, John Hopkins University Press, 1997, pp6-26.

4. Jacques Derrida, 'Paper or Me, You Know... (New Speculations on a Luxury of the Poor)', henceforth PorM in the text, in Paper Machine, op. cit., pp60-1. See also Derrida, 'Machines and the Undocumented Person', ibid, pp1-3; Derrida, 'Derelictions of the Right to Justice (But What Are the "Sans Papier" Lacking?)' $in \ Negotiations:$ Interventions and Interviews 1971-2001, op. cit., pp133-46; and Jacques Derrida H.C for Life, That Is to Say... Laurent Milesi and Stefan Herbrechter (trans), Stanford, Stanford University Press, 2002, p137 and p171, n123.

5. Ibid., p16. The Postscript is written on 'the rim of Mount Vesuvius, right near Pompeii', ibid, p98.

6. Derrida presumably puts 'paper' in scare quotes in order to indicate that the literal referent is materialized differently in various kinds of identification documents.

7. See also Richard Burt, 'Read After Burning: Derrida Destroyed ... Derrida Published', Glossator, special issue entitled 'Going Postcard: The Letter(s) of Jacques Derrida' Michael O'Rourke (ed), Volume 7, Fall 2012; and Richard Burt, 'Putting Your Papers in the citizen of a foreign country refused the right conferred, *on paper*, by a temporary or permanent visa, a rubber stamp. The literal reference to the word *papers*, in the sense of legal justification certainly depends on the language and uses of particular national cultures (in France and Germany, for instance). But when in the United States, for example, the word *undocumented* is used to designate analogous cases, or *undesireables*, with similar problems involved, it is the same axioms that carry authority; the law is guaranteed by the holding of a 'paper' or document, an identity card (ID), by the bearing or carrying [*port*] of a driving permit or a passport that you keep on your person, that can be shown and that guarantees the self, the juridical personality of 'here I am'. We shouldn't be dealing with these problems without asking what is happening today under international law, with the subject of 'human rights and the citizen's rights', with the future or decline of nation-states.⁴

At the end of this long passage, Derrida concludes 'we are all, already, "paperless" people' (PorM, p61)). After having insisted that he and other supporters of the 'paperless' people are not 'calling for the disqualification of identity papers or of the link between documentation and legality' and having pointed out that 'when we support them [paperless people] today in their struggle, we *still* demand that they be issued papers', Derrida adds that what he metaphorically calls 'the earthquake' of virtual, paperless media 'touches nothing less than the essence of politics and its link with the culture of paper. The history of politics is a history of paper, if not a paper history' (PorM, pp60-1). (Derrida uses the analogy of the 'earthquake and ... the après-coups of its aftershocks' in Archive Fever as well).⁵ Clarifying the force of the final subordinate clause qualifying the meaning of a 'history of paper' (not the same thing as 'a paper history'), Derrida restates his earlier point that 'although the authentication and identification of selves and others increasingly escapes the culture of paper ... the ultimate juridical resource still remains the signature done with the person's "own hand" on an irreplaceable paper support' (PorM, p57).

In this essay, I will ask what it means for people to default to the condition of being paperless inside of the 'earthquake' of new media, when the archive is no longer founded on paper supports, when files go virtual, when the state and paper, the reading of a text and its storage, are decoupled yet inseparable: the distinction between paperless and paper media cannot rightly be reduced to a linear history in which an age of a material medium is replaced by the age of a virtual, or digital one. As Derrida acutely observes, the unlimited upheaval under way in archival technology ... should above all remind us that ... archival technology no longer determines, will never have determined, merely the moment of the conservational recording, but rather the very institution of the archivable event. It conditions not only the form or the structure that prints but also the printed content of the printing: the *pressure* of the *printing*,

the *impression*, before the division between the printed and the printer. This archival technique has commanded that which in the past even instituted and constituted whatever there was as anticipation of the future' (AF, p18). The archive is a structuring structure that both preserves and destroys what it stores, not a particular building site with a particular collection of papers, say the Bibliothèque Nationale. Thus, in this article, I read 'paperless' people in light of the impact Derrida thought that new media had on the archive with regard to its 'archive fever', or 'anarchivity', a word he coins in his book, Archive Fever: A Freudian Impression, to mean 'the violence of the archive itself, as archive, as archival violence', the radical destruction of the archive and the remains of what can never be archived, the ash of the archive (AF, p6, p10, 19, p7).7 I will then be in a position to elaborate and examine various ways in which what Foucault and Agamben call biopolitics merges with bibliopolitics, or what I will come to define as 'shelf-life'. This relation will be discussed through the passport's dual function as identification papers and as a kind of book; through Alain Resnais's parallel film documentaries Nuit et broulliard (Night and Fog, 1955), devoted to the Holocaust, and Toute la memoire du monde (All the Memory of the World, 1956), devoted to the Bibliothèque nationale de France (National Library of France); and through autobiographical essays by Walter Benjamin and Theodor Adorno about shelving and shipping their books.8

Ι

How is a 'paperless' person, someone whose support takes the form of identification papers, caught up in new kinds of virtual biometrics and bioprocessing? What kind of virtual life supports might international law offer to replace paper supports? How are these supports a problem of storage, and of writing as self-storage, or what I will call shelf-life? I want to address these questions by turning to Derrida's account of the thing that holds papers together, namely, the portefeuille, or wallet. Taking this turn means that we begin to grasp what I call the 'hold' of reading, or in this case the holdover of readings to be continued. Derrida's account of the wallet is textually deferred and placed in the storage unit of an endnote (PM, pp188-9, n29). However, this endnote does not follow Derrida's first mention of the wallet at the end of a very long parenthetical comment regarding paper: '(Indeed a reflection on paper ought in the first place to be a reflection on the sheet or leaf [feuille] ... We should also, if we don't forget to later, speak about the semantics of the portefeuille, at least in French)' (PM, p14). Derrida's endnote begins as if taking up where his parenteheical remarks left off: 'I had forgotten to come back to the French word portefueille [wallet]'. A note does follow the parenthesis that defines the meaning of Portefeuille (PM, p186, n14). But this note has been added by the translator, who seems to forget that Derrida remembers he forgot

Order: The Matter of Kierkegaard's Writing Desk, Goethe's Files, and Derrida's Paper Machine, or the Philology and Philosophy of Publishing After Death', *Rhizomes* 20 (Summer 2010).

8. Giorgio Agamben, Homo Sacer: Sovereign Power and Bare Life, Daniel Heller-Roazen (trans), Stanford, Stanford University Press, 1994. In a way that superficially resembles Derrida's conclusion that we are all already paperless people but does not theorize virtual media, Agamben writes 'If today there is no longer any one clear figure of the sacred man, it is perhaps because we are all virtually homines sacri', p115. Agamben's account of biopolitics derives from Michel Foucault's chapter, 'Right of Death and Power Over Life', in The History of Sexuality Vol. 1: An Introduction, Robert Hurley (trans), New York, Pantheon, 1980, 135-59. For Derrida's critique of Homo Sacer see The Beast and Sovereign 2, Geoffrey Bennington (trans), Chicago, University of Chicago Press, 2011, 315-17; 324-34. Derrida coins the phrase 'biblioontolological essence' in Geneses, Genealogies, Genres, & Genius: the Secrets of the Archive, Beverly Bie Brahic (trans), New York, Columbia University Press, 2006, p16.

in endnote 29. (Dear reader: please hold on while I hold up my essay by attending to the hold ups in Derrida's interview.) The translator's arguably unnecessary note is not merely an uncaught error; rather, it echoes and perhaps even mimics Derrida's own textual repetitions. For example, the phrase 'we are all, already, undocumented, paperless' occurs in the first chapter of *Paper Machine* and Derrida rewrites it almost verbatim, dropping 'undocumented' in 'Paper or Me, You Know' (PM, p61). Similarly, Derrida has an endnote on 'biblion' in 'Paper or Me, You Know', that similarly repeats much of a passage in the body of 'The Book to Come' (PM, pp6-8, pp187-8, n27). Endnoting allows for Derrida to put certain issues into storage or take them out, often marking his discussion in the body of the text as a lapse: for example, in 'Typewriter Ribbon, Limited Ink', he says 'I don't know why I am telling you this' in the middle of a rhetorically unmarked digression on the amber vampire insects and then ends the three page digression by apparently recalling his purpose: 'I didn't know, a moment ago, why I was telling you these stories of an archive: archives of a vampire insect'. 9 Yet a clear distinction between an unmarked lapse and a lapse rhetorically marked as a 'hold on' moment of interruption is very difficult, probably impossible, to draw in Derrida's work. Moreover, these 'hold on' and 'hold up' moments may mean both delay or stopping and support, as in holding a place. Derrida's many returns to Freud's 'Notes on the Mystic Writing Pad' mentioned above may be construed as placeholders that enabled him to hold up reading by folding it up, unfolding it, and refolding. In Archive Fever, Derrida writes: 'an exergue serves to stock in anticipation and to prearchive a lexicon which . . . ought to lay down the law and give the order. ... In this way, the exergue has at once an institutive and conservative function. ... It is thus the first figure of an archive' (AF, p7). The 'exergue', 'preamble', 'foreword', and 'postscript' of Archive Fever paratextually mark a series of hold ups that auto-immunize the already auto-infected archive fever Derrida has already caught. Derrida's thought remains unfinished not just because he died but because no reading can ever be finished or complete: reading is always an operation of re-shelving, of unfolding, of living-on as shelf-life.

9. Derrida, 'Typewriter Ribbon', op cit., pp331, 333.

Let me now cite Derrida's endnote on the wallet so we may understand how variously virtual and material forms relate to shelf-life more concretely:

I had forgotten to come back to the French word *portefeuille* [wallet]. Which says just about everything on what is invested in paper, in the leaf or the *feuille* of paper. Current usage: when its 'figure' does not designate a set of documents authenticating an official power, a force of law (the ministerial portfolio), portefeuille names this pocket within a pocket, the invisible pocket you *carry* [porte] as close as possible to yourself, carry on your person, almost against the body itself. Clothing under clothing, an effect among other effects. This pocket is often made of leather, like

the skin of a parchment or the binding of a book. More masculine than feminine, a wallet gathers together all the 'papers,' the most precious papers, keeping them safe, hidden as close as possible to oneself. They attest to our goods and our property. We protect them because they protect us (the closest possible protection: 'This is my body, my papers, it's me...') (*PM*, p188, n29).

Derrida proceeds to account for the partially paperless contents of wallets.

They take the place, they are the place, of that on which everything else, law and force, force of law, seems to depend: our 'papers,' in cards or notebooks: the identity card, the driving permit, the business or address book; then paper money - banknotes - if one has any. Nowadays, those who can also put credit or debit cards in there. These do fulfil a function analogous to that of other papers, maintaining the comparable dimensions of a card - something that can be handled, stored away, and carried on the person - but they also signal the end of paper or the sheet of paper, its withdrawal or reduction, in a wallet whose future is metaphorical ... One effect among others: the majority of the 'rich' often have less cash, less paper money, in their wallets, than some of the poor.

Wallets traverse both papered and paperless, or 'pauperized' people (PM, p187, n25).10 Is the wallet an archive, then, regardless of the materiality of the papers it holds? Is it a 'biological archive' (AF, p34)? To be sure, Derrida lays out, in the first pages of Archive Fever, certain conditions on which he says any archive depends: there can be no archive 'without substrate nor without residence', no archive without archons as guardians and interpreters of the law, 'no archive without outside', no archive without psychoanalysis (AF, pp3-4; p11). Yet as Derrida engages questions of the difference new media make to the archive, he begins questioning the limits of the archive: 'is not the copy of an impression already a kind of archive? ... Can one imagine an archive without foundation, without substrate, without subjectile?' and begins to talk of 'virtual archives' and 'an archive of the virtual' (AF, p28; pp26-7; p64; p66). In several essays including in the French edition of Paper Machine, Derrida refers to storage devices as different as two editions of Jean-Jacques Rousseau's Confessions and a piece of amber containing fossils of vampire insects, and he refers elsewhere in Paper Machine to 'computer archives' having been 'locked up'.11

If we grant that the wallet too is a kind of archive, even an archive that may contain other archives in the form of copies, it follows that the archive may be portable, even transportable. Near the end of his endnote on the wallet, Derrida relates an autobiographical anecdote about his home having been burgled twice over the previous two years; the thieves took his laptop the first time and his 'portefeuille the second time' (PM, p189,

10. There are now digital wallets as well. See, for example, 'Google wallet' http:// www.google.com/ wallet. It offers the following options: 'Your wallet in the cloud; Make your phone your wallet, Carry your wallet on the web; A wallet you can lock'.

11. Derrida, "Typewriter Ribbon', op cit., p286, p289; p331; 'Machines and the "Undocumented Person'", in *Paper Machine*, op cit., p2 and 'The Word Processor', op. cit., p29.

n29). 'So what was taken away', Derrida writes, "was what was included or condensed - virtually, more in less - less time, space, and weight. What was carried away [emporté] was what could most easily be carried [porté] on the person and with the person: oneself as an other, the portefeuille and the 'portable' (PM, p189, n29). If the wallet is an archive, the archive itself becomes potentially portable, both nomological and virtualized. 'We are all, already "paperless" people' may be read broadly as follows: the biological and virtual archive offers various kinds of life support even when material supports are lacking. Portable, virtualized archives may become virtual life support systems in the form of trans/portable reading materials, materials that go unnoticed and unread, or in Rilke's case, copied, found on a corpse, read, and finally burned.

Π

By saying that we are all 'paperless' persons, Derrida means, I take it, that the substitution of a material paper support by a paperless electronic support has entailed a global network in which even those with papers are effectively reduced to those without them. It might be tempting to appeal to Michel Foucault for the explanation of what Derrida is looking at the epiphenomena of, namely, paperlessness as a technology of surveillance. Derrida describes a "paperless" setup' that that both covers the entire earth and extends beyond it:

new powers delete or blur the frontier in unprecedented conditions, and at an unprecedented pace ... These new threats on the frontiers are ... *phenomenal*; they border on phenomenality itself, tending to phenomenalize, to render perceptible visible, or audible; to expose everything on the outside. They do not only affect the limit between the public and the private - between the political or cultural life of its citizens and their innermost secrets and indeed, secrets in general; they touch on actual frontiers - on frontiers in the narrow sense of the word: between the national and the global, and even between the earth and the extraterrestrial, the world and the universe - since satellites are part of this 'paperless' setup (PorM, p57).

To explore how this paperless setup differs from new kinds of biometrics and dataveillance, I turn now to a Youtube video on the US passport, as it effectively raises borderline questions about borders and border crossing. As Derrida writes,

the crossing of borders always announces itself according to the movement of a certain step [pas] - and of the step that crosses a line. An indivisible line. And one always assumes the institution of such an indivisibility. Customs,

police, visa or passport, passenger identification - all of that is established upon this institution of the indivisible, the institution therefore of the step that is related to it, whether the step crosses it or not.¹²

The passport figures a problem of form related to materiality, a problem of determining the form of the object / thing. The passport as 'book' offers resistance to a narrative, especially a genetic narrative of its construction and assemblage; the passport is a hybrid, both a printed book and yet also a kind of e-book, a Kindle that doesn't function (you can't read the digital data or subtract from it, add to it / alter it). It is first a 'thing', then a 'book' with fine print and microprint, first made of a foreign, imported cover (thing) with three blank but formatted memory chips, then becomes American (book) when assembled (the paper covering over the foreign chips, which are loaded and locked), and finally a 'personalized' book (sort of like on demand publishing). Only machines 'read' the passports (officers 'skim' them). This narrative of passport production reveals and hides its own double Un/American construction (the side of the inside (chip) being covered by the paper laminated onto the plastic cover): the 'made in America for Americans' notion of book assemblage beginning and ending in America (printing, stitching, lamination) competes with a global industrial model of assemblage in which non-American digital parts and cover get imported and data then gets 'loaded on' to the imports and covered up without Americans even knowing (unless they watch this video from 2009). 13 Like any (transnational) commodity, American passports alienate American citizens from their own identity papers, covering up the foreign, protective cover, literally secreting the chips that fully functionalize the identity papers from their 'owners' (PorM). The printed pages of the passport as book become a cover, literally and metaphorically, for the storage of citizens as data, their reduction to microchips. And the question of 'reading' and 'skimming' the book is all the more bizarre since there is no narrative to read, just a profile reduced to one's life span and home.

The YouTube video does not say what is stored on the chips (the word 'information' is not used), whether it is the same as the information on the passport or in excess of it. It is information about us, however. That much is clear. But we are alienated through our data processing; we are booked by the State into per sons through personalization. But we are only informed by changes in how US passports are made. Their making would usually seem to fall under state secrets, so the effect of the ideas that we are learning is like seeing something that we are not supposed to see. The video is itself a threat because it gives forgers information they could use to forge. But the issue is that persons are stored as data when they are turned from persons into citizens. Citizenship passes though the person in enabling him or her to pass through customs, instituting distinctions between guest and host, alien and host, and the inhuman outside citizenship (equated with aliens as

12. Jacques Derrida, Aporias, Thomas Dutoit (trans), Stanford, Stanford University Press, 1993, p11.

13. See http://www.huffingtonpost.com/2009/06/13/how-a-us-passport-is-made_n_215287.html

animals, vermin, threats, viruses, flus, and so on), hostage and hostage-taker. Citizenship not as securing of human rights but as Host-age taking.

III

It is beyond the scope of this essay to show how what I take to be the deadend of biopolitics - how to recognize a camp since even a hospital room may become a detention centre? - is a consequence of its failure to theorize the impact of new media on the archive. We may take a tentative step, however, by showing that the archive is the nomos of the earth, the paradigm of the political space opened up in modernity when the state of exception becomes the norm and all life becomes virtually homines sacri, not the camp. Even if all life is bare life and hence may be caged, bare life is still minimally 'free' to range (with papers or without them; with genuine papers or forged papers) within the planetary space of the political as the archive, even when phenomenalized as camp or cage. The political space of the archive includes the camp within it. The camp is always already an event of archivalization. Biopolitics is therefore not about confinement (only, or even primarily) but about various kinds of mediatized transmission, translation, transit, or bio-biblio-processing. To grasp this point more fully, we may move from the question of pasperlesssness to that of shelf-life as played in two reciprocally haunting films about the camp and the archive. Like so many of Alain Renais's films, Nuit et broulliard (Night and Fog, 1955) and Toute la memoire du monde (All the Memory of the World, 1957) are concerned with memory, media, biopolitics, and the archive. Whereas Night and Fog shows archival material about bioprocessing - passports stripped of prisoners or records kept by prisoners with the names of the recently dead crossed out - All the Memory of the World addresses an almost inverse kind of biblioprocessing of books as prisoners: the camp is haunted by the library, just as the library is haunted by the camp.

Much as the Nazis tattooed numbers on the arms to be used to identify the victim's corpse, sewed symbols of different colours and shapes on their prison clothing (figure 1) and stripped prisoners of their passports and identification cards (figure 2) in Night and Fog, so books enter the national library as prisoners and are immediately issued identification cards, then subject to inspection, labelling, 'inoculation', classification, card catalogued, and shelving in All the Memory of the World (figures 3, 4 and 8). In an extended high angle tracking shot, we see an inspector walking up and down between the reading tables. One of the first overheads shows a man who pushes a cart with book requests stop at a desk and then give them to a woman librarian who gets up to check them out. After she sits back down, the film cuts to a second overhead shot of the man pushing the cart as the narrator refers to the books passing into circulation as crossing the 'last border', a 'boundary' more profund than Alice going through the looking glass. A kind

Figure 1, Alain Resnais (director), Night and Fog, 1955. The concentration camp as archive, library archive as fortress

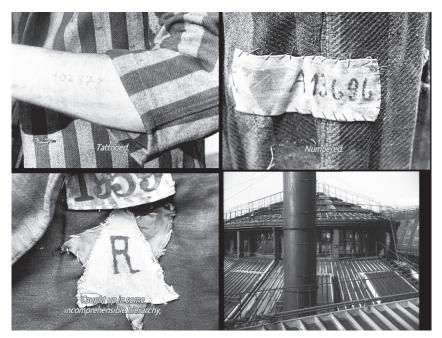


Figure 2, Alain Resnais (director), Night and Fog, 1955. People decoupled from their papers





Figure 3, Alain Resnais (director), All the Memory of the World, 1956. Books as prisoners

of biblio-border control operates here, paper check for the books, which are given identification cards and those shelved on a cart readied for the reading room to have their request slips in them (figures 5 and 6).

Both films highlight the social construction of the paper world that autoarchives people: the desertion, abandonment, and partial destruction of the Nazi concentration camps poses a threat to the survival of yet to be archived materials in Night and Fog, much as the destruction of books by readers who 'crunch them like insects' in All the Memory of the World (figure 6) poses a threat to the national library's already archived materials. 14 All the Memory of the World is arguably haunted by Night and Fog, particularly by the way it eventalizes the archive as an unreadable place. What were then contemporary shots of the ruins of Nazi concentration camps are haunted by the absence of archivists in particular and of humans in general. The camps are always shot totally lacking in humans. There are no guides, no tourists, no schoolchildren: only the camera visits the blocks now (figure 7).

14. Since All the Memory of the World has received almost no critical attention. I will focus primarily on it. None of the essays in a recent, quite comprehensive discussion of Night and Fog mentions All the Memories of the World. See Griselda Pollock and Max Silverman (eds), Concentrationary Cinema: Aesthetics As Political Resistance in Alain Resnais's Night and Fog, Oxford, Berghahn Books. 2012

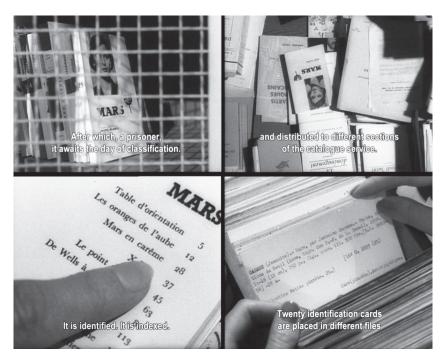


Figure 4, Alain Resnais (director), All the Memory of the World, 1956

Figure 5, Alain Resnais (director), All the Memory of the World, 1956



Figure 6, Alain Resnais (director), All the Memory of the World, 1956



Figure 7, Alain Resnais (director), Night and Fog, 1955. The lifeless after-life of the concentration camp



Figure 8, Alain Resnais (director), All the Memory of the World, 1956, and Chris Marker, La Jetée, 1962. The Paris Cinematheque archive haunting the underground camp of the post-apocalyptic future



The camp has erased itself as a potential archive, so to speak, and this erasure is in turn being 'archived' in Resnais's film as a resistance to reading. Resnais advances this erasure of the archive and its recording on film: in *All the Memory* of the World, by drawing a series of provocative parallels between the 'fortress' and 'silent stronghold' of the national library in in All the Memory of the World (figure 1) and the wide variety of camp architectural styles in Night and Fog. Just as there are no people in the camps in Night and Fog, so there are next to no readers in All the Memory of the World. We see one person in a reading room at one point, but he is still. Otherwise, all the reading rooms are empty, as are the storage rooms. Those few people we do see work in the library, and readers seen in a long, overhead tracking shot in the cathedral-like space of the reading room near the end of the film resemble the sequence alternating the close up shots of the faces of statues with close up shots of people, seen in looking up at various objects or books in the library but never taking them down from the shelf (figure 5). For example, one shot begins with a close up of a book shelf, and then dollies in and dollies right before cutting

15. See the extra 'On Vertigo' in the Criterion edition of Chris Marker, La Jetée (1962) for an analysis of how the archive of the Paris Cinemathèque haunts the underground camp of the postapocalyptic future in Marker's film. See figure 8. On the architecture of the Bibliothèque nationale and underground areas of Paris occupied by the Nazis during World War II, see W.G. Sebald, Austerlitz, Anthea Bell (trans), New York, Random House, 2001.

abruptly to a stationary shot of a Bibliothèque nationale inspector standing motionless in the shadow behind a large sculptural ornament attached to a column (figure 5). The inspector wearing a cap with the initials 'BN' (for Bibliothèque nationale) discloses the archon, guardian function of the archive. That function is increasingly spectral and yet also increasingly graphic, as we see a book literally injected with a shot containing, one assumes, some kind preservative, as if metaphorically inoculating against its future reader, before it may pass through the 'looking glass' from the stacks into the reading room. 15

Archiving is inseparable in All the Memory of the World from personified technical supports. The film begins in the basement, with a microphone dropping down into the centre of the shot. Like the camera that is the only visitor t o the concentration camp in Night and Fog (figure 1), the microphone is the only visitor in the library, as if the microphone itself were delivering voice-over narration. The erasure of the archive suspends the decision about the value of its contents, unlike the Nazi officer shown in Night and Fog deciding which prisoners go in the forced labour line and which go in the line for the gas chambers. The value of the catalogued materials shown in the BN's basement have an unclear status. Are they waiting to be catalogued or unworthy of being catalogued? Like a box in one room of the library that cannot be opened until 1974, the value of the library's various materials is subject to a future consisting of non-reading, a future that deprives the archivist of sovereignty. The film's final high overhead shot, lasting more than ten seconds, makes the check out desk and the people using it resemble a portrait painted by Giuseppe Arcimboldo (figure 6). The work of reading as abstraction returns as a pattern to be recognized, a happy face of memory which is not a human face yet can be recognized only by humans capable of reading it, translating into a metaphor, a figure, face, personification of memory. The best hope for an imprisoned book is to remain unread, perhaps misfiled, mis-shelved, even lost in the archive.

IV

We may understand further how biopolitics is better understood as bibliobibliopolitics, or shelf-life, if we turn to Walter Benjamin's essay, 'Books by the Mentally Ill: From My Library'. The essay concludes with a cryptic reference to an un-named manuscript whose difficulties of publication Benjamin links with obtaining a passport:

The mere existence of such works has something disconcerting about it. So long as we habitually regard writing as - despite everything - part of a higher, safer realm, the appearance of insanity, especially when it enters less noisily form elsewhere, is all the more terrifying. How could this happen? How did it manage to slip past the passport control of the city of books, this Thebes with a hundred doors? The publishing history

of such works must often be as bizarre as their contents. Nowadays, one would like to think, the situation is different. Interest in the manifestations of madness is as universal as ever, but it has become more fruitful and legitimate. The writings of the insane, so we might suppose, would have no trouble obtaining a valid passport today. Yet I know of a manuscript that is finding it as difficult as ever to obtain the approval of a respected publishing house, even though it is the equal of Schreber's in both human and literary form, and far superior in intelligibility. ¹⁶

Some books get left behind in manuscript, even if passports become less restrictive. Benjamin records the loss by failing to give the author or title of the unpublished manuscript that is not yet a book, instead tabling its contents as if he were hoping it and others like it might thereby slip by the passport controls of the biblio-polis.¹⁷

Obviously, Benjamin's semi-serious, semi-jocular reach for the passport ('your papers please!') in order to make apparent the ideological underpinnings of the biblio-polis anticipates, desperately, heart-wrenchingly, the fate of so many Europeans, himself included, who found themselves, stateless, nicheless, slot-less, without papers, literally 'fatherless', or 'apatrides', as they fled the Nazis in 1940. While the passport analogy might play differently now than it did in the today of Benjamin's essay, it indicates that Benjamin's neurotic 'motley order' of re-shelving recovers what, in 'The Book to Come', Derrida elaborates as the status of the book or biblion as backing, the material support or guarantee which, in purely physical terms permits portability, linearity, and enables a manuscript or a person to travel into the hands of readers, find a slot or niche in the physical and ideological or semiotic world of its today, having passed muster at border control (*PM*, p27). For biblion we may also read person, the 'book' now the backing of a particular way of configuring an identity, a mode of citizenship, belonging, and the privileges it affords.

As Derrida observes, 'the Greek word *biblion* ... has not always meant "book" or even "work"; instead *biblion* could designate a support for 'writing' (so derived from *biblios*, which in Greek names the internal bark of the papyrus and thus of paper, like the Latin word *liber*, which first designated the living part of the bark before it meant 'book'). *Biblion*, then, would only mean 'writing paper', and not book, nor oeuvre or opus, only the substance of a particular support - bark. But *biblion* can also, by metonymy, mean any writing support, tablets for instance or even letters: post (*PM*, pp5-6). The extension of *biblion* as book, then, represents the development of one particular metonymy, that equates the backing of writing, the underpinning of writing by a physical substance with the figure of the 'book', collating, if you like, writing and book, text and material support and linearizing the *biblion* as book. For Derrida, the 'book to come' signals not something new, so much as something held in abeyance by the repetition and so adoption of one particular metonymy. That repetition made a world. Likewise, as Benjamin's re-shelving discovers,

16. Walter Benjamin, 'Books by the Mentally Ill: From My Library', Selected Writings Volume 2 part 1, 1927-1930, Michael W. Jennings, Howard Eiland, and Gary Smith (ed), Harvard, Harvard University Press, p130.

17. This loss of the mss in order to make it possible to find it later in published form would, in any case, only be a temporary solution since Benjamin sees the collector as an endangered species about to go extinct. See Walter Benjamin, 'Unpacking My Library', Illuminations: Essays and Reflections, Hannah Arendt (ed), New York, Schocken Books, 1968.

other infra-worlds, other forms of writing, a whole 'library of pathology', for example, inhere within the order provided by the book.

As Derrida turns to the figure of the library - he is giving this lecture at the Bibliothèque nationale de France - he arrives at the question of the slot or niche, the shelf, as it were, 'already in Greek, bibliothèque means the slot for a book, book's place of deposit, the place where books are put (poser), deposited, laid down (reposer), the entrepôt, where they are stored' (PM, p6). And such places of deposit constitute for Derrida a '[s]etting down, laying down, depositing, storing, warehousing - this is also receiving, collecting together, gathering together, consigning (like baggage), binding together, collecting, totalizing, electing, and reading by binding' (PM, p7). 'So the idea of gathering together, as much as that of the immobility of the statutory and even state deposit', he writes, 'seems as essential to the idea of the book as to that of the library'. Within this question of gathering, depositing, and so of sorting by gathering, of generating the polis via or in relation to the biblio-polis, he arrives at the 'question of the title'. 'Can we imagine a book', asks Derrida, 'without a title?' 'We can' he answers, 'but only up to the point when we will have to name it and thus also to classify it, deposit it in an order, put it into a catalogue, or a series, or a taxonomy'. He ends this thinking of the title with the contention that 'it is difficult to imagine, or at any rate to deal with, with a book that is neither placed nor collected together under a title bearing its name, an identity, the condition of its legitimacy and of its copyright'. 'Sure', we may say, 'yes it is' - for such books, which exist, and which are not properly speaking books at all, or not books quite yet, sit uneasily on their shelves, as Benjamin might tell him, until, of course, the day when those books without titles, such as the manuscript whose title Benjamin withholds from us, reveal their own encrypted infra-titles to us.

V

In 'Bibliographical Musings', Theodor Adorno offers his own instance of shelf-life, in this case, of damaged books. He tells an anecdote in which he correlates a distinction between real and fake books with a distinction between damaged and undamaged books: damaged books are the real books, and fakery extends not only to reproductions of books but even to the presentation of new books as old:

[The] Potemkinian library I found in the house of an old American family on the grounds of a hotel in Maine ... displayed every conceivable title to me; when I succumbed to the temptation and reached for one, the whole splendid mass fell apart with a slight clatter - it was all fake. Damaged books, books that have been knocked about and have had to suffer, are the real books. Hopefully vandals will not discover this and treat their brand new stocks the way crafty restaurateurs do, putting an artificial layer

of dust on bottles of adulterated red wine from Algeria. Books that have been lifelong companions resist the order imposed by assigned places and insist on finding their own; the person who grants them disorder is not being unloving to them but rather obeying their whims. He is often punished for it, for these are the books that are most likely to run off.¹⁸

Against the degraded collection he finds in Maine, that nevertheless 'tempts' him, because of the verisimilitude or efficacy of the 'backing' and the replete order of titles seemingly on offer, Adorno pitches the authentically damaged book. Not a stunt book that falls apart on contact - there only to advertise the importance of books which are in fact not there - the damaged book acquires a life all its own, a life, or liveliness. The damaged book, the used or mangled book, is the book that resists its owner's impulse to order it.

Adorno goes on to describe his own damaged books, their ruination and repair, his description taking on a theological cast that makes Providence sound like a life and death selector or military officer deciding which books will be preserved and which will be disappeared:

Emigration, the damaged life, disfigured my books, which had accompanied me, or, if you like, been dragged, to London, New York, Los Angeles, and back to Germany, beyond measure. Routed out of other peaceful bookcases, shaken up, locked up in crates, put into temporary housing, many of them fell apart. The bindings came loose, often taking chunks of text with them. They had been badly manufactured in the first place; high quality German workmanship has long been as questionable as the world market began to think it was in the era of posterity. The disintegration of German liberalism lurked in it emblematically; one push and it fell to pieces. But I can't get rid of the ruined books; they keep getting repaired. Many of these tattered volumes are finding their second childhood as paperbacks. Less threatens them: they are not real property in the same sense. Now the fragile ones are documents of the unity of life that clings to them and of its discontinuities as well, with all the fortuitousness of its rescue as well as the marks of an intangible Providence embodied in the fact that one was preserved while another was never seen again. None of the Kafka published during his lifetime returned with me to Germany in good condition (BM, p24).

It is as impossible as it would be undesirable to separate the story of these damaged books, books broken in and by transit, from the damage inflicted on their owner in and by his own eviction or emigration. Indeed, it is tempting to say that here Adorno embarks on a rhetorical inflection of the pathetic fallacy, to construct the 'bare life' of books which follow in the wake of their human reader. And so it is perhaps that despite their damage, despite the damage they reflect back at him, Adorno cannot bear to throw out these books

18. Theodor W. Adorno, 'Bibliographical Musings' in *Notes* to *Literature Volume* 2, Shierry Weber Nicholsen (trans), Rolf Tiedemann (ed), New York, Columbia University Press (1992), pp20-31; p24, henceforth BM in the text.

and they remain, in stark relation to the reduction of books to mass culture delivery mechanisms for 'stimuli'.

Beyond the folding of books into a biographical regime as backing or prop for the self, Adorno goes on to write that 'the life of a book is not coterminous with the person who imagines it to be at his command'. 'What gets lost in a book that is loaned out', he continues,

and what settles into a book that is sheltered are drastic proof of that. But the life of a book also stands in oblique relation to what the possessor imagines he possesses in his knowledge of the book's *dispositio* or so-called train of thought. Time and again the life of books mocks him in his errors. Quotations that are not checked in the text are seldom accurate. Hence the proper relationship to books would be one of spontaneity, acquiescing in what the second and apocryphal life of books wants, instead of insisting on that first life, which is usually only an arbitrary construction on the reader's part (BM, pp24-5).

Forget immobility. Forget the established or satisfactory order (dispositio) of 'first lives'. Give yourself over to the order that books produce by and in their juxtapositions, use, misuse, and damage. The trick is how to do it without doing violence to the relation that develops between biblion and bios - how we might accede to or allow ourselves to be the beneficiaries of this form of life support without installing that aid as another order or system. Best to keep everything - however damaged. Best not to know why exactly and trust to luck, to what seems like chance, a pure exposure to the aleatory figure that cohabits with fictions of order.

One might as well attempt to herd cats - which is of course the Derridean *animôt* or anti-metaphor, a neologism and pun Derrida makes on the French word for animals ("animaux" and the French word for words [mots] meant to call into question the distinction between mute animals and man as speaking animal,)¹⁹ to which Adorno turns:

19. Jacques Derrida, The Animal That Therefore I Am, Marie-Louis Mallet (ed.), David Wills (trans), New York, Fordham University Press, 2008.

The private life of books can be compared to the life that a widespread and emotionally charged belief, common among women, ascribes to cats. These undomesticated domesticated animals. Exhibited as property, visible and at one's disposal, they like to withdraw. If their master refuses to organize his books into a library - and anyone who has proper contact with books is unlikely to feel comfortable in libraries, even his own - those he most needs will repudiate his sovereignty time and time again, will hide and return only by chance. Some will vanish like spirits, usually at moments when they have special meaning. Still worse is the resistance books put up to the moment one looks for something in them: as though they were seeking revenge for the lexical gaze that paws through them looking for individual passages and thereby doing violence to their own

autonomous course, which does not wish to adjust to anyone's wishes. An aloofness toward anyone who wants to quote from them is in fact a defining characteristic of certain authors, especially Marx, in whom one need only rummage around for a passage that has made a special impression to be reminded of the proverbial needle in the haystack (BM, p25).

Moody, aloof, resistant, apt to punish, the book is a strange animal, an animal dressed in an anthropomorphic 'coat', for to itself it lacks no skin. It likes to punish the 'pawing' of the 'lexical' gaze of the reading animal that seeks after particular passages rather than accepting what is given freely if capriciously, and subject to loss. It is worth noting further that properly speaking the book is not an animal at all, so much as a form of life that unfolds in the circuit that unfolds between women and cats - the book, *this* book, like *this* cat, is always a thoroughly historical, singular being which resists attempts to confine it to this or that species, this or that slot on the shelf. It wanders.

For Adorno, then, life, life worth living, might be said to consist in a bio/biblio life support project that we might call 'living together with or through books', that is by attending to the second-ness of books, to the apocryphal, tacked on life, that books make possible, to the backing and bucking of writing, to recall Derrida's modeling of the *biblion*, that they effect (*PM*, p6). Reading the book's paratext is for Adorno a matter of attending to the book's graphic design:

The book has figured among the emblems of melancholy for centuries ... there is something emblematic in the imago of all books, waiting for the profound gaze into their external aspect that will awaken its language, a language other than the internal, printed one. Only in the eccentric features of what is to be read does that resemblance survive, as in Proust's stubborn and abyssal passion for writing without paragraphs. The eye, following the path of the lines of print, looks for such resemblances everywhere. While no one of them is conclusive, every graphic element, every characteristic of binding, paper, and print - anything, in other words, in which the reader stimulates the mimetic impulses in the book itself - can become the bearer of resemblance (BM, p27).

By reading mimetically, Adorno becomes revelatory, finds a way into reading the history of the book and of historicizing the book: 'What is revealed in this history' is a totality, the implosive dialectical tensions of which may be detected in Adorno's adoption of metaphors or literal book damage to route the book's 'material components' through the formal 'irregularities, rips, holes, and footholds that history has made in the smooth walls of the graphic design system ... and its peripheral features' (BM, p30).

Adorno's essay ends with a series of breakdowns in mimetic reading until reading itself becomes impossible. First, a distinction between inside and

outside gets collapsed as a consequence of Adorno having made 'anything' in a book an occasion for mimetic reading:

The power history wields both over the appearance of the binding and its fate and over what has been written is much greater than any difference between what is inside and what is outside, between spirit and material, that it threatens to outstrip the work's spirituality. This is the ultimate secret of the sadness of older books, and it follows how one should relate to them and, following their model, to books in general (BM, p31).

Reading a book through its graphic design and paratext, the vertical printing on the spine, the removal of the place and date of publication of the title page, the book's cover is to encounter the book's resistance to reading. Adorno's metaphors for reading a book focus on the paratext of the book. This focus on the book's 'most eccentric features' transmutes from print to the book as image, 'imago', 'graphic image' (BM, p30).

Although Adorno refers throughout the essay to the book's external and internal form, his account of the true book as the damaged book does not yield an analysis based on resemblance: he defines damage both as external and literal (what happens to books when they are shipped around the globe, when they are read and reread over time, when they are produced more cheaply); and also as external and metaphorical (the way external coercion and pressure gets interiorized - 'The book['s] ... own form ... is attacked within the book itself') (BM, p21). The resistance to reading may penetrate the writing of the book so far as to verge on altering its form. As Adorno writes of Karl Marx's writings:

At many points Marx' [sic] texts read as though they had been written hastily on the margins of the texts he was studying and in his theories of surplus value this becomes almost a literary form. Clearly his highly spontaneous mode of production resisted putting ideas where they belong in neat and tidy fashion - an expression of the anti-systematic tendency in an author whose system is a critique of the existing one; ultimately, Marx was thereby practicing a conspiratorial technique unrecognized as such even by itself. The fact that for all the canonization of Marx there is no Marx lexicon available is fitting; the author, a number of whose statements are spouted like quotations form the Bible, defends himself against what is done to him by hiding anything that does not fall into that stock of quotations . . . The relief the lexica afford is invaluable, but often the most important formulations fall through the cracks because they do not fit under any keyword or because the appropriate word occurs so infrequently that lexical logic would not consider it worth including: 'Progress' does not appear in the Hegel lexicon (BM, p26).

In Adorno's account, the process of writing and printing involves a secret that is hidden even from the author himself, already described by Adorno earlier as estrangement of the author from his text and even of the text from itself when he reads the page proofs ('the authors look at them with a stranger's eyes' 'unrecognized as such even by itself') (BM, p23). Yet what is hidden by the violence of reading for the pullable quotation is not reducible either to a secular Marxist account (book as commodity, reified by the means of production), nor to an actual agency (the book continues to be personified), nor to a particular theology, but is detected through a series of metaphors, the last of which is to 'fall through the cracks' (BM, p42).

Adorno finishes his essay off by calling up an 'ideal reader' rather than an existing one. In speaking of 'the work's spirituality' and "the ultimate" secret', Adorno ends by (re)tuning into a theological wavelength, a call from beyond the grave of the book's life, as it were, but there is no religious identification. Karl Marx's marginal notes are analogous to musical notes, which may be heard by a reader:

Someone in whom the mimetic and the musical senses have become deeply enough interpenetrated will ... be capable of judging a piece of music by the image formed by its notes, even before he completely transposed it into an auditory idea. Books resist this. But the ideal reader, whom the books do not tolerate, would know something of what is inside when he felt the cover in his hand and saw the layout of the title page and the overall quality of the pages, and would sense the book's value without needing to read it first (BM, p31).

What kind of life support do damaged books, resistant to reading, offer Adorno? On the one hand, a kind of Jewish mysticism may be heard in Adorno's metaphors of hiding (even the act of hiding is hidden from the one who hides), a mysticism that stops short of messianism as a book becomes a work of art through suffering: 'Damaged books, books that have been made to suffer, are the real books'; 'The bibliophile expects from books beauty without suffering ... Suffering is the true beauty in books; without it, beauty is corrupt, a mere performance' (BM, p24, p29). The books' suffering is redeemed in aesthetic terms, as the books' true beauty. And yet, on the other hand, Adorno's account of suffering is clearly not messianic nor eschatological in that he is not using Christian images of the 'wound' or 'stigmata' for suffering or narrating an apocalyptic history (of more and more degradation of books due to changes in the book publishing industry). Nor does Adorno single out one book in particular. His concern with damaged books is rather with the conditions of book publication and how those conditions make books both more accessible and more resistant. Adorno speaks at the end of 'Bibliographical Musings' both of a singular type of books (older books) and of books in the plural, putting more pressure on his personification of books by highlighting even more clearly the differences between the non 'coterminus' if analogous lives and deaths of books and the lives and deaths of writers and readers (BM, p24). Books preserve and defend their value by becoming inhuman. Reading a book whose value you cannot determine without reading it effectively reduces reading to information processing. Opening up the possibility of life supports in the form of suffering bio-books without equating suffering with sacrifice, Adorno redeems the archive as a hidden refuge or holding area for refugees of reading and personified book. Adorno does not hold out, that is, for an undamaged life support, repaired and rendered readable by a visible 'Passion of the Book' to be detained in a camp for inspection and inoculation.

VI

What is there to be gained by displacing biopolitics with biobiblioplitics and by arriving, through a deconstructive examination of the new media archive, at the notion of shelf-life? At least one thing becomes clear: the question of paperlessness, the questioning of digital and material supports, arises from the fantasmatics of media, the dematerialization of paper, its virtualization or spectralization.²⁰ As Derrida writes in 'Paper or Me, You Know':

20. Derrida also links the 'book' and 'bios' through the phantasm in *The Beast and Sovereign* 2, op. cit., p129-133, p148-49.

It is not in itself a novelty or a mutation that the modes of appropriation are becoming spectral, are 'dematerializing' (a very deceptive word, meaning that in truth they are moving form one kind of matter to another and actually becoming all the more material, in the sense that they are gaining in potential *dynamis*): that they are virtualizing or 'fantasmatizing' ... Once they have been identified with the form and material of 'paper', these incorporated schemata are also privileged ghost-members, supplements of structuring prostheses (PorM, p56).

Furthermore, the spectrality of the 'material' support takes the book's future from the opposition of life and death that orients biopolitics to the way a text lives on, or 'survives', to use Derrida's word: 'Survivance in the sense of survival that is neither life nor death pure and simple, a sense that is not thinkable on the basis of the opposition between life and death'.²¹

21. Derrida, The Beast and the Sovereign 2, op. cit., pp130-31.

With this reorientation of the new media archive toward a fantasmatics of biobibliopolitics and hence '(im)materialities of text', we may close by noting that Derrida's notion of haunted, spectral media is itself haunted by dreams about shelf-life, about storage and retrieval, as moments of passage, of border-crossing. Consider, in closing, Adorno's record of a dream he had in Frankfurt on 12 November 1955, a dream involving a question about an obsolete passport, the answer to which will have determined whether Adorno passed an exam:

I dreamt I had to take an exam for a diploma in sociology. It went badly in empirical sociology. I was asked how many columns there are in a punch card, and, as a pure guess, I said twenty. Of course, that was wrong . . . Taking pity on my ignorance, the examiner then announced that he would question me on cultural history. He showed me a German passport of 1879. It ended with the farewell greeting: 'Now out into the world, my little wolf!' This motto appeared in gold leaf. I was asked to explain this. I took a deep breath and explained that the use of gold for such purposes went back to Russian or Byzantine icons. The idea of the prohibition on images had been taken very seriously in those parts; only gold was exempted. Because it was the purest metal, an exception was made for it. Its use in illustrations was followed by baroque ceilings. And the gold lettering in the passport was to be the last vestige of a great tradition. The examiners were delighted by the profundity of my knowledge and I passed the exam.²²

Shelf-life passes on.

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22. Theodor W. Adorno, Dream Notes, Rodney Livingston (trans), London, Polity, 2007, pp57-58. See also Derrida's waking 'dreams' of paper: 'First, when I dream of an absolute memory ... my imagination continues to protect this archive of paper. ... On paperless paper. Paper is in the world that is not a book'; and I also dream of living paperless - and sometimes that sounds to me like a definition of 'real life', of the living part of life. The walls of the house grow thicker, not with wallpaper but with shelving [my emphasis] Soon we won't be able to put our feet on the ground: paper on paper', 'Paper or Me, You Know', op. cit., p65.

1. Lisa Nakamura and Peter Chow-White, 'Introduction - Race and Digital Technology: Code, the Color Line, and the Information Society', in L. Nakamura and P. Chow (eds), Race After the Internet, London, Routledge, 2012, p5.

- 2. See for example, Beth Kolko, Lisa Nakamura and Gilbert Rodman (eds), Race in Cyberspace, London, Routledge, 2000; Wendy Chun, Control and Freedom: Power and Paranoia in the Age of Fiber Optics, Cambridge MA, MIT Press, 2006.
- 3. Lisa Nakamura, Digitizing Race: Visual Cultures of the Internet, London, University of Minnesota Press, 2007.
- 4. Geert Lovink, Networks Without Cause: A Critique of Social Media, Cambridge, Polity Press, 2011, p13.
- 5. danah boyd, 'White Flight in Networked Publics: How Race & Class Shaped American Teen Engagement with MySpace & Facebook', in L. Nakamura and P. Chow (eds), Race After the Internet, London, Routledge, 2012, pp203-222.
- 6. Eszter Hargittai and Eden Litt, The tweet smell of celebrity success: **Explaining variation** in Twitter adoption among a diverse group of young

BLACK TWITTER? RACIAL HASHTAGS, NETWORKS AND CONTAGION

Sanjay Sharma

Abstract This essay foregrounds how technocultural assemblages - software platforms, algorithms, digital networks and affects - are constitutive of online racialized identities. Rather than being concerned with what online identities are in terms of ethno-racial representation and signification, we can explore how they are materialized via the technologies of online platforms. The essay focuses on the micro-blogging site of Twitter and the viral phenomenon of racialized hashtags - dubbed as 'Blacktags' - for example #onlyintheghetto or #ifsantawasblack. The circulation of these racialized hashtags is analyzed as the transmission of contagious meanings and affects, such as anti/racist humour, sentiment and social commentary. Blacktags as contagious digital objects play a role in constituting the 'Black Twitter' identities they articulate and interact with. Beyond conceiving Black Twitter as a group of preconstituted users tweeting racialized hashtags, Blacktags are instrumental in producing networked subjects which have the capacity to multiply the possibilities of being raced online. Thus, ethno-racial collective behaviours on the Twitter social media platform are grasped as emergent aggregations, materialized through the contagious social relations produced by the networked propagation of Blacktags.

Keywords Twitter, race, assemblages, networks, contagion

Race itself has become a digital medium, a distinctive set of informatic codes, networked mediated narratives, maps, images, visualizations that index identity.1

There is a growing body of research exploring issues of race and ethnicity in digital environments. Social networking relations, modes of online communication and digital identities have been revealed to be far from race-neutral.² Research has raised questions concerning how extant racial segregations and inequalities have spilled over into the virtual realm, highlighting the creation of *new* kinds of digital divides. The oft-cited, iconic 1993 New Yorker cartoon by Peter Steiner announcing 'On the Internet, nobody knows you're a dog' captured the apparent freedom of a blossoming World Wide Web. However, the original cyberspace promise of 'leaving the meat (body) behind' has done little to withstand the racialization of online spaces. The internet has always been a racially demarcated space and today the plethora of online communication platforms (instant messaging, emaillists, blogs, discussion forums and social media) continue to exhibit varying degrees of identity marking and racialized segregation.³ The internet, in other words, is a manifold set of sociotechnical practices, generative of digital privileges and racial ordering.

It has become apparent that online race is complex and mutable. This picture supports Geert Lovink's declaration that: 'The idea that the virtual liberates you from your old self has collapsed. There is no alternative identity'. That digital media should be understood as merely an adjunct to the 'real' world is, then, an increasingly tenuous standpoint. But this should not be taken to mean that there is a static replication of 'off-line' identities *online*, far from it. Online racial inclusions and exclusions are dynamically transforming, augmented by the explosion of 'Web 2.0' social networking sites, and modes of access (broadband and mobile phones). For instance, the rise of social networks witnessed the 'white flight' of users from MySpace towards Facebook. And variations in the adoption of social media by different ethnoracial groups have become more visible. The hype of Web 2.0 celebrating user participation and content generation has obscured the racialized *protocols* that circumscribe our online interactions.

Web studies exploring race and ethnicity have principally conceived identity as a 'lived' social construction or hegemonic mode of representation. The relationship between communication platforms and identity practices is difficult to unravel, particularly as research in this field risks essentialising online activity in relation to supposed ethno-racial designation. The rapidly expanding digital landscape poses a further challenge to researchers, as the 'real-time' speed, propagation and irruptions of race online create a presentism that seemingly resists critical analysis. Modalities of race wildly proliferate in social media sites such as Facebook, Youtube and Twitter: casual racial banter, race-hate comments, 'griefing', images, videos and anti-racist sentiment bewilderingly intermingle, mash-up and virally circulate; and researchers struggle to comprehend the meanings and affects of a racialized info-overload.⁹

The complexity of online racial formations raises the question of whether adequate attention is being paid to the significance of the online environments that race exists in: how are both race and digital networks transformed in their mutual encounter? This essay offers an analysis which centres upon exploring the technosocial production of race. Digital networks are generative of race and can be grasped by an approach attentive to the operations of online platforms. My contention is that a move to a materialist understanding of digital media and networks¹⁰ opens up new possibilities for rethinking how race *works* online. Lisa Nakamura and Peter Chow-White intimate that 'race itself has become a digital medium'; thus the materiality of both race and the digital can prompt an alternative approach and method, beyond the mantra of race as a social construction. Rather than only being concerned with what online identities are in terms of their ethno-racial signification, we can explore

adults, New Media and Society, 13, 5 (2011): 824-842, http://doi.org/cnfgkb

- 7. cf. Alexander Galloway, Protocol: How Control Exists After Decentralization, Cambridge MA, MIT Press, 2006.
- 8. 'Presentism' refers to how social researchers are being governed by the real-time nature of contemporary media culture, unable to undertake deep analysis; see Emma Uprichard, 'Being stuck in (live) time: The sticky sociological imagination', Les Back and Nirmal Puwar (eds), 'Live Research Methods', Sociological Review Monograph, 2012, pp124-138.
- 9. See the darkmatter project 'race mashup' experiment which highlights a saturated racialized discourses based on news and blogs searches, user posts, bookmarks, 'likes' and ranking: http://www.darkmatter101. org/site/mashup/ (accessed 12 January 2012).
- 10. See for example, Marianne van den Boomen et al (eds), Digital Material: Tracing New Media in Everyday Life and Technology, Amsterdam, University of Amsterdam Press, 2009; Jussi Parikka, What is Media Archaeology, Polity Press, 2012; Wendy Chun, 'Introduction: Race and/as Technology; or,

How to Do Things to Race', Camera Obscura, 24, 170 (2009): 7-35.

11. Marianne van den Boomen et al, ibid

12. Ganaele Langlois, 'Meaning, Semiotechnologies and Participatory Media', Culture Machine, 12 (2011): 1-27.

13. Arun Saldanha, Psychedelic White: Goa Trance and the Viscosity of Race, London, University of Minnesota Press, 2007.

their 'digital materialty'. 11 That is, how 'technocultural assemblages' 12 - digital networks, communication platforms, software processes - are constitutive of online racialized subjectivity and activity. Pursuing a materialist approach also leads to re-conceiving race as an 'assemblage': 13 encountering race as an emergent force in digital media vis-a-vis its networked connections, informatic flows and affects.

To situate the discussion of a digital-race assemblage, this essay explores the social media micro-blogging site of Twitter. More specifically, I focus on the phenomenon of 'Black Twitter' that has become evident, principally in relation to the relative magnitude of Black (especially African-American) activity, and in particular the creation of certain kinds of 'hashtags'. A key feature of Twitter has been the practice of user-defined hashtags for identifying and propagating messages in the network, with special attention to popular trending hashtags which can impact on wider media culture beyond the Twitter-sphere. Popular hashtags have transformed into mediafriendly monikers for appearing to (momentarily) capture the zeitgeist of the online world. Notably, the phenomenon of racialized hashtags - for example, #ifsantawasblack or #onlyintheghetto dubbed as 'Blacktags' - virally circulate through the Twitter network, and on occasions unexpectedly appear as top trending topics. These short-lived internet memes, often in the form of ambiguous racialized humour have fuelled the notion of 'Black Twitter'. Both Black Twitter and Blacktags have attracted discussion amongst bloggers and news sites, yet they have received almost no academic scrutiny. The phenomenon has largely elicited identity-based explanations, dwelling on the idiosyncratic behaviour of African-American users (re-tweeting particular hashtags until they 'trend' on Twitter). This kind of identitarian understanding animates the limits of approaches that continue to centre user identity and behaviour as the key site of analysis. By doing so, it fails to effectively address the significance of the digital materialization of race.

The phenomenon of Black Twitter affords an opportunity to interrogate Blacktags as racialized digital objects in relation to the technocultural assemblages they are produced in. In this esay it will be maintained that the network structures of Twitter, its trending algorithm and hashtags as machinic replicators, play a critical role in the emergence and viral circulation of Blacktags. The analysis presented locates Blacktags in terms of the transmission of meanings and affects (such as anti/racist humour and social commentary). As digital objects, Blacktags reveal the contagious effects of networked relations in producing emergent racial aggregations, rather than simply representing the behaviour of an intentionally acting group of Black Twitter users. Moreover, it will be argued Blacktags have the capacity to interrupt the whiteness of the Twitter network.

The significance of exploring Black Twitter and Blacktags does not hinge on claiming a radical online anti-racist practice, nor by naively identifying a politically progressive 'hashtag community'. The aim of the essay is to open up a new way of thinking about the entanglement of race and digital networks. This task requires a direct engagement with the technosocial processes of online media, enabling us to locate the emergence of a digitalrace assemblage.

TWITTER

Since launching in 2006, the micro-blogging service Twitter has unexpectedly become a key player in the colonization of the internet by corporate social media. Its 140 character limit for sending short messages (tweets) mimicked SMS, enabling users to post from mobile phones, in addition to the twitter. com web interface and other third-party clients and applications. Twitter's current 140 million active user-base dwarfs by comparison with Facebook, yet it has become the 'real time' of the digital media landscape because of the precipitous speed of its propagation of messages, information and 'news'. Moreover, the ability of any registered user to follow (or address) another user without permission or reciprocity, has led to Twitter being exemplary as a 'masspersonal' communication platform, appearing to collapse the historic distinction between mass and interpersonal communication. ¹⁴ As Shaomei Wu et al highlight, individuals - including celebrities and other prominent figures such as politicians, commentators or 'experts' - rather than only (traditional) media agencies and governmental organisations, can communicate instantly and directly with potentially millions of followers.

Twitter has spawned modes of communication practices that were not necessarily envisioned by its original design, or its tag-line question: 'What are you doing?' One of the first large-scale studies of Twitter by Aksay Java et al identified at least four types of communication uses: daily chatter; sharing information and URLS; reporting news; and conversations. ¹⁵ Twitter is a 'noisy environment' due to the frequency and speed of tweets being posted, ¹⁶ and users can find navigating the Twitter-sphere challenging. Particular communication conventions emerged soon after Twitter's launch. The earlier openness of the software platform enabled users to influence the development of the architecture of the system. For example, the @user-name emerged as a convention of addressivity to direct a message or reply to a user, or simply to reference another user (for example, a celebrity, without the expectation of a reply).

Many of the emergent Twitter communication conventions stemmed from existing Internet Relay Chat (IRC) practices particularly the use of the hashtag (#).¹⁷ In IRC networks, hashtags originally identified channels and topics, or they marked a message for a particular group. The symbol # prefixes a term to identify the hashtag, for example #obama or #humantrafficking. The inclusions of hashtag keywords or concatenated terms as part of a tweet were technically adopted by Twitter a year after its launch. Hashtags are circulated on Twitter by a user creating a message which also includes the unique hashtag,

14. Shaomei Wu et al, 'Who Says What to Whom on Twitter', WWW, ACM, March 28 - April 1, (2011): 705-715.

15. Aksay Java et al, 'Why We Twitter: An Analysis of a Microblogging Community', in H. Zhang et al (eds) WebKDD/SNA-KDD 2007, LNCS 5439, 2009, pp118–138.

16. Courtenay Honeycutt and Susan C. Herring, 'Beyond Microblogging: Conversation and Collaboration via Twitter', Proceedings of the Forty-Second Hawai'i International Conference on System Sciences (HICSS-42). Los Alamitos, CA, IEEE Press, 2009.

17. In the USA hashtags are also referred to as the 'pound' symbol.

18. A re-tweeted message can be an exact copy of the original message, or a user can amend the content of message though include the same hashtag. There also can be iterations of similar hashtags - a new hashtag being created in response to an existing one. As with folksomonies, there is no single individual or group controlling a hashtag or its iterations.

19. Axel Bruns and Jean Burgess, 'The use of Twitter hashtags in the formation of ad hoc publics', in 6th European Consortium for Political Research General Conference, 25-27 August 2011, University of Iceland, Reykjavik, p3.

20. Michele Zappavigna, 'Ambient affiliation: A linguistic perspective on Twitter', *New Media* and Society, 13, 5: 788-806, http://doi. org/dx3px2

21. Axel Bruns and Jean Burgess, op. cit., p6.

22. Michele Zappavigna, op. cit., p801.

23. Romero et al (2011) refer to common English words concatenated together as 'Twitter Idioms' which 'serve as a marker for a conversational theme'.

24. These tweets

or sending a new message incorporating an existing hashtag; or simply retweeting ('forwarding') the original message with the same hashtag. ¹⁸ Beyond IRC networks, hashtags identifying a specific topic are not unique to Twitter, as tagging is a principal component of Web 2.0 user-generated metadata or 'folksonomies' for categorizing content; for example in blogs, bookmarking and photo-sharing services. Nonetheless, Axel Bruns and Jean Burgess point out that the Twitter hashtag,

has proven itself to be extraordinarily high in its capacity for 'cultural generativity'... and has seen a proliferation of applications and permutations cross millions of individual instances - ranging from the coordination of emergency relief ... to the most playful or expressive applications (as in Twitter 'memes') or jokes ... to the co-watching of and commentary on popular television programs [and] the coordination of ad hoc issue publics ... ¹⁹

The high profile adoption and use of hashtags by politicians (e.g. #obama), celebrities (#ladygaga), social movements (#Arab_spring, #Occupy) and emergency events (#Fukishima) have led to hashtags becoming integral to the viral circulation of tweets. The seemingly unruly practices of tweeting are afforded a semblance of organisation as hashtags are able to relate together potentially thousands of individual messages across the Twitter network. Hashtags are used as a powerful utility for finding significant tweets. Searching for messages via popular hashtags enables the content of tweets to be readily discovered and followed (as hashtag searches can be saved). Furthermore, hashtags are now a principal functionality of Twitter via the identification of 'Trending Topics' (introduced in 2008). The ranking of the most popular hashtags - Trending Topics displayed via global or national location - appear both on a user's homepage and Twitter's main search page. Top trending hashtags elevate a topic to acquire a massively increased visibility, particularly in relation to the frenetic landscape of social media.

In contrast to other Web 2.0 tagging practices, the separation of form from content is effectively collapsed within Twitter because hashtags operate as 'inline metadata'. Twitter hashtags are unique because rather than merely categorising content, they enable users to intensify their engagement by 'organising' content and facilitating participation in conversations. The formation of 'hashtag communities' are not bounded groups but exist in emergent, 'permeable meso-level spaces which overlap both with the macrolevel flow of messages across longer-term follower/followee networks and with the micro-level communicative exchanges conducted as @replies between users who may or may not have found one another through the hashtag itself ...'²¹ Not only are hashtags generative of ad hoc communities, they function as means of *amplifying* the significance of a collection of messages and render them more readily visible and findable. Michele Zappavigna

identifies the hashtag as being formative of a 'new kind of sociality where microbloggers engage in ambient affiliation ... in the sense that the users may not have interacted directly and likely do not know each other, and may not interact again'. ²² Nevertheless, because of the different communicative practices found on Twitter, we should be cautious not to over-generalize the social characteristics of hashtag community formations.

HASHTAGS AS 'BLACKTAGS'

'Blacktags' are a particular type of hashtag associated with Black Twitter users (mainly African-Americans), because the tag itself and/or its associated content appears to connote 'Black' vernacular expression in the form of humour and social commentary. Blacktags take the form of concatenated American-English words and slang, expressive of everyday racialized issues and concerns. Examples of popular Blacktags (between 2010-12) include: #cookout; #wordsthatleadtotrouble; #wheniwaslittle; #inappropriatechurchsongs; #ifsantawasblack; #atablackpersonfuneral; #onlyintheghetto; #hoodhoe.²³ And the following group of tweets are indicative of the kind of humour-laden provocations and social critique associated with the hashtag #onlyintheghetto:²⁴

#onlyintheghetto can a game of dominoes turn violent
#onlyintheghetto your idea of a fancy restaurant is kfc
#onlyintheghetto will yu hear gunshots and instead of running yu guess which

gun made that sound Hoes dat kno they ain't shit but act stuck up #onlyintheghetto

Hoes dat kno they ain't shit but act stuck up #onlyintheghetto #onlyintheghetto will your TV cost more than your house

What is seemingly remarkable is that Blacktags on occasions become *trending* topics on Twitter, which appears to belie their vernacular expression and racialized specificity. This phenomenon has garnered both negative and positive attention across online media. A short-lived website *OMG! Black People!*²⁵ in July 2009 documented racially-charged tweets against a perceived Black Twitter. The site revealed messages from white users disparaging how trending topics - Blacktags in response to the *Black Entertainment Television* (BET) Awards - were being dominated by 'black' themes and users. On the other hand, Choire Sicha, an editor of the topical AWL website, admitted to being fascinated with Blacktags: 'I cannot keep quiet about my obsession with Late Night Black People Twitter, an obsession I know some of you other white people share, because it is awesome'.²⁶

The visibility of Blacktags is integral to instantiating the notion of 'Black Twitter',²⁷ which has been also reinforced by a number of internet demographic usage studies. The widely cited PEW 2009 survey reported that adult online African-Americans disproportionately accounted for 26 per cent of all users of Twitter (and other online updating services).²⁸ Notwithstanding the

were collected by the author during 2011. Either the same message is tweeted with the hashtag, or there can be a number of different messages associated with the same hashtag. What will be of interest is the intense repetition of Blacktags.

25. OMG! Black People! http:// omgBlackpeople. wordpress.com/ (accessed 15 September 2011).

26. Choire Sicha, 'What Were Black People Talking About on Twitter Last Night?', AWL, November 11, 2009, http://www. theawl.com/2009/11/ what-were-Blackpeople-talkingabout-on-twitterlast-night (accessed 20 October 2011). There is an explicit assumption that only Black people are involved in tweeting Blacktags.

27. Kimberly C. Ellis, 'Why "They" Don't Understand What Black People Do on Twitter', Dr Godess, 12 Aug 2010, http://drgoddess. com/2010/08/ why-they-dontunderstand-what-Black-people-doon-twitter/ (accessed 18 June 11); Chase Hoefburger, 'The demystification of Black Twitter', Daily Dot, 9 March 2012, http://www.dailydot. com/society/Blacktwitter-dr-goddess/ (accessed 5 April

28. Susannah Fox, Kathryn Zickuhr and Aaron Smith, 'Twitter and Status Updating', 2009, http://www.pewinternet.org/ Reports/2009/17-Twitter-and-Status-Updating-Fall-2009. aspx?r=1 (accessed 15 May 2010). The PEW survey also found that there are relatively more female Twitter users amongst African Americans.

29. Patrice J. Williams, 'Black Twitter: Trending Topics Paint the Wrong Picture', *The Root*, 18 January 2011, http://www.theroot.com/views/Black-twitter-trending-topics-paint-wrong-picture (accessed 20 May 2011).

30. Farhad Manjoo, 'How Black People Use Twitter', Slate, 10 August 2010, http://www.slate.com/ articles/technology/ technology/2010/08/ how_Black_people_ use_twitter.html (accessed 12 October 2011).

31. Patrice J. Williams, op. cit.

32. Danielle
Belton, cited in
Sam Sanders, 'How
Black People May
Or May Not Use
Twitter, npr, 16
August 2010, http://
www.npr.org/blogs/
alltechconsidered/
2010/08/16/
129235517/ howBlack-people-mayor-may-not-usetwitter (accessed 12
March 2012).

33. Tami, 'Rejecting the notion of "Black People Twitter", What Tami Said, 18

methodological limitations of accurately identifying the ethnic background of registered members, a report of 'Twitter users in America' by the marketing company Edison Research in 2010 boldly claimed that 'many of the "trending topics" on Twitter on a typical day are reflective of African-American culture, memes and topics'.²⁹ The title of Farhad Manjoo's prominent *Slate* article 'How Black People Use Twitter' also reinforced equating a homogeneous 'Black Twitter' with Blacktags, even though the author went on to discuss that while these hashtags appear to be associated with a sub-grouping of young working-class African-Americans, they can involve other ethnicities and socioeconomic groups.³⁰ The significance of Black Twitter has raised concerns amongst critics and bloggers in relation to Blacktags mis-representing or self-stereotyping the 'Black community'. Patrice J. Williams writing for the African-American news site *The Root*, lamented how (misygonistic) hashtags such as #hoodhoe or #itaintrape can trend, while 'serious' topics such as Haiti earthquake are relatively marginalized.³¹ Arguably, the moniker of *Blacktag* is somewhat of a misnomer. The articles by Sicha and Manjoo provoked a range of critical responses from some African-American commentators, accusing the bloggers of fetishizing the behaviour of Black people by highlighting a relatively insignificant phenomenon; Danielle Belton points to its banality: 'It's like a Black person on a bike - I've never seen that!'. 32 It is hardly surprising that essentialist notions of 'Black Twitter' have been vociferously challenged: 'Watching Black folks on Twitter tells no more about African American culture than watching the forums at Salon or Gawker reveals about white culture ... [A]ttempting to assign deep cultural meaning to trending topics like #hoodhoe is a reflection of racial bias'.33

The discourse concerning Blacktags has focussed on the demographic distribution and supposed behaviour of (a sub-set of) African-American users. While it raises contestations over what counts as 'Black Twitter', this discourse is ostensibly predicated upon an understanding of Blackness as an a priori identitarian category, and largely ignores the properties of the networked online environment that Black users act in. An influential example of this approach is surprisingly found in a presentation by the eminent data visualization researchers Fernanda Viegas and Martin Wattenberg, at the Personal Democracy Conference (2010).³⁴ These researchers examined sets of one hundred Twitter users - categorized via their profile pictures - and identified distinct differences in what 'Black' and 'White' users were tweeting via different types of hashtags. Viegas and Wattenberg report discovering a very high ratio of Black users associated with tweeting #cookout for example, and in comparison, a high proportion of White users associated with (BP) #oil spill. While not stated, the racialized implication is that Black users of Twitter are predominantly preoccupied with trivia and banal chatter, and white users are significantly more involved in engaging with serious social issues. The presentation by Viegas and Wattenberg is exemplary for (unintentionally) propagating a reductive understanding of Black Twitter via its associated hashtags and user profiles. More generally their approach exemplifies the limitation of understanding race in identitarian and representational terms. It eschews considering the technocultural environment that materializes racialized aggregations and networked affects, to which I now turn.

WHAT'S 'BLACK' ABOUT BLACKTAGS?

The dilemma for empirical researchers working in the field of race has been to name and identify ethno-racial subjects, but to avoid the trap of racialized classification and ascription. In the case of social media such as Twitter, while user profile data typically records sex and age, ethnicity is not requested. For Viegas and Wattenberg, it leads to utilizing the profile pictures of Twitter users to identify their ethno-racial background. Notwithstanding the problem that some users may employ fake identities or alternative profile images, 35 researchers resorting to determining the ethno-racial background of social media users via phenotypical characteristics can effectively reproduce practices of racial profiling. Frantz Fanon compellingly argued that the colonial visual regime has been fundamental to operations of racial categorization and racism, and how 'racial intelligibility is manifest to us immediately in perception'. 36 The visual regime - 'Look, a Negro!' - seeks to tell us the *truth* about racial being.³⁷ The institutional and cultural practices of the white gaze have worked alongside a 'racial-epidermal schema' that has naturalized a 'Black essence'. Fanon's 'fact of Blackness' registers the impasse of those phenotypically marked as Black to escape from their pathological racial designation. It is not difficult to admonish Viegas and Wattenberg for employing racially suspect visual methods, though their approach is symptomatic of the larger epistemological problem of 'how is race known?'.38 Along with Viegas and Wattenburg, many researchers can be caught relying on problematic visual schemas if wanting to identify the racial background of social media users. Moreover, even if user-generated ethno-racial data was collected or self-reported, it does not necessarily overcome identitarian modes of racial classification.

Nevertheless, the point would not be to deny identifying the presence of Black users or their involvement with tweeting Blacktags. To dismiss race because it is 'already racist' ignores how race *works* as an assemblage.³⁹ In contrast, as Wendy Chun urges, we can try to 'make race do different things'.⁴⁰ The challenge is to develop an alternative account which moves beyond simply attempting to evade valorising Black users, or resist ascribing racialized cultural characteristics to their online behaviour. Moreover, common strategies in the social sciences and humanities that seek to avoid essentializing racialized groups champion the intersectional recognition of other differences, such as those of class, gender or sexuality. However, valorising multiple identities does little to escape the limits of the discursive representation of race as a problem of knowledge.⁴¹ The remainder of this

January 2011, http:// www.whattamisaid. com/2011/01/ rejecting-notion-of-Black-people.html (accessed 2 April 2012).

- 34. Fernanda Viegas and Martin Wattenberg, 'PdF 2010 | Fernanda Viegas and Martin Wattenberg', YouTube, 22 June 2010, http://www.youtube. com/watch?v= zeVODwQAYT8 (accessed 18 January 2011). These researchers were involved in developing the ManyEyes data visualization platform, and more recently, Flowing Media.
- 35. Twitter, unlike other friends/ relationship based social media such as Facebook, Google+ and Linkedin does not insist on real identities being used.
- 36. Dilan Mahendran, 'The Facticity of Blackness', Journal of the Sociology of Self-Knowledge, Special Double-Issue, 2007, p192.
- 37. Frantz Fanon, Black Skin, White Masks, NYC, Grove Press, 1991.
- 38. Arun Saldanha, Reontologising race: the machinic geography of phenotype, *Environment and Planning D: Society and Space*, 24 (2006): 9, http://doi.org/ dm3vcd

39. Ibid.

40. Wendy Chun, 2009, op. cit., p28.

41. Jeffrey Nealon, Alterity Politics: Ethics and Performative Subjectivity, London, Duke University Press, 1999.

42. Gilles Deleuze and Félix Guattari, A Thousand Plateaus: capitalism and schizophrenia. London, Athlone Press, 1987.

43. Arun Saldanha, 2007, op. cit.

44. Ibid., p190.

45. Gilles Deleuze and Félix Guattari, op. cit, p257.

46. Marianne van den Boomen et al, 'Introduction - From the virtual to matters of fact and concern', in M. van den Boomen et al (eds), Digital Material: Tracing New Media in Everyday Life and Technology, Amsterdam, University of Amsterdam Press, 2009, pp9-10, http:// doi.org/dtd9rc

essay aims to overcome the shortcomings of race thinking governed by a logic of identity and representation, by offering an alternative framework for analyzing how race operates in online environments. The discussion that follows focuses on Twitter and is organised by two key concerns: firstly, *how* Blacktags virally trend on Twitter; and secondly, *why* Blacktags circulate across the social network. Responding to these concerns addresses the materiality of race in online networks by advancing a concept of a *digital-race assemblage*.

In the work of Gilles Deleuze and Félix Guattari, the concept of 'assemblage' explores the processes by which heterogeneous elements are arranged and brought together in particular sets of relations, relations that constitute forms of territory and expression.⁴² Assemblages are dynamic because they are constantly being made (or territorialized) and unmade (or deterritorialised), and connecting to other assemblages. Understanding race as an 'assemblage' acknowledges the oppressive force of racial categorization and the violence of racism, yet seeks to activate the potential of race to become otherwise. Arun Saldanha has innovated this kind of radical rethinking of race in machinic terms.⁴³ Rather than only as a problem of representation or embodied difference, race is discovered in its emergence through connections between bodies, and other entities and processes: 'From a machinic perspective, race is not something inscribed upon or referring to bodies, but a particular spatiotemporal disciplining and charging of those bodies themselves. Bodies collectively start behaving like situationally distinct aggregates - racial formations, racial clusters'. 44 What is identified or known as re-presentable racial identity is when the potential of race is arrested, and difference becomes stratified and bounded via social mechanisms of power. In reality, the boundaries of racial identities are fuzzy and messy, entangled with other differences, constantly being made and unmade. To grasp what race is necessitates first discovering how it functions; 'what it can do' and how it connects to other assemblages.45

A digital-race assemblage can be understood by considering how race *works* in online networks. That is, how race is manifested in social media platforms involves addressing its own digital materialization in relation to the materiality of these online spaces. Marianne van den Boomen *et al* elaborate a notion of 'digital materiality' as 'configured by human actors, tools and technologies in an intricate web of mutually shaping relations ... [T]he lines separating objects, actions, and actors are hard to draw, as they are hybridized in technological affordances, software configurations and user interfaces'.⁴⁶ Their account highlights the fact that user identities, representations and meanings in online spaces are produced by material processes vis-a-vis complex technological assemblages. Participatory social media proliferate online identities, interactions and meanings at speeds and magnitudes which appear to defy conventional hermeneutic approaches. A materialist approach interrogates the networked environment which make possible these representations and meanings. As Ganaele Langlois critically contends:

Rather than asking the question: 'who speaks?', it is better to ask the question: 'What kind of technocultural assemblage is put into motion when we express ourselves online?' ... We have to take notice not only of what users are saying at the interface level, but also of the involvement of different types of software processes in sorting and ranking information; not only the content of a message online, but the *informational logics* that make such a content more or less visible ...⁴⁷

Thus, the phenomena of Black Twitter and Blacktags are not simply social representations or *a priori* racialized categories. They are 'real' in the sense their materiality emerges through how the bodies of particular groupings of users machinically connect with the technocultural assemblage of Twitter, constituted by the informational logics of: user names and profile pictures, hashtags and trending algorithms, software interfaces and processes, data flows and networked relations, inclusion and exclusion, racial dis/ordering, contagious vernacular humour, meanings and affects, etc. When 'Black users' enter into a Twitter assemblage, their subject formation can be both territorialized (made) and deterritorialized (unmade) because racial identities are not constituted prior to their discursive representation.⁴⁸ Connecting with another assemblage - whether another body, aggregation of users or a network - offers the creative potential of entering into a process of *becoming*: 'the action by which something or someone continues to become other (while continuing to be what is)'.⁴⁹

ALGORITHMS, NETWORKS, DIFFUSION

If we return to the presentation by Viegas and Wattenberg, it is remarkable that the highlight of their discussion visualizes a list of popular hashtags, yet there is no mention of the *process* of how Twitter discovers trending topics. Perhaps because the inner-workings of Twitter's trending algorithm - which determines the ranking and display of popular topics - remains a proprietorial secret, the researchers avoid addressing its complex operations. After all, deploying a computer algorithm to parse the linguistic composition of more than 400 million new messages per day (over 4630 per second)⁵⁰ is an enormous undertaking. However, ignoring the significance of the algorithm in determining popular topics can result in *naturalizing* the existence of racialized hashtags, and further obfuscating the technocultural processes involved in their production as popular topics in the Twitter-sphere.

Twitter's algorithm for identifying trending topics has mutated over time. The original version appeared to rely on the sheer frequency of tweets for a particular keyword, and was relatively insensitive to time. This resulted in specific hashtags to be trending for lengthy periods, producing tiresome static rankings (for example, those associated with vacuous teen-celebrities such as Justin Bieber). Twitter updated its algorithm in 2010, indicating that a

47. Ganaele Langlois, op. cit, pp3-4, emphasis added.

48. Sanjay Sharma, Multicultural Encounters, London, Palgrave MacMillan, 2006.

49. Deleuze and Guattari, cited in Paul Patton, *Deleuze* and the Political, London, Routledge, 2000, p78.

50. Tomi Geron, 'Twitter's Dick Costolo: Twitter Mobile Ad Revenue Beats Desktop On Some Days', Forbes, 6 June 2012, http:// www.forbes.com/ sites/tomiogeron/ 2012/06/06/twittersdick-costolo- mobilead-revenue- beatsdesktop-on- somedays/ (accessed 10 July 12). 51. 'To Trend or Not to Trend ...' Twitter Blog, 8 December 2010, http://blog.twitter.com/2010/12/to-trend-or-not-to-trend.html (accessed 23 November 2011).

52. Jessica F. Carter, 'A response to Farhad Manjoo's "How Black People Use Twitter', 2011, http:// jessicafayecarter. com/a-response-tofarhad-manjoodshow-Black-peopleuse-twitter/ (accessed 2 February 2012).

53. Matthew Fuller, Behind the Blip, Brooklyn NY, Autonomedia, 2003; Wendy Chun, Programmed Visions, MTT, 2011.

54. Andrew Goffey, 'Algorithm', in M. Fuller (ed), Software Studies: A Lexicon, London, MIT Press, 2008, p17.

55. Tarleton Gillespie, 'Can an algorithm be wrong? Twitter Trends, the spectre of censorship, and our faith in the algorithms around us', Culture Digitally, 19 October 2011, http:// culturedigitally. org/2011/10/can-analgorithm-be-wrong/ (accessed 19 June 2012).

trending topic was not simply based on overall popularity (total tweets), but in terms of the *velocity* of a conversation over a shorter time-frame in relation to other conversations over an average day.⁵¹

A cursory explanation of the short-lived trending of Blacktags has been forwarded in terms of users 'gaming the system';⁵² that is, the possible manipulation of trending topics by young Black users intensely (re)tweeting a particular hashtag over a relatively short-period of time. This kind of explanation appears plausible, because 'gaming the system' is not especially unique to African-Americans. Various iterations of Justin Bieber hashtags continue to appear as popular trends because of the seemingly purposeful (re) tweeting actions of his loyal teenage fans. And corporate marketing strategies regularly attempt to trend particular brands to increase their visibility and feed multimedia advertising campaigns. However, any explanation relying on users manipulating Twitter trends requires further unpacking; or else we can be left with reductive assumptions that characterize algorithmic processes as readily determined by human agency, and attribute to users particular kinds of consciously co-ordinated behavioural characteristics.

Computer software algorithms are deeply embedded in many infocapitalist electronic and data analysis systems, such as stock markets, marketing trends and advertising analytics. For instance, Google's page rank (which determines the position of search results), or Facebook suggesting new 'friends', or Amazon's book recommendation system all rely on sophisticated algorithms which exploit user input (and increasingly employ data-mining techniques to predict user behaviour). As algorithms become ubiquitous in Web 2.0 platforms, the complex real-time calculations they perform on massive user-generated data remains opaque to observers. It appears credible to consider algorithms in the technically neutral terms of computer science: executing lines of code, independent of platform or external context. However, a software studies critical standpoint stresses that code is imbricated with relations of power-knowledge which articulate wider social processes, mediating everyday culture and producing material effects.⁵³ As Chun maintains, it is not possible to separate code from its execution, yet algorithms continue to operate as 'hidden magical processes', particularly for users of social media. Andrew Goffey characterizes algorithms as performing 'logic + control', exhibiting a 'hierarchizing power' that authorizes or impedes the production and circulation of information; algorithms 'do things, and their syntax embodies a command structure to enable this to happen'.⁵⁴

Since Twitter updated its algorithm, it has been subject to scrutiny for apparently 'censoring' newsworthy items, identified by hashtags such as #wikileaks, #occupywallstreet, the Gaza-bound #flotilla and the notorious killing of Black teenager #TroyDavis. These issues received significant Twitter activity and widespread mainstream (off-line) media attention, yet failed consistently to trend on Twitter.⁵⁵ However, the private company has shrewdly characterised itself as a key player in supporting information diffusion of

'progressive' political issues, which explains Twitter's attempts to publicly elucidate why significant hashtags may not on occasions trend. There is also evidence to suggest that the company does not actively censor politicized hashtags.⁵⁶ The rapid 'real-time' circulation of messages in the Twitter-sphere encourages a focus on the temporal characteristics of information diffusion with respect to the identification of trending topics. This has become more significant due to the trending algorithm becoming relatively insensitive to topics propagating through the network over longer periods of time. Twitter has endeavoured to identify key factors involved in identifying popular topics: 'Trends should privilege terms that spike, terms that exceed single clusters of interconnected users, new content over retweets, new terms over already trending ones'.⁵⁷ Nonetheless, the *exact* operations of Twitter's *value-laden* algorithm remains hidden by the company, and studies attempting to discover or model its inner-weighting and statistical calculations reveal highly complex computational processes involved in determining which terms trend.⁵⁸

Nevertheless, it is possible to interrogate trending topics in relation to the significance of the structure of user networks and the kind of hashtag content being circulated. The identification of popular Blacktags by Viegas and Wattenberg was devoid of a discussion about the structure and formation of ad hoc hashtag communities, and the types of topics associated with these. On the other hand, Manjoo⁵⁹ - notwithstanding the critical reception of his article - did usefully draw on network research, which points to the likelihood of Blacktags trending because they originate in tightly-clustered groups (with higher than average follower-followed reciprocal relationships), often a characteristic of 'minorities' in social networks. From a social network analysis perspective, the diffusion of Blacktags can be accounted for by a model of 'simple contagion'. Damon Centola and Michael Macy point out that the phenomenon of the 'strength of weak ties' suggests that within a highly clustered network - a 'small world' with strong in-group ties - information may rapidly spread to other parts of the network, because only a few 'long' ties are needed to make distant (bridging) connections and create larger network effects.⁶⁰ The authors highlight that in Mark Granovetter's original work, network ties between people have been characterised as being relational and *structural*. The relational element refers to a channel of information in terms of influence and trust between people. The structural element facilitates linking, diffusion and integration into the network. Granovetter's 'strength of weak ties' thesis implies that a network which is 'structurally weak' can be 'relationally strong'.

However, Centola and Macy demonstrate that this phenomenon is not generalizable to all types of networks when examining information flow and diffusion. Contagious modes of collective behaviour can occur on the basis of differing processes of diffusion. In the case of trending Blacktags, they may originate within a relatively small cluster of highly connected African-American users, and the rapid diffusion of these hashtags to *other* branches

56. Gilad Lotan. 'Data Reveals That "Occupying" Twitter Trending Topics is Harder Than it Looks!', SocialFlow, 12 October 2011, http:// blog.socialflow.com/ post/7120244374/ data-reveals-thatoccupying-twittertrending-topics-isharder-than-it-looks (accessed 20 June 2012).

57. Tarleton Gillespie, op. cit.

58. Jean-Baptiste Chaubet, 'Detecting Trending Topic on Chatter', MSc Dissertation, Information and Communication Technology, Royal Institute of Technology, School of Computer Science and Communication, Stockholm, 2011; Fang Fang et al, 'Detecting Twitter Trends in Real-Time', Proceedings of the 21st Workshop on Information Technologies and Systems, WITS 2011, pp49-54

59. Farhod Manjoo, op. cit.

60. Damon Centola and Michael Macy, Complex Contagions and the Weakness of Long Ties, American Journal of Sociology, 113, 3 (2007): 702-734. The authors draw on the pioneering work of Mark Granovetter, 'The Strength of Weak Ties', The American Journal of Sociology, 78, 6 (1973): 1360-1380.

61. Jessica Carter, op. cit.

62. Daniel M. Romero, Brendan Meeder and Jon Kleinberg, 'Differences in the Mechanics of Information Diffusion Across Topics: Idioms, Political Hashtags, and Complex Contagion on Twitter', International WWW Conference, 2011.

63. Blacktags are not explicitly referred to in the study by Romero et al, though arguably could form a sub-set of Twitter idioms. However, Blacktags may not neatly fall into the schema developed by Romero. Moreover, the label of 'political' hashtags should not suggest that 'idiom' hashtags do not have a politics.

64. Romero et al appropriate the term 'stickiness' away from its more popular 'marketing' usage (e.g. Malcolm Galdwell), and instead offer a more precise definition to characterise a mode of information diffusion.

65. Ibid.

66. Sitarum Asur et al, 'Trends in Social Media: Persistence and Decay', Proceedings of the Fifth

of the network via long bridging ties ('simple contagion') - particularly via re-tweeting - points to the involvement of other clusters, including other (ethnic) groups. Jessica Carter rightly points out that 'no one wants to do the work of understanding these [hashtags] as multicultural particularly when they fit neatly into the stereotypes about Blacks'. ⁶¹

Moreover, the mechanisms of information diffusion in social networks are multifarious, and the research by Daniel Romero et al draws attention to variations over how different types of hashtag spread through Twitter.⁶² The researchers develop a typology for categorizing hashtag topics; for example, political hashtags (which refer to political figures, discussions, controversial issues), and idioms hashtags (conversational themes represented by concatenated terms, such as Blacktags). 63 Elaborating upon the work of Centola and Macy, Romero et al find that there are distinct mechanisms of information contagion for different kinds of hashtag - based on the variation of 'stickiness' (likelihood of information spreading) and 'persistence' (exposures from multiple sources). Stickiness refers to a piece of information (or idea) spreading from one person to another which can be attributable to the number of exposures an individual has to that piece of information.⁶⁴ High stickiness means a greater likelihood of information diffusion. Persistence refers to 'the relative extent to which repeated exposures to a piece of information continue to have significant marginal effects on its adoption'.65 High persistence points to 'complex contagion' which relies on multiple exposures from different sources (e.g. reinforcement from different people) via stronger and 'wider' ties before a topic can successfully spread across the network. This differs from the model of 'simple contagion' which involves single exposures via 'weak' or longer ties for information diffusion.

Political hashtags are found to have a high persistence (complex contagion), and in comparison, conversational idiom hashtags have high stickiness though low persistence (simple contagion). This account can affirm that trending (idiom) Blacktags exhibit high diffusion rates through the Twitter network with weak ties over a relatively short period of time; and these types of hashtags are more likely to exhibit clusters of tightly-knit users. In contrast, trending political hashtags rely on multiple exposures likely to involve a broader range of users across different parts of the network. In this respect, returning to Viegas and Wattenberg's identification of hashtags #oill spill (political; white users) with #cookout (idiom; Black users), merely correlating these respective hashtags with the racial identities of users is flawed if we are properly to grasp this phenomenon. The relative number of white and Black users associated with particular trending hashtags can be dependent upon specific mechanisms of contagion, not actual numbers or correlation between race and a particular topic. The researchers stumble upon the phenomenon of distinct hashtag diffusion by visualizing apparent differences in user groups associated with political or idiom hashtags. Yet they fail to explain adequately these differences beyond reductively displaying racially categorized Twitter

profile identities. The effect is that an implicit assumption about racialized user dispositions prevails. Furthermore, in relation to hashtag *content*, the study by Sitaram Asur *et al* specifically examined factors influencing trending on Twitter, and discovered that the content being shared (via retweets by other users) is the most significant, and not the attributes of users (their number of followers or tweet-rate). ⁶⁶ These findings are not necessarily generalizable to all types of hashtags, ⁶⁷ but they can problematize any simplistic impression of Blacktags *personifying* Black users in relation to possessing specific kinds of hashtagging behaviour. Blacktags can operate beyond their perceived racialized characteristics.

An alternative consideration of race as a digital assemblage enables 'identities' of users to be explored in relation to how they are formed and connected vis-a-vis the technocultural processes of Twitter. Rather than pre-constituted racial subjects merely acting on Twitter, racial aggregations or clusters emerge in relation to dynamic network structures of interacting users, and these are articulated by systemic software processes (that is, other assemblages) such as the trending algorithm, where the morphology of different hashtags and their distinct modes of contagion plays a significant role in determining what trends. That is, popular Blacktags are not only attributable to the idiosyncratic behaviours of a sub-set of African-Americans – they arise from the array of machinic networked relations, algorithmic operations and differential information flows of Twitter.

RACIAL CONTAGION: IMITATION, REPETITION, DIFFERENCE

The discussion of Black Twitter highlights that the morphology of Blacktags influences how they diffuse within Twitter. While it reveals the significance of network structures and the emergence of racial aggregations, it tells us little about *why* Blacktags are intensely shared.⁶⁸ Blacktags are distinctive because they curate and virally propagate racially charged messages expressing social critique through a particular acerbic style of humour which has been associated with elements of African-American culture.

One way of explaining the apparent contagious qualities of Blacktags is in terms of the memetic characteristics of hashtags: they are effectively online (micro-)memes.⁶⁹ The concept of a meme has acquired widespread usage for highlighting the rapid circulation of any popular cultural phenomena. The geneticist, Richard Dawkins coined the term 'meme' in his book *The Selfish Gene*, as a 'unit of cultural transmission, or a unit of imitation'.⁷⁰ Examples of memes can range from ideas, melodies, catchphrases, fashions or architectural styles. Essentially, analogous to genes, memes are *pattern replicators*, and *imitation* 'is how memes replicate'. Memes are supposedly in a neo-Darwinian competition to survive in human minds, and there are three principal characteristics of successful memes: *copying-fidelity* (qualities that enable reproduction, such as memorability); *fecundity* (relevance and speed of

International AAAI Conference on Weblogs and Social Media, 2011, pp1-4.

67. See Albert-Laszlo Barabasi, Linked, London, Plume, 2003. Barabasi identifies 'influential hubs' diffusing information across 'scale-free' networks. For example, the viral mysogonistic hashtag #aintitrape was initiated by the comedian Liv Duval, who has a large number Twitter followers. However, numbers of followers does not simply secure 'influence', see Jonah Berger and Katherine Milkman, Social Transmission and Viral Culture, Wharton School, University of Pennsylvania, 2010.

68. Cf. Jonah Berger and Katherine Milkman, ibid.

69. Jessica Carter, op. cit; Karissa McKelvev et al, 'Visualizing Communication on Social Media', arXiv:1202.1367v1, 2012; Oren Tsur and Ari Rappoport, 'What's in a Hashtag? Content based Prediction of the Spread of Ideas in Microblogging Communities', Proceedings of the fifth ACM international conference on Web search and data mining, 2012, pp643-652.

70. Richard Dawkins, *The Selfish Gene*, Oxford, OUP (second edition), 1989, p171. 71. Susan Blackmore, The Meme Machine, Oxford, OUP, 1999.

72. Limor Shifman. 'An anatomy of a YouTube meme', New Media and Society, 14, 2 (2012): 187-203, http://doi. org/c36vss

73. http://www. cheezburger.com/

74. http:// boards.4chan.org/b/

75. Irina Papuc, 'Does 4Chan Reflect Our Culture's Morals When No One Is Looking?', Techli, 15 June 2012, http:// techli.com/2012/06/ warning-not-safefor-work/ (accessed 20 June 2012).

76. Keith Ansell Pearson, Viroid Life: Perspectives on Nietzsche and the Transhuman Condition, Routledge, London, 1997, n3, p13.

77. See Susan Blackmore, op. cit.

78. For example, Michele Knobel & Colin Lankshear, 'Online Memes, Affinities, and Cultural Production', in M. Knobel & C. Lankshear (eds), A New Literacies Sampler, Oxford, Peter Langford, 2007; Limor Shifman, op. cit.

79. Jussi Parikka, 'Contagion and Repetition: On the Viral Logic of Network Culture', Ephemera, 7, 2 (2007): 287-308;

replication); and *longevity* (length of time present for reliable reproduction). Predictably, the Web is considered the prime propagator of memes because of its ease of digital reproducibility and rapid diffusion of information.⁷¹ The viral circulation of popular online phenomena in the form of linguistic expressions, images and videos are commonly dubbed as internet memes.⁷² The website Cheezburger⁷³ hosts a range of online media for both tracking and creating memes. And the infamous 4chan discussion board, 74 a generator of racially provocative and ambiguous memes, has been described as a 'viral incubator'.75

The internet meme concept has ironically become a meta-meme in contemporary media culture, an everyday moniker for any kind of viral online phenomenon. Although, the utility of meme theory remains contested within academic discourse, especially concerning its ontological rendering of culture as a unit of transmission in a Darwinian competition for survival. Memes seemingly possess an autonomous agency, with passive human brains as mere vehicles for their propagation. Keith Ansell-Pearson argues that Dawkins' theory '... reifies the processes of cultural evolution since it has no insight into how such processes involve technical and social mediation. The idea that culture develops in terms of a process of self-replication analogous to genetic evolution is an assertion at best and completely unfounded'. 76 This has not prevented ambitious deployments of the meme concept to account for human behaviour and 'infectious' contemporary cultural phenomena by psychologists such as Susan Blackmore.⁷⁷ In contrast, media culture researchers have utilized the meme concept as an 'analytical tool' for studying the transmission of digital culture.⁷⁸ And more critically, materialist media theorists, Jussi Parikka, Matthew Fuller and Steve Goodman have heuristically engaged with memes for interrogating contemporary viral cultures.⁷⁹ While the study of memes seeks to explore how populations are susceptible to the *contagious* transmissions, meme theory has been found to be deeply problematic for relying on notions of genetic evolution as a basis of cultural evolution.⁸⁰ In particular, materialist media perspectives characterize meme theory as fundamentally flawed for its mechanistic neo-Darwinist account of human desire and social invention.81

An alternative line of inquiry has revived the work of Gabriel Tarde by valorizing imitation for exploring contagious collective behaviour.82 In particular, the rediscovery of Tarde's key text, *The Laws of Imitation*⁸³ has been influential for the development of (Deleuze inspired) work concerning the contagious characteristics of networks in relation to the boundaries between the individual and 'the crowd'.84 Tarde's contemporary appeal is located in the rejection of an intentional sovereign individual and conversely, the determinism of social collectivities à la Durkheim.85 When Tarde declared 'Society is imitation, and imitation is a kind of somnabulism', 86 he aimed to sidestep the dichotomy of the consciously acting individual and the unconsciously driven crowd. Breaking down the division between apparent voluntary

(individual action) and involuntary (crowd behaviour) leads to appreciating variation in forms of imitation as 'a matter of difference in *intensity*' rather than type, according to Jakob Arnoldi and Christian Borch.⁸⁷ It implies that imitation is an emergent quality, rather than simply attributable to individual or group behaviour.

The characterization of the potential force of collective group behaviour has a long history, and a range of politically charged terms have arisen to describe this phenomenon, for example, 'the mob', 'the crowd' and 'the multitude'. Gustave Le Bon has been authoritative for his fearful characterization of the contagious power of the crowd. 'According to Le Bon, crowds jeopardize the organism of the population and it is therefore crucial, he believed, to fight mass behaviour'.88 As Borch contends, Le Bon's classic account of crowd theory implicitly advanced 'a racist biopolitical program'. It should be of little surprise that group behaviour in social media can similarly raise the fear of the pack-like acting mob, which has been used to characterize online taunting or bullying; or more specifically in relation to the presence of Blacktags, the propagation of misogynist racialized humour. Nevertheless, Borch contests classical crowd theory (and follows Elias Cannetti), by maintaining that the crowd has the capacity to generate democratic transformations. Rather than suppressing the individual, crowds are sites through which the freedom of the 'individual' can be realized.

Analytically we can characterize hashtag propagation as formative in structuring Twitter as an *imitative* network, that is, both as a social network made up of 'intentionally' acting individuals *and* as a 'crowd' of affective contagions.⁸⁹ A (Black) subject 'gaming the system' to trend a hashtag is thus neither an autonomous agent imitating others, nor dissolved into an aggregation without agency. Rather than reduce society to an aggregation of autonomous agents, the 'individual' can be situated as emerging at a 'threshold'. Andrea Brighenti suggests that beyond the threshold are not groups of individuals, but a *crowd*. The crowd is manifest through movement and encounter, constituted by a Deleuzian *multiplicity* which,

has at least two fundamental dimensions ... the dromological (composition of relative speeds and slownesses) and the affective (capacities of affecting and being affected) ... The crowd is thus a composition of relative speeds ... It is through its own dromology that the crowd becomes capable of affecting other social entities and being affected by them.⁹⁰

Thus, racial aggregations can be conceived in terms of the properties of a crowd. Groupings of Black twitter users are formed by networked interactions via their dromological and affective capacities in relation to the propagation of Blacktags. The formation of racial aggregations on Twitter can be located in machinic terms: Black 'collective' activity in the production of Blacktags is not over-determined by an idiosyncratic set of ethno-racial dispositions;

Matthew Fuller, Media Ecologies, London, MIT, 2005; Steve Goodman, Sonic Warfare, London, MIT, 2010.

80. Hans Bernhard Schmid, 'Evolution by Imitation, Gabriel Tarde and the Limits of Memetics', Distinktion, Scandinavian Journal of Social Theory, 9, 2 (2004): 103-119.

81. Teresa Brennan, The Transmission of Affect, London, Cornell University Press, 2004; Tony D. Sampson, Contagion Theory Beyond the Microbe, CTHEORY, (2011), www. ctheory.net/articles. aspx?id=675

82. See for example, Tony D. Sampson, Virality: Contagion Theory in the Age of Networks, Minnesota, University of Minnesota Press, London, 2012.

83. Gabriel Tarde, The Laws of Imitation, New York, Henry Holt, 1903. http:// openlibrary.org/ books/OL7240797M/ The laws_of_ imitation

84. Jakob Arnoldi and Christian Borch, 'Market Crowds between Imitation and Control', Theory, Culture and Society, 24, 7-8 (2007): 164-180; Andrea Brighenti, 'Tarde, Canetti, and Deleuze on crowds and packs', Journal of Classical Sociology, 10, 4 (2010): 291–314; Tony Sampson, op. cit.

85. Bruno Latour, 'Gabriel Tarde and the End of the Social', multidudes, 2005, http://multitudes.samizdat.net/Gabriel-Tarde-and-the-End-of-the (accessed 18 April 2010)

86. Gabriel Tarde, op. cit., p87.

87. Arnoldi and Borch, op. cit., p169, my emphasis.

88. Christian Borch, 'Body to Body: On the Political Anatomy of Crowds', Sociological Theory, 27, 3 (2009): 272.

89. cf. Arnoldi and Borch, op. cit.

90. Andrea Brighenti, 'Tarde, Canetti, and Deleuze on crowds and packs', Journal of Classical Sociology, 10, 4 (2010): 291-314, 304.

91. Gabriel Tarde, cited in Vito Campanelli, *Web Aesthetics*, Rotterdam, NAi Publishers, 2010, 78.

92. The creation of *new* Blacktags can also be another repetitious call-andresponse to existing Blacktags.

93. Baratunde Thurston, 'SXSW 2010: How to be Black', Youtube, 2010, http://youtu. be/c6luK6u97Ug (accessed 16 September 2011).

94. Dexter B. Gordon, 'Humor in rather it is an emergent array of qualities and connections vis-a-vis the technocultural assemblages of Twitter. To put it another way, the question of 'what makes Blacktags Black?' is refigured towards how the dromological and affective qualities of Blacktags render them as imitative and contagious digital objects. Let us see how.

Tarde noted that 'Repetitions are also multiplications or self-spreading contagions'. A key characteristic of hashtags is that they operate as *replicators*, spreading via repetition. Hashtags make available the re-tweeting of the whole message they embody, or the tweeting of a new message via the existing hashtag. Either way, to (re-)tweet a hashtag continues its propagation through the Twitter network, and increases the potential for contagious affects to take hold. Blacktags similarly have this duality of function, though they appear unique for the *intense repetition* of the embodied messages that propagate vernacular styles of caustic jokes and social commentary. For example, the popular hashtag of *#atablackpersonfuneral* propagated tweets such as:

- ... The other gang members stand beside the casket planning the revenge.
- ... the momma of the deceased ALWAYS scream, "LAWWWWD! THEY TOOK MY BABYYY!"
- ... someone almost always tries to jump into the grave.
- ... ppl take cell phone pics of the body.
- ... there is always at least one white person who feels completely out of place.

A director of *The Onion* website, Baratunde Thurston has highlighted that Blacktags express a 'call-response' form of exchange associated with African-American culture, and the structural addressivity of Twitter facilitates this particular modality of communication.⁹³ Moreover, he points to the linguistic play of Blacktags expressing the bitter humour of 'the dozens'.

'Playing the dozens,' one of the more popular African American language games, is also a strategic survival tool ... These games are part of the humour that continues to fulfil the need for a sense of power in the midst of misery, the need for both a morale booster and amusement in Black culture ... ⁹⁴

Manjoo has contested Thurston's characterization of Blacktags as 'the dozens', because not all of these hashtags express this humorous mode of addressivity, and 'non-Black' online exchanges can also take a similar anti-phonal form. ⁹⁵ However, the point is not to essentialize Blacktags as embodying an exclusive vernacular form, but to draw attention to the machinic significance of their *repetition*. James Snead observed that repetition has been an 'organising principle' of elements of African American culture, 'the thing that is there to pick up', enabling participation, interruption and improvisation. ⁹⁶ There is no teleological goal to repetition (or the 'cut' as Snead describes it); repetition

creates the space for encounter, movement and difference to emerge. The 'repetition with a difference' associated with African American culture marks the variation in the *intensity* of imitation.

It is important to consider briefly the politics of Blacktags, though it is not possible simply to identify their anti-racist determination. This does not mean that Blacktags are merely ambiguous signifiers possessing multiple meanings, simultaneously progressive or reactionary. Blacktags propagate an ambivalent social humour in which 'lurks the spectre of tragic reality', 98 reiterating the marginalized condition of Black life. Yet, the networked emergence of Blacktags activates the possibility of race to exceed itself by multiplying its connections. The repetitious intensity of Blacktags can occur with 'an important difference...to create a deterritorialization, a line of flight for African American Culture'. 99 Jeffrey Nealon reminds us that deterritorializations are not in themselves liberatory. Blacktags activating a 'becoming-Black' is a site-specific transformative movement: 'there are only specific, more or less forceful imbrications of form and content that can respond to - disrupt and reinscribe - existing norms'. 100 Thus, 'Black Twitter' is not in opposition to a 'white Twitter' space (and neither of these are fixed or homogeneous). The intensive, imitative repetition of Blacktags has the potential to interrupt the whiteness of the Twitter network. In this respect, Black Twitter can be more than an aggregation of Black users manifested as a stratified racial group. That is, it can form a becoming-Black block - a deterritorializing crowd - fashioned by a series of technocultural processes and practices. The affects and meanings of Blacktags are produced through the digital-race assemblage of Twitter, which I have examined in this essay. The politics of Blacktags arise in relation to the interventionary force of their becoming-Black, temporally occurring in the networked spaces of Twitter. It is only by exploring the digital materiality of race on Twitter can we begin to grasp the significance of Blacktags and Black Twitter.

Twitter and other corporate social media (Facebook, Youtube, Flickr etc.) are circumscribing the Web. The original design of the World Wide Web utilizes a series of protocols to access the internet. However, the rise of social media (and search engines) are creating 'walled gardens', delimiting access and ostensibly regulating its 'open' architecture. The emergence of a *participatory* social web presents the potential of creativity and collaboration, yet the corporate colonisation of the public internet is exploiting online activity and accumulating massive identity profiling data, beyond the reach of academic researchers. ¹⁰¹ More specifically, how online identities are being transformed by a ubiquitous informatic-capitalist social media and whether new racial ordering and segregations are emerging has become a compelling issue. Nonetheless, it has been contended that focussing exclusively on ethno-

African American Discourse: Speaking of Oppression', Journal of Black Studies, 29, 2 (1998): 258

95. Farhod Manjoo, op. cit.

96. James A. Snead, 'On Repetition in Black Culture', *Black American Literature Forum*, 15, 4 (1981): 150.

97. Amiri Baraka, Blues People: Negro Music in White America, London, Harper Perennial, 2002; Henry Louis Gates, The Signifying Monkey: A Theory of African-American Literary Criticism, Oxford, OUP, 1989.

98. Gordon, op. cit., p.256.

99. Jeffrey Nealon, op. cit., p121.

100. Ibid., p136.

101. Ron Deibert, 'Social Media, Inc: The Global Politics of Big Data', World Politics Review, 2012, http://www. worldpoliticsreview. com/articles/12065/ social-media-inc-theglobal-politics-ofbig-data (accessed 12 July 2012) racial identity and the discursivity of race, while not paying attention to the technocultural operations of digital media leads to inadequately perceiving the production of new forms of racial coding, interaction and emergence.

This essay has explored 'Black Twitter' and its associated Blacktags as a means to grapple with the question of how race is manifested online. The analysis moves beyond the logic of identity and representation, which can limit race to either being a signifier to be semiotically deconstructed, or an embodied difference to be overcome. Alternatively, advancing race as assemblage enables a tracing of its *emergence* in online networked relations. The potentiality of race to become otherwise in digital networks - such as in the case of Blacktags - is neither positive nor negative. Rather, the possibility that race can do different things opens towards new understandings of how it functions. It is worth stressing that a materialist approach to analysing race and digital networks resists jettisoning the significance of meaning and representation, or erasing the (racialized) subject. Its point of departure discovers and interrogates a digital-race assemblage by offering an alternative methodology, which attends to the materiality of digital objects. Blacktags analyzed as digital objects necessitate developing novel methods for conceiving the online viral production and circulation of race. Pursing a technocultural perspective expands our grasp of racialized meaning by taking into account the conditions and regimes of its production, 'constituted by a range of heterogeneous representational and informational technologies, cultural practices and linguistic values'.102

102. Ganaele Langlois, op. cit., p1.

103. cf. Richard Rogers, The End of the Virtual: Digital Methods, Amsterdam, Amsterdam University Press, 2009.

Critical race researchers ought to confront how online computer-based technology actually *works* - it cannot remain obfuscated as a 'black box'. To come to terms with the complex technological and political operations of new online platforms, both existing social science virtual methods and racethinking need to evolve. The recent developments of 'digital humanities', 'social computing' and 'software studies' recognise the significance of engaging with the technosocial processes of the internet and new media. This essay contributes toward what can be identified as a *digital-race method*¹⁰³ for exploring race as an emergent online relation, articulated by systemic software processes and informatic connections. It is a method which seeks to understand the multiplicities of race in digital networks. As corporate social media unrelentingly colonise online life, developing digital-race methods and interventions will become imperative for committed researchers and net-activists.

On The Materiality Of Contemporary READING FORMATIONS: THE CASE OF JARI TERVO'S LAYLA

Hanna Kuusela

Abstract This essay describes the emergence of a 'reading formation' around a Finnish bestselling novel, Layla, investigating how a specific dominant reading of Layla was constructed with the help of different material supports - including TV programmes, blogs, newspapers, websites and advertising infrastructure. The essay sets out Tony Bennett's concept of reading formation and develops it in the context of twenty-first century reading environments, paying special attention to the transformations associated with digital media and the book's material supports. By making empirical use of actor-network theory, the essay suggests that contemporary reading formations should be perceived as hybrid networks of both human and non-human actors, technologies and texts. By focusing especially on the circulation of Layla's opening sentence across different material platforms, and describing its interaction with different actors, the essay depicts how certain interdependencies between different actors and material mechanisms controlled the proliferation of meanings around Layla. Thus, the essay investigates how specific culturalist meanings of Kurds as a violent and misogynist people were materially constructed at the expense of tendencies to polysemy in the text.

Keywords reading formations, actor-network theory, materiality, paratexts, culturalism

In 1983 Tony Bennett made a theoretical intervention that he later framed as an attempt to ease the tension between poststructuralism and Marxism in the field of literary criticism.¹ According to Bennett, the object of literary theory and criticism should not be texts but something he called 'reading formations'. By a reading formation he meant

a set of discursive and inter-textual determinations which organize and animate the practice of reading, connecting texts and readers in specific relations to one another in constituting readers as reading subjects of particular types and texts as objects-to-be-read in particular ways.²

According to Bennett, readers productively activate the texts they read (as poststructuralists more generally had suggested), but this always takes place inside a reading formation that structures the interaction between the texts

^{1.} Tony Bennett, 'Texts, Readers, Reading Formations', The Bulletin of the Midwest Modern Language Association, 16, 1 (1983): 3-17; and Tony Bennett, 'Texts in History: The Determinations of Readings and Their Texts', in Derek Attridge, Geoff Bennington and Robert Young (ed), Post-Structuralism and the Question of History, Cambridge, Cambridge University Press, pp63-82.

^{2.} Bennett, 'Texts in History', op. cit.,

3. Bennett, 'Texts, Readers, Reading Formations', op. cit., p16.

- 4. Bennett, 'Texts in History', op. cit., p70.
- 5. Dan Hicks, 'The Material Culture Turn: Event and Effect', in Dan Hicks and M.C. Beaudry (eds), The Oxford Handbook of Material Culture Studies, Oxford, Oxford University Press, pp25-98.
- 6. Jari Tervo, *Layla*, Helsinki, WSOY, 2011
- 7. For discussion on circulation, see Benjamin Lee and Edward LiPuma, 'Cultures of Circulation: The Imaginations of Modernity', *Public Culture* 14,1 (2002): 191-213, http://doi.org/c26cpw
- 8. Bennett, 'Texts in History', op. cit., p70.
- 9. The author has published twenty books, including thirteen novels and several collections of both short stories and poems. Moreover, he has found popularity beyond the literary audiences as the team captain in the Finnish version of the primetime TV-show Have I Got News for You.

and their readers. This is most notably the case with popular literature and, according to Bennett, this should form the main object of research, so that the 'analysis must start with the determinations that organize the social relations of popular reading'.³

In this essay, I engage with the question of how to study the reading formations of the twenty-first century. I approach Bennett's project by using a perspective that pays particular attention to the roles materiality and technology play in the reading formations of contemporary popular literature. In recent decades, the focus of both cultural production and cultural theory has moved from print towards digital production and reception. This new cultural ecosystem rests on connections, networks and relationships or links between different fragments of information. Consequently, the digital revolution seems to have created new kinds of formations which older cultural forms, such as literature, must now navigate. As a result of this, the sets 'of discursive and inter-textual determinations which organize and animate the practice of reading' have both changed and acquired new relevance.⁴

These broader changes and technological developments have been accompanied by a new interest in materiality, technology and material practices. Some say that the so-called linguistic turn has been followed, and if not entirely substituted then at least supplemented, by a 'material turn'.⁵ One body of theory that has contributed to this 'turn' has been 'actor-network theory' (ANT). My intention in this essay is to use some of the insights offered by actor-network theory and apply them to the analysis of a Finnish popular novel, Layla, and the reading formations around it. 6 I describe, in particular, how the commentaries made on Layla found varying material supports and circulated, interacted or corresponded with the messages that were disseminated by the publisher. In so doing, I investigate how they together constructed a powerful reading formation inside of which the readers of Layla had to navigate in order to negotiate meanings.⁷ Consequently, my concern in this essay is to find and test empirical means by which to study twenty-first century reading formations, 'the specific determinations that mould and structure popular reading' in their full materiality.8 I start this argument by introducing the idea of Layla as an actor-network.

LAYLA AS AN ACTOR-NETWORK

Written by a famous Finnish author, Jari Tervo, and published in 2011, *Layla* was for several months the best selling fiction book in Finland. It describes the intersecting paths of Finnish individuals, a Kurdish family, and a German family, who are all, in one way or another, involved in prostitution or human trafficking. I have chosen to analyse *Layla* because it is above all a popular trade book. As a popular book with a topical theme it can demonstrate forcefully how the reading formations of twenty-first century popular fiction

may operate. Moreover, Layla is a good testing ground for research on the materiality of reading formations because it does not, in any particular way, draw attention to its material dimensions. On the contrary, Layla's materiality runs the risk of remaining unnoticed in the eyes of contemporary researchers who often concentrate on experimental works that 'foreground, and thematize the connections between themselves as material artifacts and the imaginative realm'.10

Prior to engaging with the milieu of Layla, however, I will further introduce the theoretical premises of this essay. I will discuss the idea of an actor-network in relation to other approaches and concepts, most notably to Bennett's reading formations and literary post-structuralism in general.

Emerging from science and technology studies, actor-network theorists such as Michel Callon and John Law - have described an actor-network as an unstable set of relations between heterogeneous elements, human and nonhuman alike. It is unstable because it is in a constant process of mutation as new relations are built, maintained or challenged by actors, which are mutually defined in the course of their associations. An actor-network is never complete but, rather, under negotiation.11 If we attend to the particular domain of text, we see that actor-network theory shares several dynamic features with poststructuralist theories that put emphasis on the processual nature of meaning making, and its potentially infinite possibilities.¹² Equally, with its emphasis on connections, relations and mutual dependencies, ANT has similarities with Bennett's definition of the reading formation and his remark that texts 'exist only as variable pieces of play within the processes through which their meaning is socially enacted'. 13 Following these approaches, this essay considers Layla not as a fixed entity, but as an emergent collective process, an outcome of a network of relations. It is studied in the light of its readings, as Bennett has defined the task of an analyst.14

An actor-network perspective suggests that in order to be effective, a text, for example, needs to have materially supported relations and bonds to other actors. It needs to be commented upon and it needs to circulate physically. These relations are necessary, because as Bruno Latour has noted, to determine the efficiency of a mechanism we should not look for any intrinsic qualities but at all the transformations the mechanism undergoes in the hands of different actors. 15 For Latour, 'the status of a statement depends on later statements', 16 which is why 'we are not to follow a given statement through a context. We are to follow the simultaneous production of a "text" and a "context". 17 As already implied, this is not something that would differentiate ANT from the different currents of literary post-structuralism. On the contrary, some ANT-writers have explicitly presented their work as a variant of post-structuralism. According to John Law,

actor-network theory can also be understood as an empirical version of post-structuralism. For instance, 'actor-networks' can be seen as scaled-

- 10. See Katherine N. Hayles, Writing Machines, Cambridge and London. The MIT Press, 2002, p25.
- 11. See Michel Callon, John Law and Arie Rip (eds), Mapping the Dynamics of Science and Technology, London, The Macmillan Press Ltd. 1986.
- 12. See Roland Barthes, 'Theory of the Text', in Robert Young, Untying the Text: a Post-Structuralist Reader. London and Boston, Routledge and Kegan Paul, 1981, pp36-37.
- 13. Bennett, 'Texts in History', op. cit.,
- 14. Ibid., p74.
- 15. Bruno Latour, Science in Action: How to Follow Scientists and Engineers Through Society, Cambridge, MA, Harvard University Press, 1987, pp27-29.
- 16. Ibid., p258.
- 17. Bruno Latour, 'Technology is Society made Durable', in John Law (ed), A Sociology of Monsters. Essays on Power, Techonology and Domination, London and New York, Routledge, 1991, p106.

18. John Law, 'Actor Network Theory and Material Semiotics', version of 25th April 2007, p6, available at: http:// www. heterogeneities .net/publications/ Law2007ANT andMaterial Semiotics.pdf

19. Bennett, 'Texts, Readers, Reading Formations', op. cit., pp14-17.

20. Jay David Bolter, Writing Space. The Computer, Hypertext, and the History of Writing, Hove and London, Lawrence Erlbaum Associates Publishers, 1991, p3.

21. Ted Striphas, The Late Age of Print, New York: Columbia University Press, 2009, p3.

22. Roger Chartier and J.A. González, 'Laborers and Voyagers: From the Text to the Reader', Diacritics, 22, 2 (1992): 50; see also, Nicole Matthews and Nickianne Moody (eds), Judging a Book by Its Cover: Fans Publishers, Designers, and the Marketing of Fiction, London, Asghate Publishing, 2007; Michele Moylan and Lane Stiles (eds), Reading Books: Essays on the Material Text and Literature in America, Minneapolis, University of Massachusetts Press, 1996.

23. John Law, 'Power, Discretion and Strategy', in John Law (ed), A Sociology of Monsters: Essays on Power, Techonology and down versions of Michel Foucault's discourses or epistemes. Foucault asks us to attend to the productively strategic and relational character of epochal epistemes ... The actor-network approach asks us to explore the strategic, relational, and productive character of particular, smaller-scale, heterogeneous actor-networks.¹⁸

Following Law's suggestion here, I want to argue that ANT can indeed be a useful *supplementary* tool for studying literature and its effects in the twenty-first century. The reasons are twofold.

First, ANT's dedication to the *micro-perspective* and *empiricism* may help to develop further, for example, the idea of the reading formation. It is noteworthy that Bennett himself remained hesitant as to how exactly to do research on these formations. He wrote that he was 'not altogether sure' what the practical consequences of his theoretical idea could be. Bennett did not offer any tools or methodological means by which to study "the living life" of written texts', but noted instead that his 'concern has been less to provide answers than to raise awkward questions'. He only concluded that critics often fail 'to broach the real issue: namely, accounting for such *real* variations in the social destinies of texts as *have actually* taken place'. ¹⁹ My suggestion is that these actual variations can be understood by observing and analysing the different relations that are built and challenged at the micro level, the level at which actor-network theorists have traditionally worked.

Second, ANT's sensitivity towards the material aspects of human action and human/non-human interactions can be useful when looking for the object of literary criticism in the late age of print. The 'late age of print' is a concept used by Jay David Bolter to describe the current age in which printing and electronic technologies are intermixed. According to Bolter, the idea of the book is changing because of the tension between print and digital forms, and consequently the late age of print is best understood 'as a transformation of our social and cultural attitudes toward, and uses of', print.²⁰ Ted Striphas has developed the concept further in order to draw attention not only to the rise of the digital but also to the changes in the 'social, economic, and material coordinates of books ... in relation to ... denser forms of industrial organization, shifting patterns of work and leisure, [and] new laws governing commodity ownership and use'.21 Equally, paying attention to the materiality of literature can also mean analyzing the physical dimensions of literary texts. As Roger Chartier and J.A. González have remarked: 'Readers, in fact, never confront abstract, idealized texts detached from any materiality. They hold in their hands or perceive objects and forms whose structures and modalities govern their reading or hearing'.22

Consequently, the reading formations of popular literature are definitely changing. What ANT can help us to focus on is how in the late age of print the collective that produces, for example, a book or the reading formation

that produces a reading is constituted not only by social relations but also by objects, technologies and materials. Books, or their readings, are results of various interactions between people, papers, machines, codes and so on. As ANT theorists have argued, social relations should rather be understood as networks of interrelated sets of entities, both human and non-human: 'the network of what we call "social" relations is never purely social. For, though it is social, it is also and simultaneously technical, architectural, textual, and natural'.23 These definitions have similarities also with Foucault's concept of the 'dispositif' or 'apparatus', which suggests a need to approach discourses in their fullest materiality.²⁴

All the points I have made about the nature of actor-networks and reading formations suggest that, though generative and productive, the act of reading is also heavily determined by the interactions between texts, 'ideological phenomena and broader social and political processes and relationships', as well as their material dimensions and technologies.²⁵ Reading takes place inside networks of reading formations, or in a "society of discourse", which though diffuse is certainly constraining', as Foucault has summarized.²⁶ Even if in theory a specific text may dissolve 'into the million and one readings of individual subjects', the task of the critic, according to Bennett, is to study those 'reading formations that concretely and historically structure the interaction between texts and readers'. 27 As Geoff Waite has remarked regarding Bennett's reading formations: 'The question of textual indeterminacy must never be confused with that of ideological and political overdetermination'.28 Because 'some readings regularly carry more cultural weight than others' some meanings become dominant or hegemonic and some remain subordinate or marginal.²⁹ Consequently, according to Bennett, criticism should intervene within such processes whereby meanings are produced and 'seek to detach texts from socially dominant reading formations and to install them in new ones'.30

In the following, I will attempt this kind of criticism in the context of Layla. I describe the processes in which some meanings were made dominant whereas others were pushed to the margins. More specifically, I will do this by following the gradual emergence of the dominant reading formation around Layla as it appears and is exemplified in the different material embodiments of the novel's opening sentence.

Doing this requires paying more attention to the rather obvious, but often analytically neglected, aspects of literature. In short, before finding its readers, a literary text is mediated, for example, by its physical dimensions and form, by the institutions distributing and valuing it and by the different paratexts of the book.³¹ In the following, then, instead of analysing the literary text, I pay attention to the circulation of the opening sentence, as it was materially embodied in different media: in newspapers, advertising, TV, websites and literary blogs. By analysing digital media together with print media, I attempt to describe practices that mediate literary texts in the twenty-first century

Domination, London and New York. Routledge, 1991, p166.

- 24. Michel Foucault. 'The Confession of the Flesh', in Power/ Knowledge. Selected Interviews and Other Writings 1972-1977, Colin Gordon (ed), London, Harvester Wheatsheaf, 1980.
- 25. Bennett, 'Texts in History', op. cit.
- 26. Michel Foucault, 'Order of Discourse', in Robert Young (ed), Untying the Text: A Post- Structuralist Reader, Boston, London and Henley, Routledge and Kegan Paul, 1981.
- 27. Bennett, 'Texts, Readers, Reading Formations', op. cit.,
- 28. Geoff Waite, 'The Politics of Reading Formations: The Case of Nietzsche in Imperial Germany (1870-1919)', New German Critique, 29 (1983): 187.
- 29. Bennett, 'Texts, Readers, Reading Formations', op. cit., p8.
- 30. Bennett, 'Texts in History', op. cit.,
- 31. Paratexts are texts that surround the literary text, such as titles, cover images, and back cover texts. According to Gerard Genette, more than a sealed border, the paratext

is a threshold of interpretation. See Gerard Genette, Paratexts: Thresholds of Interpretation, Jane E. Lewin (trans), New York and Cambridge, Cambridge University Press, 2001. and, in particular, their interactions with different materials. Consequently, the empirical discussion that follows investigates how the battle over the dominant interpretation of Layla was fought.

LAYLA - BATTLES BETWEEN INTERPRETATIONS

Taking place mostly in Finland, Turkey and Germany, Layla describes the intersecting lives of several European individuals, who are all in different ways connected to prostitution. The main characters of the novel include a Finnish woman, Helena, who starts to work as a prostitute, a Kurdish girl, Layla, who becomes a prostitute after being sold by a human trafficker, a Finnish pimp, Armonlahti, and a Finnish Islamophobe, Jaussi, who buys sex from the prostitutes. The novel, thus, has several central characters who all play an essential part in the plot. For the most part, the novel has a heterodiegetic narrator (i.e. the narrator does not participate in the events). However, the focaliser (i.e. the perspective from which the narrative is told) changes between the chapters, and occasionally the narrator changes into different homodiegetic narrators (i.e. to different characters who take part in the events). These narrating techniques give 'voice' and narrative power to different characters, and also to others than the title character, Layla. In this sense, the book is a rather typical example of a novel with multiple perspectives. Multiple focalisers and narrators are often understood as literary techniques that offer different perspectives on a common topic, in the case of Layla, on prostitution and human trafficking. These techniques make the novel appear as a space for intersecting but different voices, while the narrating techniques - most notably the use of different focalisers - encourage multidimensionality and polysemy.

However, when approached from the perspective of the actor-network or the reading formation around *Layla*, the situation looks rather different. Even if the narrating techniques encourage the reader to approach the text from different perspectives, the materially embodied practices *around* the narrative narrowed down the interpretive scope, making some meanings apparently less successful than others in terms of their public legitimacy.

After the novel was released, two interpretative discourses emerged. The first one presented *Layla* as overtly feminist, as a novel about the global or the universal subjugation of women. This interpretation was articulated, for example, in the largest national newspaper and by the author himself. The newspaper stated that men fight their battles through women, no matter what their religious backgrounds.³² Similarly, the author suggested on the national breakfast TV show that violence against women in the Middle East should be compared with gendered violence in Finland. In the interview he remarked:

Every other week we read in the papers how, after years of harassment, an ex-husband, a boyfriend, or the current husband has killed a woman

32. Antti Majander, 'Mies, ryhdy naisen asialle', *Helsingin Sanomat*, 02/09/2011.

for exactly the same reasons [as Kurds]. Because of so-called honour. [...] This is fully comparable with the honour killings in the Middle East.³³

This statement proliferated in the newspapers and the blogosphere, and consequently the author repeated the interpretation in another prime-time TV show by saying that it was his intention in the novel to mix 'honour killings' with 'crimes of passion'. He argued that essentially both terms refer to violence against (often young) females exercised by familiar men.³⁴ My suggestion is that this interpretation attempted to keep the implicit multidimensionality of the novel alive, resisting the temptation to produce one dominant or hegemonic reading of the text. By drawing parallels between distant events and individuals and by highlighting the importance of the different characters - instead of only the title character - it opened up a space for the confrontation of different views, as presented by the novel's multiple focalizers. It attempted to produce cross-cultural or transnational codes or common nominators between people in different countries. Even if it described the novel rather simplistically as feminist, it forced the focalizations of the Kurdish characters to encounter those of the Finnish characters, thus, constituting the novel as the site for a multi-vocal debate.

The second line of interpretation, however, looked rather different. It connected the novel mainly to Kurds, their customs and their supposed cultural tendency to oppress women. This interpretation linked the violence against the eponymous hero entirely to a specific notion of Kurdish culture. This line of interpretation can be named *culturalist* as the patriarchal violence is understood as originating entirely in a specific culture and not, for example, in the transnational context of immigration and cultural flows. As Sherene Razack has noted, through its exclusive emphasis on culture as the only explaining category, a culturalist approach may obscure the multiple factors that give rise to violence. 35

This second interpretation was consequently questioned by some Kurds living in Finland. A lawyer with a Kurdish background claimed that the author made ridiculous claims in his book and stereotyped Kurds as a people that can survive only by clinging to old customs, such as honour killings. In reality, the critic wrote, Kurds are a diverse group of individuals scattered across different countries, practicing different religions and customs.³⁶ This conflict opened up a space for polysemic confrontation, but as further exploration of the empirical case reveals, the actor-network or the material embodiments of the emerging reading formation around the book worked against this potential discursive multi-dimensionality.

In what follows, I demonstrate how in the actor-network around Layla the first line of interpretation was gradually taken over by the culturalist interpretation. In order to demonstrate the shift, my text travels with the culturalist interpretation as it is embodied in the circulation of the opening sentence of Layla, or the metonym that it creates.³⁷ In this way I describe the 33. 'Ykkösen aamutv: Aamun kirja: Jari Tervon Layla', a TV-program, YLE TV 1, 15/09/2011, all translations from Finnish into English are my own.

34. 'Strada', a TVprogram, YLE TV 1, 23/09/2011.

35. Sherene Razack, 'Imperilled Muslim Women, Dangerous Muslim Men and Civilised Europeans: Legal and Social Responses to Forced Marriages', Feminist Legal Studies 12 (2004): 130-160, http://doi.org/dzhrff

36. Husein Muhammed, 'Jari Tervo kirjoittaa hatarin tiedoin' at http:// huseinmuhammed. puheenvuoro. uusisuomi.fi/84961jari-tervo-kirjoittaahatarin-tiedoin

37. In my analysis, I use the words metonymy and sentence, where the latter refers to the exact reproduction of the opening sentence, and the former refers to figures of speech that emerge from the sentence but that find different syntactic expressions.

38. The retailers were chosen on Google by using the search words 'bookseller', 'booksellers online', and 'web booksellers', and by taking into account the first five results of each search. The newspapers include the ten largest daily newspapers in Finland (except for the two that did not review the book) and the two largest papers of those six-days-a-weeknewspapers that reviewed the book. Circulation figures of these newspapers vary between 52,000 and 380,000 (in 2011).

39. See for example the traditions of

emergence of a reading formation that made one interpretation dominant. As I will show, the circulation of this metonym replaces the multiplicity of characters, or the global dimensions of misogyny, with the destiny of the Kurdish eponymous hero. The description is based on empirical research, in the course of which I followed this metonymic phrase across different platforms and media: these include sixteen newspaper reviews of Layla (including the Finnish news agency that distributes its texts digitally in different media), the advertising campaign of the book, thirty literary blogs as well as the information given about the book on the webpages of nine popular Finnish online retailers of books and on its publisher's webpage.³⁸ The opening sentence of Layla is compact, and written in italics: 'I was engaged in the cradle' (in Finnish, 'Minut kihlattiin kehdossa'). The next few sentences reveal that the 'I' of the opening sentence is the eponymous hero, Layla, and not, for example, a Finnish character. This metonymic phrase, which substitutes the cradle for childhood, uses an alliteration, kihlattiin kehdossa, which is repeated again in italics in the middle of the same page in the sentence: 'I was engaged in the cradle, for fifteen years I prepared myself for my husband and he prepared himself for me'. After this, the phrase does not appear in the main text of Layla but the opening sentence appears twice in italics on the back cover of the first Finnish edition of the novel (see figure 1).

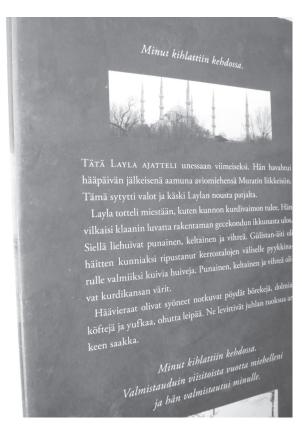


Figure 1, the back cover of the first Finnish edition of Layla

The use of italics is one traditional way to utilise the materiality of the written word. Scholars or artists working on the materiality of texts have often emphasised typographical dimensions and how different typographical decisions are either enabled or disallow by the medium in question.³⁹ In the case of *Layla*, not only the quadruple repetition of the opening sentence in the same print volume, but also the typography used, signals that this is an interpretation worth paying attention to. Repeating or emphasising specific messages and using the covers for this purpose is a procedure typical for the era of the printed book: in a printed book, the covers and their peritexts (i.e. paratexts that are part of the physical book) accompany each act of reading. Thus, they are powerful material devices

of the publishers and the editors to present the text as an object-to-be-read in a particular way. However as reading culture is slowly turning towards new technologies, the role of peritexts might be weakening or at least changing. Not all e-books, for example, include back cover texts, or even if they do, the reader is not obliged to encounter them. This is why we should follow the phrase further and investigate also other material platforms on which the meanings of Layla were structured. After all, the covers mark only a tiny moment in the expansive biography of this metonymic phrase.⁴⁰

During the first six months following Layla's publication, the opening sentence and its variants circulated extensively in writings attached to the book on the Internet, in print media and in advertising discourse. In newspapers, the reviewers did not exactly cite the opening phrase but they rather incorporated the metonym into their own writings. The second largest daily newspaper, for example, stated that 'A young Kurdish girl, Layla, was engaged already in the cradle. But in the morning, when her husband Murat does not find blood on the sheets, all hell breaks loose'. 41 More or less the same scene was used also in Finland's third largest newspaper: 'In the beginning of the novel, Layla, who has been engaged already in the cradle to her fiancée, gets married in Turkey but has to run for her life because she does not bleed on the wedding night'.42 Similarly, a local newspaper circulated the same metonymic phrase with the same additional word 'already': 'Layla, a Kurdish wife engaged already in the cradle and living in Istanbul, Turkey, shames her family, because she does not bleed in the bed' on her wedding night.⁴³ Another fairly large local newspaper used the phrase in the title of its review: 'Engaged in the cradle, doomed to death'. 44 Finally, also the news agency, STT, used the same phrase, which was then reproduced by other actors (for example by local newspapers and radio stations): 'A fifteen year old Kurdish girl, Layla, who lives with her family in Istanbul, has been engaged already in the cradle. She has been chosen to be the spouse of her own cousin Murat'. 45 The circulation of this phrase in the media was so widespread that ten out of the sixteen reviewers used it in some form. Most of the reviews attached it to the wedding night. No similar, recurrent, attributes were attached to any other character, and no other event was reproduced to such an extent in the reviews.

This interaction between the printed book and the newspapers can be analysed along the lines offered by material culture studies and ANT: objects and materialities are constituted by particular power relations but they also actively construct such relations. 46 As Latour has noted, 'whenever we discover a stable social relation, it is the introduction of some non-humans that accounts for this relative durability'. 47 Antoine Hennion has made a similar argument in relation to music and has suggested that durable art needs technical objects, material support, carriers and instruments, as well as discourses and practices. ⁴⁸ The same applies to literature: the power of a literary meaning depends on the relations it has with different materialities, for example online and artists' books and concrete poetry.

- 40. For discussion on the biography of things, see Igor Kopytoff, 'The Cultural Biography of Things: Commoditization as Process', in Arjun Appadurai (ed), The Social Life of Things: Commodities in Cultural Perspective, Cambridge, Cambridge University Press, 1986.
- 41. 'Jari Tervo: Layla', Aamulehti, 30/09/2011.
- 42. 'Jari Tervon uusin on humaani kaleidoskooppi', Turun Sanomat, 02/09/2011.
- 43. 'Tervo puolustaa naisten oikeuksia', Pohjalainen 20/10/2011.
- 44. 'Kehdossa kihlattu, kuolemaan tuomittu'. Ilkka. 20/02/2012.
- 45. Jari Tervo käsittelee vaikeita aiheita' STT, 02/09/2011.
- 46. Ian Woodward. Understanding Material Culture, London, Sage Publications, p12.
- 47. Latour, 'Technology is Society Made Durable', op. cit.,
- 48. Antoine Hennion, 'Baroque and Rock: Music, Mediators and Musical Taste', Poetics 24, 6 (1997): 415-35, http://doi.org/b9v8s4

in the print press. Whenever we discover a stable literary interpretation, it is the non-humans that account for this relative durability.

The initial material support the sentence 'I was engaged in the cradle' found on the first page and the back cover of the first edition, thus, interacted with, and was strengthened by, the newspapers' material capacity to multiply and distribute uniform and unidirectional meaning. This extension of the material support was, however, just the beginning. Simultaneously, and partly overlapping, with the publication of the newspaper reviews, the publisher launched an advertising campaign concentrating on the same sentence. In particular, before the Christmas sales, adverts on billboards (on bus stops and on highways), banners, posters, magazines and newspapers spread the opening sentence. With minor differences these advertisements included the front cover of the book, occasionally the author's face and the opening sentence: 'I was engaged in the cradle'. These material embodiments of the sentence, thus, became part of the physical space in which many Finnish readers navigated in order to negotiate the meanings of the text. They created bodily encounters between the sentence and its readers. The posters and their location in urban space gave the sentence new material dimensions: it was not a paratext designed only for those who had touched the book or read reviews about it. Through the material support the sentence received in the advertising materials, it became part of the reading formation also of those people who never read the book.

Figure 2, an advertisement for Layla located in a bookstore in central Helsinki



Different retailers also used these advertising materials in their stores, as the image taken in a centrally located bookstore in Helsinki shows (see

figure 2). The store is one of the flagship stores of the largest book retailer in Finland, and it was impossible to enter the store without encountering the poster. As a matter of fact, it was difficult even to take a bus to the suburbs without seeing the message since the store is located just opposite the bus platforms. Inside the store, the sentence found another round of material support, as another poster with a different image but the same sentence was placed on top of the pile of the copies of Layla. This same poster accompanied the copies of Layla also in Stockmann, the largest department store in Helsinki. The publisher's own bookstore displayed a third poster, once again with a different image but with the same sentence. The sentence thus found multiple material embodiments in urban space.

The same message was also disseminated on other platforms: the TV-advertising campaign

of the book included the sentence 'I was engaged in the cradle' whispered by a female voice. This brought a new material dimension to the reading formation of Layla - the sonic - which supplemented the visual and the printed or the written materiality of the sentence.

These advertising and marketing strategies are nothing peculiar in today's publishing industry. The arrival of large conglomerates and the rise of powerful retailers has 'intensified the culture of marketing in publishing', as Claire Squires has noted.49 In particular, the so-called 'lead' authors, such as Layla's author Jari Tervo, receive lots of attention both from the media and publishers' marketing departments. However, the most obvious features, the advertising campaigns, constitute only one part of literary marketing. As Squires has observed, today's literary marketing is above all 'a process of representation carried out by a wide variety of agencies'. The key to marketing success is to get other actors to distribute the marketing message and consequently to facilitate the 'negotiation of cultural, economic and journalistic capital'. 50 Squires has paid particular attention to the role of retailers as intermediaries between publishers and customers. I have already discussed the tendency of the print journalists to use the key metonymic phrase 'engaged in the cradle'. One could say that the readings of the critics overlapped with the advertising campaign to such an extent that the reviewers seemed to fall into readings 'which are mere acts of consumption'. 51 According to Roland Barthes, this kind of reading does not see itself as perpetual production, and for Barthes this is the unfortunate state in which most acts of reading take place. The reviewers reproduced the metonymic phrase which the publisher had disseminated with the support of varying physical objects, such as the advertising posters and the back covers. These materially embodied processes seemed to order the readings of the reviewers in ways discussed by Bennett and N. Katherine Hayles, where the latter has noted that 'a literary work mobilizes its physical embodiment in conjunction with its verbal signifiers to construct meanings in ways that implicitly construct the user/reader as well'.52 But the interactions between the explicit marketing actions and other actors reached further than that, as this phrase did not seem to exhaust its power over time. This should encourage us to investigate more thoroughly the role of the digital and the technological.

By now it will come as no surprise that on the publisher's webpage the book was introduced with the following sentences 'I was engaged in the cradle. For fifteen years I prepared myself for my husband and he prepared himself for me'. Unlike in the book, on the webpage the comma between the two parts of the sentence was replaced by a full stop. These sentences were then followed by the three paragraphs that followed the opening sentence in the novel.⁵³ In addition to this introductory text, as late as May 2012 (more than eight months after Layla was released), Layla's publisher, the largest in Finland, used the opening sentence on the front webpage of the entire conglomerate (see figure 3). Even though the publisher had released numerous other books 49. Claire Squires, Marketing Literature: The Making of Contemporary Writing in Britain, London, Palgrave Macmillan, 2009, p34.

50. Ibid., p176-82.

51. Roland Barthes, 'Theory of the Text', op. cit., p42.

52. Hayles, Writing Machines, op. cit.,

53. The paragraphs are the following: 'I was engaged in the cradle. // This was Layla's last thought when asleep. The morning after her wedding night, she awoke to the moves of her husband, Murat. He turned the lights on and ordered Layla to rise from the mattress. // Layla obeyed her husband, just like a real Kurdish wife ought to. She glimpsed out of the window of the gecekondu, built by her clan without a permission. The red, the yellow and the green swayed. Mother Gülistan had hang dry scarfs out on the clothesline between the apartment buildings in honour of the weddings. Red, yellow and green were the colours of the Kurdish people. // The wedding guests had eaten tables full of böreks, dolmas, köftes and uyfka, the thin bread. They spread the aroma of the feast over to the weekdays'. Layla, op.



Figure 3, a screenshot of the front webpage of the media conglomerate that owns the publisher of Layla

since Tervo's novel, it used the opening sentence of *Layla* to introduce the entire media house to its online visitors.

These marketing actions of the publisher seemed to spark another round of circulation for the metonym, this time on the websites of online retailers. Without exceptions, all the online retailers advertised the book by using the opening sentence 'I was engaged in the cradle', the three paragraphs that followed and the phrases 'I was engaged in the cradle. For fifteen years I prepared myself for my husband and he prepared himself for me'. It is noteworthy that none of the online retailers used any other passage from the book. They stayed loyal to the message of the marketing department, even to the extent that they all used the full stop instead of the comma, thus reproducing the marketing text rather than the text in the book. In other words, they carried out the message sent by the marketing department. Even if the online world is not directly under the control of the publisher, it may nevertheless reproduce its message with the support of digital code. This is where the new materiality of the reading formation becomes apparent.

This kind of copying and pasting is above all a digital phenomenon that requires the material properties of code. It is an instance in which the older theories of discursive formations can perhaps benefit from being supplemented with ideas about the role of technology derived from ANT. Whereas the term 'discourse' refers to a formation that reproduces meanings but does not require exact equivalence at the level of words, the new, technology-supported formations can often be built on exact reproduction and equivalence. Digital transmission of information has what meme researchers call 'high copy-fidelity'. In other words, as Limor Shifman and Mike Thelwall note, digitalization allows the transfer of information without loss. Digital material also has high fecundity: a fast copy-rate.⁵⁴ Anything that exists in digital form and on the Internet is easily copied, because 'the instructions for its copying are found in every line of the code that makes it up', as Matthew Fuller has summarized the material

54. Limor Shifman and Mike Thelwall, 'Assessing Global Diffusion with Web Memetics: The Spread and Evolution of a Popular Joke', Journal of the American Society for Information Science and Technology 60, 12 (2009): 2567-2576, http://doi.org/d856mp

properties of this practice.⁵⁵ These factors - copy-fidelity and fecundity - have been commonplace features in cultural production since the invention of word processing, and they contribute to the success of any meme. The powerful reading formation around Layla, or the proliferation of its opening sentence, would not have been possible without material support, and even less so without digital technology and human/non-human made code which allows for the transfer of information without loss.

55. Matthew Fuller, Behind the Blip: Essays on the Culture of Software, New York, Autonomedia, 2003,

The role of digital technologies becomes clearer if we follow our metonymyic phrase further in the virtual world, this time in blogs. Several of the thirty blogs I analysed cited the opening sentence and the first paragraph of the book, word for word. Some blog entries opened with the opening sentence, and others modified the phrasing in a similar way to the reviewers, for example:

According to a Kurdish custom, the eponymous hero Layla has been engaged to her cousin already in the cradle. Tervo, like other experts, makes a clear distinction between the traditions of a tribe or a clan and Islam. Customs can be much older than the Koran. And much more ruthless.56

56. http://www. kirjojentakana.fi/jaritervo-layla (Behind

This blog entry is an example of the culturalist interpretation, one that links ruthlessness to tradition rather than to contemporary social contexts. Similarly to the newspaper reviewers, another blogger combined the novel's opening metonymic phrase with the wedding night scene: 'Layla, a young Kurdish girl, has been engaged to her cousin already in the cradle. But something went wrong: the sheet on the wedding bed was spotlessly clean in the morning'. 57 Finally, even a presidential candidate, Pekka Haavisto, used the metonymic phrase, when being asked for book recommendations. He named Layla with the following description: 'A Kurdish wife was engaged already in the cradle. An interesting statement about multicultural Finland'.58

57. http:// ammankirjablogi. blogspot.fi/2011/11/ layla-jari-tervo.html (Amma's Book Blog)

These blog writings could be read as examples of what Hayles has called a post-human conjunction, 'a trajectory in which we become part of a cybernetic circuit'.59 Or in my vocabulary, they are actors in the networks constituted by both humans and non-humans. Rather than typing and posting different passages of the book (or passages that resonated most strongly with the blogger's own interpretations), the bloggers used those passages that were already online or in a digital form. And so did the retailers. This practice of exact reproduction is something that the older theories of hegemony, or discursive power, or even that of reading formations, do not perhaps capture in full. It is a digital practice that is based on the materiality of code and the hypertext links that direct movement from one anchor to another.

58. http://www. vaalikone2012. fi/?k = 1356&v = 1357

59. Hayles, The Writing Machines, op. cit., p51.

The power of the link can be seen also in another practice preferred by the bloggers. Originally, blogs were designed to direct the flow, or control the abundance, of information online.⁶⁰ The first blogs were above all referrer sites that allowed specific URLs to spread. This was achieved, for example,

60. See Jodi Dean, Blog Theory, Cambridge, Polity Press, 2010, p41; Ignacio Siles, 'The Rise of Blogging: Articulation as a Dynamic of Technological Stabilization', New Media Society 14, 5 (2012): 781-97.

61. Siles, 'The Rise of Blogging', op. cit., p782.

62. http:// ammankirjablogi. blogspot.fi/2011/11/ layla-jari-tervo.html (Amma's Book Blog)

63. http:// bookingitsomemore. blogspot.fi/search/ label/Tervo%20Jari (Booking It Some More)

64. http:// kaikenvoilukea. blogspot.fi/2011/09/ jari-tervo-layla.html (Everything Can Be Read)

65. Another issue regarding contemporary reading formations is how tags and algorithm-produced recommendations create materially supported links between texts. In the case discussed here, however, tags did not seem to have much relevance. The issue of algorithms as constitutive of reading experiences, in particular through book marketing, would warrant an article of its own. For discussion of algorithms, see Scott Lash, 'Power after Hegemony: Cultural Studies in Mutation', Theory, Culture and Society 24, 3 (2007): 55-78; Matthew Fuller and Andrew Goffey, Evil Media, Cambridge, Mass., and London, MIT Press, 2012; David Beer, 'Power through the Algorithm? Participatory Web Cultures and the Technological Unconscious', New Media & Society 11, 6 (2009): 985-1002.

by using links located in page sidebars. Later, different widgets have come to perform this 'metajournalistic' function, as Ignacio Siles has called it. 61 In the case of Layla, many bloggers followed these patterns. They referred and linked to other blogs that included reviews of Layla and to the media discussion around the book. One blogger finished her blog entry with the following text and a list of links: 'Layla has been read and presented in their blogs at least by: Jori / Kirsi / Tessa / Erja / Minna / Booksy'. 62 Similarly, another blogger listed and linked reviews of Layla, including three texts in print media and two blogs.63

In this way bloggers make explicit, code-supported, links to other actors, and the materiality of the code helps to carry these inter-textual allusions. In addition to linking, bloggers can also comment on each other's writings. A blogger named Booksy, for example, conveyed her reading experience (on which she had written her own blog) in the comment sections of the bloggers Jori and Tessa.⁶⁴

These relations of mutual references and links create materially supported reading formations and networks of readers that borrow from each other, and in so doing consolidate and entrench certain meanings. 65 This mutual consolidation of meanings and their repetitive circulation might even be a key feature of today's social media. Jodi Dean has discussed blogs in the context of 'a repetitive intensity of drive' so that 'the movement from link to link, the forwarding and storing and commenting, the contributing ... in hope of further movement ... is circulation for its own sake'. 66 The most pessimistic commentators on blog culture and social media suggest that such immediacy and circulation only result in 'digital Darwinism' and the suppression of unique voices in favour of mob rule. ⁶⁷ This might be too bleak a picture in general, but elements of it also characterize the contemporary reading culture of print literature. For example, the proliferation of the particular metonym associated with the opening lines of *Layla* demonstrates the emergence of a techno-environment around print literature: different autonomous but interdependent actors cited the same paragraphs and reproduced the same metonymic phrase in relation to the same description of the wedding night, and the communication technologies which they used facilitated and positively encouraged this unanimity. Together with the two other central paratexts, - the title and the cover image - the sentence and its central metonym attached the novel to Layla's destiny. This process was, however, not entirely uniform. It is important to note that among the blogs, one circulating piece of text also challenged this dominant reading. Unlike the online retailers, several bloggers also reproduced a different citation: this citation equated the Kurdish honour killings with Finnish domestic violence.⁶⁸ However, a certain circuit of human and non-human relations emerged also here as this was the passage that had been cited in the review published in the country's largest newspaper. The same passage was, then, reproduced by different bloggers so that this practice, too, had a uniform character.

Something of a final confirmation of the power of the dominant reading formation came when the opening sentence found another round of national print publicity, receiving an award for being the best literary sentence of the year. The award, the 'Sentence-Finlandia', was named after the most prestigious annual literary award, the Finlandia Award. It was given by a jury composed of one person, and as such would have been seen as little else than mockery (a not inconsequential intervention in any reading formation), if it had not found such wide resonance in the media: the four largest newspapers, two TV channels and a number of smaller media all recognised the award.

LAYLA AND THE LOGIC OF INFORMATION

These observations on the reading formations around *Layla* can work as a broad methodological guide to how to study today's literary works, their reception, their biographies and the reading formations that organize popular reading, of which virtual, code-supported, networks of reading, writing, copying and pasting are increasingly important constituents. My argument may also have a contribution to make to wider issues in the study of information culture: a contribution that I will briefly sketch now.

The circulation of the book's opening metonymic phrase can be analysed further in the context offered by Scott Lash in his writings on information and objects. One could say that the picture presented thus far is one of the ways in which 'old' media such as the printed book are reconfigured by the logic of information, as Lash has described it. According to Lash, in the information age communication becomes event-like and immediacy replaces argumentation and reflection. Little reflection is called for on the part of the reader or receiver, and the logic of technology, or of the circuit, replaces subjective reflection.⁶⁹ Digital technology, as we have seen in the case of the reading formation around Layla, encourages users to recycle and link to already existing texts, rather than to produce or invent novel ways of expressing their own reading experience. This might be something that blogging, as a technology-supported cultural practice, encourages. Jodi Dean has suggested that 'contemporary affective networks [of blogs] rely on the marking, adding, forwarding, and circulating of messages not because doing so "means" something but simply to communicate'.70 This is where the material basis of the actor-network or the reading formation is most visible: without digital technology and code, the exact reproduction and circulation of uniform messages would not be nearly so widespread. The reading formations of the digital era are increasingly effected by such human/non-human circuits. This has its effects also on the role of the subject in the contemporary global networks, as Lash has remarked. Drawing from other theorists of the risk society and reflexive modernization, Lash uses the notion of unintended consequences when referring to the global movements of contemporary objects. He pays attention to global information flows and 66. Dean, *Blog Theory*, op. cit., p121.

67. See Geert Lovink, Networks Without a Cause, Cambridge, Polity, 2011; Andrew Keen, The Cult of the Amateur: How Today's Internet Is Killing Our Culture and Assaulting Our Economy, London, Nicholas Brealey, 2007; Jaron Lanier, You Are Not a Gadget: A Manifesto, New York, Alfred A. Knopf, 2010.

68. The passage is the following: 'In Finlandiya (sic) former husbands and boyfriends killed their women for exactly the same reasons as Kurdish, Turkish or Syrian men, but in Finlandiya the murders committed by men were not called honour killings. Still they murdered because of their putative honour. Their religion was drunkenness. It was their defence in the court', Layla, op. cit.,

69. Scott Lash, Critique of Information, London, Sage, 2002, p74.

70. Dean, *Blog Theory*, op. cit., p102.

71. Lash, *Critique of Information*, op. cit., pviii.

72. Ibid., ppviiviii; see also Scott Lash and Celia Lury, Global Culture Industry: The Mediation of Things, Cambridge, Polity, 2007.

suggests that fast moving consumer goods spin out of the control of subjects in their movement through global networks.⁷¹ For Lash, it is the *object* which best captures the current conjuncture in which information has come to replace representation: 'The national manufacturing society focuses attention on "the subject". The global information culture for its part witnesses a new autonomy for *objects*, which in their global flow tend to escape from the intentions, from the sovereignty of the subject'.⁷² In the case of *Layla*, the physical book and its cover texts, the advertising infrastructure and the metonymic phrase that proliferated can be seen as these kind of objects that tend to escape the grasp of reflexive subjects: both author and reader. The reflexiveness of the reviewers and bloggers gave way to the power of the circulating objects, and the public intervention of the author and his non-culturalist line of interpretation gradually lost sway in the face of this circulation.

However, what my analysis of Layla demonstrates is that even if contemporary objects have a tendency to spin out of the control of sovereign subjects, this does not imply that objects become free of determination or that forms of control do not appear in the contingent networks. As the actornetwork approach suggests, different (social) relations gain different amounts of weight depending on the number and nature of materially supported associations they manage to build. This perspective, which approaches the object as a process or an event rather than as a fixed entity, focuses on the interdependences between the objects and the wider operations of the networks. Even if objects seem to be out of control, empirical research on the reading formations and actor-networks can reveal that behind a seemingly open-ended reading process, durable power relations often persist. In the case of Layla, different actors operated inside an actor-network or a reading formation in which the novel's opening metonymic phrase had come to occupy a key position, and many readers (both bloggers and reviewers) more or less followed the interpretive frameworks that the publisher distributed. Consequently, what I wish to highlight is that in the case of Layla the operations that may appear as unintended were still primarily under the control of those readers who had gained materially supported positions in the actor-network: professional readers, for example, and the publisher. Consequently, the resulting actor-network produced one dominant reading of the text faster than would have been possible in the pre-digital era. Or alternatively, when the bloggers reached outside this frame, they often did this along the lines articulated by the author or the largest national newspaper, by citing the one and the same passage that equated the Kurdish honour killings with Finnish domestic violence. The biography of the opening metonym thus demonstrates beautifully the contemporary state of the battles of which Barthes wrote: 'For centuries ... how many battles in the name of one meaning against another, how many attacks of anguish at the uncertainty of signs, how many rules [and practices] as an attempt to make them firm!'73 The different trajectories of the novel's opening metonymic phrase neutralised dissent and led different

73. Barthes, 'Theory of the Text', op. cit., p33.

readers (such as reviewers and bloggers) consume the text in similar and prescribed ways. The opening metonymic phrase worked as an interpretive threshold to the text and emphasised the faith of the eponymous hero at the expense of the intersecting destinies of different individuals across Europe which the book also worked hard to describe.

The resulting interpretation was challenged only rarely. Just one of the bloggers explicitly challenged the opening sentence and articulated her discomfort with it. She wrote that starting to read Layla has been particularly

disgusting because the book has been advertised the whole autumn and I am annoyed and bored with this advertising sentence 'I was engaged in the cradle' that has been harped on too much. It makes me think that those who do not even read the book, and know nothing about the culture of the Kurds, think that Kurdish women are engaged in the cradle, 'because Tervo also wrote that and he had found out about things'. Appalling. Many read books thinking that they are windows to the unknown.74

74. http:// katjabloigu.blogspot. com/2012/01/ tiainen-vai-tervo. html (Bloigu's Blog)

This blog entry is a rare example of a reader who both interprets and articulates publicly her opinions outside of the circuit within which digital technology, reviewers and a powerful advertising campaign framed the meanings of the book. The blogger approached the circulating sentence as a powerful actor and wanted to challenge its materially supported career - whereas others, including the professional reviewers, simply used and reproduced it as a transparent description of the novel and its themes. This reflection is, however, marked by a revealing and not unwarranted anxiety: the blogger suspects that the literary text is held hostage, or overrun, by the advertising slogan, and that it is the slogan which is beginning to mediate the culture of the Kurds for a wider public.

In this essay I have described how a twenty-first century literary object can be affected by the circulation of images, messages and interpretations in the human/non-human networks around it. In the case of Layla, different media platforms cited each other, reproduced each other's vocabularies and constituted a reading formation which mediated the book to its readers as a story about a girl who 'was engaged in the cradle'. The digital sphere followed this tendency and encouraged exact reproduction of the same interpretation. Ironically, then, the material opportunities inherent in digital code - and its transformability - can turn into material hindrances to practical polysemy and can order popular readings in ways that were not possible before.

However, as strong as these formations seem to be, their activities, of course, do not entirely exclude the possibility of subversion or alternate readings, as the example of the lone critical blogger suggests. Rather, the power of these contingent networks is an empirical question, which the methods and concepts used in this article attempt to answer. Central to my argument has been an insistence that materially-informed empirical analysis of the reading formations and actor-networks around books can open up new considerations of the relationships between literary texts, their power and the expectations of readers. Not only the pages of the book (which can carry several - even contrasting - views), but also billboards, advertising racks, TV infrastructure, blogs, networking sites for literature, newspapers, paper posters and above all digital technology constitute the mediation processes of today's literary texts. Print interacts with the digital, and these interactions are ordered in ways that are still often ignored by, or are unfamiliar to, most literary scholars.

Our readings are conditioned by contingent techno-environments, and

those interpretations that find material embodiment - whether online or in the physicality of a book, in a newspaper or a magazine - are both signs of already existing experiences and constitutive of future reading experiences. As the Reader-Response theorist Hans-Robert Jauss has suggested, readers have a certain mindset, or a horizon from which each reader reads, and according to Michael Kearns these horizons are constructed particularly effectively by such elements as endpapers, title pages, running titles and advertisements.⁷⁵ Bennett's concept of the reading formation was one attempt to describe how these mindsets and horizons are constructed on a large scale, and ANT can be seen as a means by which to bring these considerations to bear upon the materially hybrid empirical micro-contexts of the twenty-first century. In the information age, the autonomy of the literary object is thus always relative, and subject to the wider operations of the hybrid actor-network or formation within which it is read. For an observer sensitive to ruptures and modifications, the literary object may look as though it is out of control, because media environments are always contingent. However, for someone analysing the relational operations in an actor-network, the situation may look radically different.

75. Hans Robert Jauss, Toward an Aesthetic of Reception, Minneapolis, University of Minnesota Press. 1982: Michael Kearns, 'The Material Melville: Shaping Readers' Horizon', in Michele Movlan and Lane Stiles (eds), Reading Books: Essays on the Material Text and Literature in America, Amherst, University of Massachusetts Press, 1996, pp52-

DIAGRAMMATIC WRITING

Johanna Drucker

Abstract The concept of the diagram has a rich history in many theoretical disciplines as well as in applied practices. This essay suggests that a dialogue between theory and practice can be used to explore the potential of digital platforms for developing an approach to writing and display that takes advantage of the semantically constitutive effects of format features. This approach would borrow from manuscript conventions, as well as those of print, and combine them with the specific affordances of newer media. In development of such an approach, and such a discourse, this article pursues a critical, descriptive language of the rhetorical effects of spatial relations that addresses graphical features (juxtaposition, hierarchy, interlinearity, proximity and so on) and their capacity to produce semantic value.

Keywords Diagrams, format, layout, graphic features, page design, gestalt

The study of diagrams crosses many disciplinary lines: it plays a major role in twentieth-century philosophy, in the longer history of logic and mathematics, in the lineage of graphic forms in visual culture, and in applied practices. In philosophy and logic, the discourse of diagrams has an elaborate theoretical apparatus that engages questions of knowledge, representation, mathematical logic, and epistemological paradigms. In visual culture, the history of diagrams can be tracked to antiquity - to the design of schematic structures of knowledge modelling for accounting, geometry, architecture, astronomy, cartography and other fields that merge with practical arts. In applied fields, diagrams abound, never more abundantly than now, when information visualisations and visual schema proliferate. Yet explicit discussion of the ways diagrams work, and how their graphical organisation structures the relations on which meaning and knowledge are produced, whether as logical principles or as rhetorical devices within more applied domains, is conspicuously absent from codification in any systematic way. For those seeking a connection between the philosophical interrogation of relations and the applied domain of knowledge modelling and design, no explicit links or bridges exist. Hence, I will briefly sketch the condition on which this aporia exists, and some of the means by which it might be addressed, in order to proceed to my central concern with designing environments for digital writing practices that extend the capabilities and rhetoric of print realms through new affordances and media specific possibilities.

In the domain of philosophy, the legacy of Charles Pierce looms large in the theory of diagrams. His studies of logic as semiotic took the notion of sign

1. Sun-Joo Shin, *The Iconic Logic of Peirce's Graphs*, Cambridge, MA, MIT Press, 2002.

- 2. John Sowa, Knowledge Representation: Logical, Philosophical, and Computational Foundations, Pacific Grove, CA, Brooks Publishing Company, 2000.
- 3. Frederik Stjernfelt, Diagrammatology: An Investigation on the Borderlines of Phenomenlogy, Ontology, and Semiotics, Heidelberg, Springer, 2007.
- 4. Martin Gardner, Logic Machines and Diagrams, NY, McGraw-Hill, 1958.

relations as a fundamental principle, and though he used the word graphs to describe the visual formats in which he worked systematically, his work has been used by more recent philosophers, notably Sun-Joo Shin, as the basis of diagrammatic reasoning.1 As a philosopher, Peirce was concerned with basic questions about the ways knowledge formations come into being and how the structural properties of relations among signs give rise to various potentialities for representing and understanding. This emphasis on relations is key to diagrammatic thinking in all domains. The notation system Peirce devised for his existential graphs was idiosyncratic, but relational principles at its core play a role in the interrogation of the apperception of knowledge. Peirce's semiotics focused on the grounds of knowledge production, rather than on knowledge produced. His work operates at a level of abstraction that often eschews connection to the study of literal graphical forms, though knowledge modelling and graph theory adapted in part from Peirce's work are central to the thinking of John Sowa and other computer scientists who use conceptual graphs as a key part of their intellectual approach to knowledge representation.² Semiotician Frederik Stjernfelt termed his crucial study Diagrammatology, putting the concept at the centre of his analysis of Peirce's writings on continuity, icons, relations, and the implications of these principles for biosemiotics, picture theory, and other fields.³ Diagrams, therefore, have a privileged and specialised status in the philosophical domain, as a set of organizing precepts and principles of a semiotic approach to epistemology.

In the fields of logic and mathematics, graphical forms of expression as means of manipulation, hypothesis testing, and proof creation play a substantive role in carrying out procedural and analytic operations. The notable historian and mathematical puzzle-maker, Martin Gardner, made a unique milestone contribution to the study of this activity in his Logic Machines and Diagrams, one of the few works focused exclusively on the topic.4 Gardner describes diagrams as drawings that work, that do things, thus distinguishing them from mere representations or static images. By 'work' it should be clear that Gardner does not mean 'move' in a literal sense, but rather, a sustained engagement in knowledge production by dynamic figures that operate relationally rather than representationally. The elements of a diagrammatic system create value in relation to each other, not as an image of or stand-in for something else. The point is close to the distinction between knowledge producing forms and the formal representation of knowledge that characterises Peirce's semiotics. The ways diagrams work and the things they do depend on the circumstances, of course, and the volvelles and combinatoric wheels of the medieval logician Raymon Llull operate on very different principles than the diagrams of the nineteenth century mathematician, John Venn. But in both instances, the men relied on graphical forms to perform their intellectual inquiries, not merely to express results. The diagrammatic forms were literally engaged in the operations, not functioning as figurative abstractions to depict logical relations or principles.

This notion of 'drawings that work' is the leitmotif in a recent study by John Bender and Michael Marrinan, The Culture of Diagram, an examination of the role of diagrammatic expressions in eighteenth century France.⁵ While their analysis may depend too heavily on an insistence that the Enlightenment was the crucible for diagrammatic thinking, they nonetheless make important connections between graphical forms and textual ones, engaging in a reading of the tree structure of the 'Table de Matières' of the Encylopédie of Jean le Rond d'Alembert and Denis Diderot as a diagram. Such tree forms have a history that stretches into antiquity (they were used for knowledge organisation long before the French philosophes appropriated them for rational purposes), but the recognition that semantic value is carried by textual structures - layout and format features - is a crucial principle for the larger study of the diagrammatic properties of other examples of written language. Indeed, Bender and Marrinan provide a nice segue from the abstractions of semiotics to the grounded study of cultural activity. While they are intent on describing an intellectual formation with historical specificity, they also gain traction through critical engagement with visual artefacts whose formal properties matter to their analysis - things made and thought as graphical objects. Tree structures express relations of derivation and hierarchy through their relations, not as a picture of a pre-existing image or form. The value of any particular term in the hierarchy depends on where it sits in relation to the whole as well as to each other element. A table of contents can also be considered an example of diagrammatic writing, a form whose capacity to produce meaning is fundamentally dynamic and generative, not static and representational. Its relation to meaning is not fixed, but provocative and performative. Position, placement, and sequence are all graphically coded features that constitute semantic value.

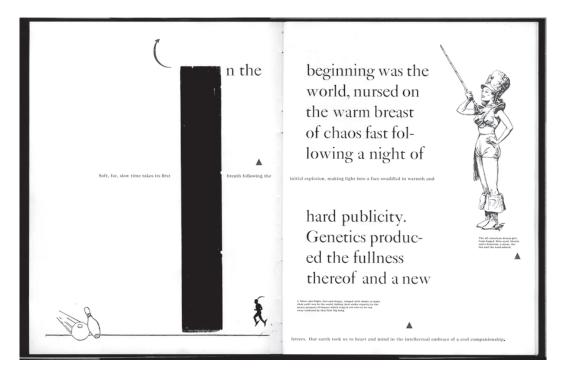
5. John Bender and Michael Marrinan, The Culture of Diagram, Stanford, Stanford University Press, 2010.

In our descent from abstraction to concrete artefacts, the final step is to go yet further than the art historians and move into an analysis of bibliographical and graphical objects. While no explicit articulation of 'diagrammatic writing' exists in the annals of the printing trade or graphic design manuals, twentiethcentury textbooks on the 'language of visual form' are filled with expertise based on its principles. Layout, composition, and conventions of textual meaning-production are well understood in the design trade, but they are taken as heuristics, not as hermeneutics. This distinction is important, because I would argue that the acts of making that form the basis of production are grounded in poetic expression and rhetorical argument rather than logic. The conventions that code written texts through graphical means, separating headers from footers, paragraphs from each other, marginalia from footnotes, and other elements of texts and paratexts, are not governed by logical rules. Now, with the multi-dimensional potential of digital displays and interface, many new possibilities exist for extending the spatial organisation of written texts and the relations they embody. Developing a critical, descriptive metalanguage for graphical forms goes along with creating conventions and codes for

their design and implementation. The diagrammatic structures of written argument are not limited to trees and graphs, but are as varied as the many visual presentations of information in any graphical interface.

So the question 'What is a diagram?' can be answered differently depending on the disciplinary context: within a highly specialised debate, subject to esoteric considerations and reflections on epistemology; or in the vernacular realm, gesturing to a loosely defined but recognisable array of visual forms. All are relevant to this essay, which asks how written language provides semantic value in the very scaffolding of its graphical structure. The vernacular notion of a diagram - as a schematic graphic image that models knowledge relationally - has a resonance with Peirce's concept of semiotic structures of sign relations that provide the foundations of meaningproduction and representation. They are not the same concepts, but the philosophical abstraction finds an echo in the use of graphical means of meaning-production in the more ordinary, practical sense.

One final bit of context may be helpful here, connecting my own particular background and experience to these intellectual arguments. Awareness of diagrammatic features of written texts has been part of my writing and book design practice for decades, since the artist's books I've produced have explored format features and polymorphous texts as a part of the writing practice that is at the heart of their design. My approach is focused on the reading possibilities potentiated by structuring the text through multiple lines and pathways, levels and hierarchies of relations, and by fragmenting text blocks into relations that alter the linear presentation conventionally assumed in the book format (figure 1). When I began my academic involvement with the study of writing as the visual form of language by reading the work of Jacques Derrida, Paul de Man, and others, I already had a decade of practical experience as a typesetter and book artist. I had been immersed in the daily activity of letterpress, copy camera, early digital typesetting equipment, and other materials that were the stuff of the 1970s print shop. Derridean écriture rarely addressed the mundane matters of the history of letters and fonts, or design precepts such as layout and composition. These physical materialities and the involvement with production appeared largely outside consideration, and almost irrelevant to the higher matters of a metaphysics of différance. The philosophical and practical realms appeared to remain separate from each other. Indeed, practical work is often still treated differently from theoretical work in the academy, as if the knowledge of hand and eye, embodied intelligence, and applied skills were somehow not theoretical. When questions of materiality and ontology bring theoretical and practical issues into dialogue, troubling the abstractions that sustain philosophical discourse, the craft-based knowledge of production is generally disenfranchised, as if the higher order of thought necessarily trumps the lower orders of material engagement. But practice is neither banal nor reductive, and no more literal and unthinking than metaphysical reflections are purely ethereal - the two



domains have much to say to each other. This leads to the crux of this essay. The coming into being of the grounds of meaning-production - through representational relations, formal structures, graphical expressions of logical and rhetorical principles - is deeply engaged with the intuitions that serve a single inquiry - how do structural relations participate in the production of meaning?

The gap between practical and theoretical knowledge is glaring. Plagued by seemingly irreconcilable vocabularies, different problems, and unmatched positions in the social worlds of intellectual life, these varied communities of practice are nonetheless connected by their shared investigations into the graphical expression of knowledge production. I can point to numerous examples, but will let one suffice as the final bit of preamble.

Walter Crane, the Arts and Crafts illustrator, designer, socialist activist and guild advocate, made the following statement in the opening lines of his brilliant 1900 publication, Line and Form: 'Outline, one might say, is the Alpha and Omega of Art'.6 He goes on to say that 'the function of outline [is]... the definition of the boundaries of form'. The act of definition, inclusion and exclusion, enclosure, is the basic act of distinction on which all other forms depend. By forms, Crane does not mean shapes, but rather, something closer to distinctions, or the basis on which form may be both made and perceived. Crane was far from the realms of philosophy, logic, and high theory, but the principle echoes Peirce's notion of the cut, the separation, that will find its fuller development in 1969, in George Spencer Brown's much cited Laws of Form.7 Brown's opening lines in 'Chapter 1, The Form',

Figure 1, **Johanna** Drucker, The History of the/ my Wor(l)d, page of letterpress printed work, 1990, courtesy of the author

^{6.} Walter Crane, Line and Form, London, G. Bell and Sons, 1900, p1.

^{7.} George Spencer Brown, Laws of Form, NY. E.P. Dutton. 1969, p3.

state 'that we cannot make an indication without drawing a distinction'. An intellectual orthodoxy that requires these realms to be kept separate, as if Crane were a mere mechanic and Peirce and Brown pure thinkers, blinds us to an understanding of the productive connections to be made across these domains. Diagrammatic reasoning is an applied realm of metaphysics, not merely an abstraction. Of course, substantive differences must be noted between Peirce's logic and semiotic and the rhetorical, poetical character of applied practice. The foundations of logic will be muddled (necessarily and productively) by the embodied, instantiated specificity of practice focused on persuasion, argument, and poetic expression. Still, the parallel between a metaphysical approach to diagrams, with the emphasis on the structuring principles of representation, knowledge, and form, and the practical application of diagrammatic activity, should be understood as a resonant rhyme, not a relation of identity. The particularity of material instantiation is not a debasement of idea, but an enactment. From these particulars theoretical principles can arise, but the categories of metaphysics will always be unsettled by its actualities, and therein a whole host of cultural conflicts and politics resides. But that is not my focus here, instead, now, with this background in place, I want to sketch an outline of what I call diagrammatic writing.

In common usage, the concept of the 'diagram' is often vaguely defined, used to refer to a broad variety of schematic images - graphs, charts, anatomical images, wiring drawings and so on. A more precise definition might focus the term to refer to a specific category - those graphical expressions that take advantage of spatial organisation to structure semantic relations. These graphical expressions are themselves meaningful as forms - they are a kind of poetics, or poieisis, a bringing into being of meaning through making. The specific properties of graphic forms, their tractable, perceptible materiality, makes it possible to analyze formats and features - to get at, to grasp, to read, see, describe, elaborate the particulars of diagrammatic expressions. Even the abstract principles of Peirce's existential graphs are worked out in graphical terms whose visual specifics create logical relations. The columns in a spreadsheet, or the graphic conventions of doing arithmetic sums or long division, are dependent on diagrammatic scaffolding that underpins their meaning-production. The spatial arrangement of values on a surface is integral to the values produced in ways that seem self-evident because they are so fully naturalised by convention. The principles that seem commonsensical in describing these spreadsheets or math operations are less intuitive and familiar in the domain of written language. But the graphical organisation of texts also depends on diagrammatic workings. Across the full range of analogue and digital media, format features of layout, composition, and graphic design are integral to the production of semantic value. The words of a chapter header or title read with a different inflection and value than when the same words are embedded in a linear sequence or tucked into a footnote. We read according to these visual cues and though we depend on them, we rarely stop to describe

or discuss their structuring principles or effects.

The long history of print conventions is now challenged by the opportunities of the digital environment, with its potential for flexible and extensible writing spaces. This challenge might be met in part by developing a more explicit understanding of the possibilities of diagrammatic writing, those compositional techniques that make use of graphical organisation in meaningful ways. In particular, my focus here is to consider whether - and how - the potential of digital display can be put at the service of imaginative and scholarly tasks. The precedents from analogue media, the format features of manuscript and print page design, combine with the flexibility of digital media (sliding or swiped panels, expanding menus, resized windows and so on). By looking at a number of examples, I hope to offer insights for designing such a space.

Some of the earliest examples of written language provide a useful precedent for diagrammatic writing. The scribes who created cuneiform tablets, dating to the third millennium before the Common Era, used scored lines to divide their surfaces into segments. These dividing lines segmented the clay surface into bounded units. Like property lines or fences, the divisions maintained distinctions among different types of information that comprised the written record on the tablet. Quantities could be separated from names for things, or, in the more elaborate column structures of inventories, owners from entities, and so on. The tablet known as Plimpton 322, for instance, is marked into individual columns in order to display Pythagorean triples, quantities that satisfy variables in specific equations (figure 2).8 The columns separate the values for each variable with striking clarity, allowing the mathematical structure of the analysis to be read. The structuring character of those lines is echoed in the columnar structure of accounting balance sheets and the marshalling of entries into their proper arrangement for purposes of tracking sums and values, names, or other items. Such structuring can be considered performative because the format enacts value production, it does not represent it, but allows it to be carried out, performed. The temptation to slip from the description of content typing that made those clay tablet grids work so effectively to the analysis of database structures is, of course, irresistible, and not without justification. Any graphical artefact has to be understood within the specific contexts of its production and reception, but shared similarities and continuities link basic elements of diagrammatic writing across these historical and cultural circumstances.

Without formal scaffolding, writing would not function. A genealogical chart that lacked the means to track bloodlines or distinguish one generation from another would hardly perform its basic functions - to secure claims to property, identity, or power. The Tree of Jesse, like the ancient symbols for the Tree of Life on which its iconography is based, is not only genealogical and mythic in its power, but embodies assumptions about the organic integrity of derivation and inheritance, continuity and shared roots and systems, literally and figurative. These relations are not merely *expressed* in its form, they are

8. Eleanor Robson, 'New Light on Plimpton', http:// www.maa.org/news/ monthly105-120.pdf



Figure 2, Plimpton 322, Cuneiform tablet dated to about 1800 BCE. Columns separate variables that satisfy an equation and fit the description of Pythagorean triples. Columns each hold a distinct, identifiable value while rows are individual instances. The grid structure obviously organises the content and gives it value http://blsciblogs.baruch.cuny.edu/plimpton322/the-tablet/

made in its format. The images do not simply represent relations of derivation and inheritance, they constitute such relations through graphical means, just as the columnar formats used for accounting designate and confer specific characteristic values through their graphical means. For instance, in a railroad schedule the diagrammatic features are essential to distinguish arrival and departure times, or minutes from hours (figure 3). A number placed in a different column obtains a different value. Such features are so endemic to the processing of written and visual information, so pervasive in their presence and function, that their operational, functional, instrumental, and rhetorical force is rarely considered. Nor are their poetical dimensions, the way they make meaning through the very act of composition, given explicit attention.

I am now in a position to outline in more detail what some of the features of a diagrammatic writing space might be and how they might work. If a diagram is an image that *works*, that does something, as writers across the logical, historical, and philosophical spectrum suggest, then it provokes a reader's engagement through its structures and the relations they express. A diagram is a graphic expression whose specific spatial and visual features constitute the semantic values. Diagrams are performative, as is clear from the cuneiform tablet and railway schedule examples, rather than representational. They use graphical means to express relations that might be expressed through other means - mathematical formulae, textual description, logical propositions.

The principles of diagrammatic thinking are not exclusive to graphical expressions, but their graphicality makes them legible and also makes their historical lineage apparent. A concept of the hierarchy of power relations or kinship relations, for example, can be understood diagrammatically and expressed visually, but the relations of subordination, exclusion, proximity, prohibition and taboo do not depend on graphical forms for either their enactment or their apprehension in a human community. Graphical means enact and enable diagrammatic activity, and though at some 'higher' level, the relations (again, think of kinship expressed in genealogical charts) can be described in logical, mathematical, or other modes, the use of graphical media has an incontrovertible specificity and efficacy.

As a subset of diagrams, diagrammatic writing makes use of specific visual codes. All writing is graphical, by definition, and the graphicality of all writing plays a part in the production of its legible and communicative, expressive, value. By reading stylistic codes,

the place and situated-ness of an inscription that distinguishes formal monumental writing, informal graffiti, printed communication, official signage from each other and from other modes of writing, we are able to identify orders, genres, types of written language in a millisecond, long in advance of processing textual content. But graphicality and diagrammatic properties are not interchangeable. Pictures are graphical, but they don't work in the same sense that diagrams do. Representational images are constrained by analogy. Their referential function determines their form rather than having their form arise from or express values through graphical relations. More forms and formats of writing contain and make use of diagrammatic features than is generally realised. For instance, the basic scoring of prose through the use of word spaces, punctuation, paragraph markers, and so forth creates a fundamentally diagrammatic work. The text is pre-digested by its graphical structure. Take the exact same set of letters, and order them alphabetically or randomly and the significance of graphical sequencing and chunking are evident (e.g. the difference between 'this and that' and 'thisandthat' or 'tndhatahsti' is graphical). Likewise, in reckoning a mathematical sum, we take advantage of diagrammatic graphic features to align columns of numbers according to the place value of integers. Try adding a set of numbers that has been scattered around the perimeter of a

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Figure 3, Staten Island Railway schedule, 1867 http://upload. wikimedia.org/ wikipedia/en/ thumb/7/7d/ $Staten_Island_$ Railway_1867. j p g / 500 p x - $Staten_Island_$ Railway_1867. jpg

room instead of placed in a neat column and the supporting role of graphical organisation and scoring becomes quite evident.

All written forms can be described as diagrammatic, but so can approaches to composition. These operate at a level of textual organisation that supports branching narratives and multi-linear approaches. A conspicuous moment for such work came with the first wave of hypertext writing in the 1980s, which brought equal parts insight and exaggeration to the idea of exploiting diagrammatic features in imaginative works.9 Earlier visions of branching narratives appeared in the writings of Vannevar Bush, in his frequently cited 1945 paper, in Theodor Nelson's work first published in the 1960s, and in some of the experiments of innovative writers who played with alternative structures in analogue or digital work, such as Julio Cortazar in Hopscotch or the computationally generated text first published in 1984, The Policeman's Beard is Half-Constructed. 10 Artists made projects that used alternative physical and graphical structures - decks of cards, collage techniques, cut pages, combinatoric processes - since early Dada experiments in the 1910s. Some critical claims tended to exaggerate the binaristic distinction between the linearity of print and the non-linearity of programmes like Hypercard. Designed for Apple and launched in 1987, the programme was a milestone, offering an easy to use platform for creating combinatoric works built in chunks whose sequence did not have to be locked into the single linear sequence. Branching and linking, the basic underpinnings of the web, were embodied in its programming. Hypertext could be rendered in a diagram that let readers see the story structure, but it could also be experienced as multiple pathways through the reading. Hypertext chunking allowed a conceptual separation between content types (such as footnotes, sources, citations, primary materials, and other elements) to be made more explicit in the storage, and thus manipulation, of these units. The modular quality of hypertext chunks could also serve to break a text into narrative units for combinatoric play, with relations specified in links, or in a database structure.

Conventional prose and print are only superficially linear, or course. The sequence of alphanumeric code follows line by line, letter by letter, but meaning is produced across a field of associations, rhymes, and references that are not only not constrained by linearity but come into being through the capacity for multiplicity of meaning and reading. Poetic forms, more obviously spatial, exploit diagrammatic elements quite conspicuously. Stéphane Mallarmé's 1896 designs for *Un coup de dés* may be the paradigmatic diagrammatic work, and certainly a touchstone for any graphically scored piece whose myriad of themes is spatialised relationally in dramatic ways. The sheer force of condensation and resonance that makes poems work embodies a diagrammatic engagement with relational principles and forces. Poems can be mapped as force fields of vectors, sinks and troughs of meaning, nodes of relation and repetition, reinforcement, or resistance. The dynamic language so crucial to diagrammatic thought springs from poetics quite readily. And

9. Jay David Bolter, Writing Space: Computers, Hypertext, and the Remediation of Print, New Jersey, Lawrence Erlbaum Associates, 2001; Michael Heim, Electric Language: A Philosophical Study of Word Processing, New Haven, Yale University Press, 1987; George Landow, Hypertext 3.0 Critical Theory and New Media in an Era of Globalization: Critical Theory and New Media in a Global Era (Parallax, Re-Visions of Culture and Society), Baltimore, The Johns Hopkins University Press, 2006.

10. Vannevar Bush, 'As We May Think', Atlantic Monthly, July 1945; on line at http://www. theatlantic.com/ doc/194507/bush; Theodor H. Nelson, 'A File Structure for the Complex, the Changing and the Indeterminate', Proceedings of the ACM 20th National Conference, 1965, pp84-100; Julio Cortazar, Hopscotch, NY, Pantheon, 1966; and Racter, Joan Hall, and William Chamberlain, The Policeman's Beard is Half-Constructed, NY, Warner Software Books, 1984.

the analysis of poetry, as well as that of many aesthetic artefacts, exposes the fields of relations produced in and across such complexities (no matter how refined, reduced, or apparently simple the artifact might be). The diagrams of Erle Loran, developed for studying the work of Cezanne, for instance, almost as clichéd-seeming at this moment as the analytic schematics used to show the triangles underlying the composition of the great Renaissance madonnas and so on were wonderful demonstrations of the dynamic principles at work (figure 4). Diagrammatic methods of analysis do their work in the study of musical pieces, staged drama, film structures, and elaborate narratives, just as the practice of diagramming sentences was used to expose structure of composition.

Picking up the thread dropped above, the binarism stressed by early hypertext writers and theorists suggested that the compositional techniques that took up Jorge Luis Borges's image of the 'garden of forking paths' heralded the arrival of a new era of literary liberation from the tedium of linearity imposed by regimes of print. Such fallacies and follies, trivial in their perception, and short-lived in their traction on imagination, were not so much wrong as simplistic, as intent on selling the virtues of new media as other hawkers of the digital. But what elements of that early shift in compositional mode, grafted onto the study of graphical expressions, connect diagrammatic principles across a continuum of manuscript to print and to digital

expressions? The question is not merely answered by an assertion that writing's diagrammatic quality inheres in a database's combinatoric ability to produce modular reworked products customised for each new reader. That may be, and may come to be, but will benefit from a higher degree of specificity about kinds and types of diagrammatic thinking expressed in graphic features and formats. Graphicality is neither essential nor incidental - it is a convenience for making relations legible, available to perception, and analysis. The graphic field also provides material evidence for analysis of its particular qualities, a notion better integrated into calligraphic traditions than those of print.

At the most abstract and fundamental level of meaningproduction, the distinction between a

Figure 4, Erle
Loran diagram
analyzing the
point of view
system in a
Cezanne still
life http://4.
bp.blogspot.com/
_sTvHtDRhr5Y/
SGacW61EWNI/
AAAAAAAAGYc/
H4xQ3g8eBtg/
s400/figure-333.
png



upon the force of a frame. Such a statement can be made without recourse to graphical expression, as a proposition that holds in the abstract, (e.g. a logical principle in Peirce's concept of the cut or separation). But tractable form immediately gives specificity to such propositions, as the citations from Walter Crane and George Spencer Brown each suggest above. Any mark might communicate meaning or value, but when it is presented on a piece of paper, within the space of a screen, on a canvas or parchment, it performs differently in response to our expectations. Delimitation of domain creates meaning. Without differentiation, the graphical has no value. Such insights were the stuff of semiotics, structuralist analysis, and post-structuralist thought.¹¹ That legacy provides a theory of trace as the coming into being of the possibility of meaning whether within a literal graphical comprehension of such processes or on a more abstract plane in which an ecology of semiotics points to more fundamental conditions of knowing and being.¹² But the inventory of graphical features that assume the form of conventions in written language, and then enact diagrammatic possibilities, begins with the play of figure and ground, edge and field of inscription, along lines of basic organizing effects. 13 These offer the chance to engage with the also familiar but still useful principles of gestalt psychology, with its analysis of perceptual tendencies provoked by visual forms. 14 The principles arise from clinical observation, perception studies, that assume a kind of normative subject and a predictable, even mechanical, relation between stimuli and response. So, continuity, grouping, proximity, emergence, invariance and so on are graphical features whose effects can be

mark and a non-mark, a signifying entity and an incidental trace, depends

The relevance of these principles to the design and study of graphical formats depends on the subtlety and finesse with which they are applied. The elaborate study of the *mise en page* of medieval manuscripts shows how nuanced the notion of 'proximity' between one column of text and another can be.¹⁵ The careful calibration of proportions is a dance of subtle metrics, of the division of a page through allocation of one portion to bottom margin and another to the top, to the decisions that keep a book unified across a gutter or throw its portions outward as if by some chaotic force of centrifugal abandon. The differences of proportion that make a design work or not don't resolve through formulaic principles, and the gestalt inventory lacks refinement. Proximity, for instance, becomes laden with attributes and values in the workings of Raymon Llull's diagrams for calculating the attributes of God or the mesh of connections generated by Athanasius Kircher (under Llull's persistent influence) in his magnificent graphical elaborations of the 1669 *Ars Magna Sciendi* (figure 5).

counted on, more or less, in most visual processes.

Diagrammatic writing structures became conventionalised in medieval manuscripts to create relations of text to commentary, text to paratext, and apparatus to the whole space of the book. Notes also point outward

11. Jacques Bertin, Semiology of Graphics, Madison, University of Wisconsin Press, 1984; Fernande Saint-Martin, Semiotics of Visual Language, Bloomington, Indiana University Press, 1990.

12. Jacques Derrida, Of Grammatology, Baltimore, Johns Hopkins University Press, 1976.

13. Johanna Drucker, Figuring the Word, NY, Granary Books, 1998.

14. Rudolf Arnheim, Art and Visual Perception, Berkeley and Los Angeles, University of California Press, 1954.

15. Henri-Jean Martin and Jean Vezin, Mise en page et mise en texte du liver manuscrit, Paris, Editions du Cercle de la Librairie-Promodis, 1990.

Typus universalis, omnibus de quacunque re proposita quastionibus formandis, aptus.

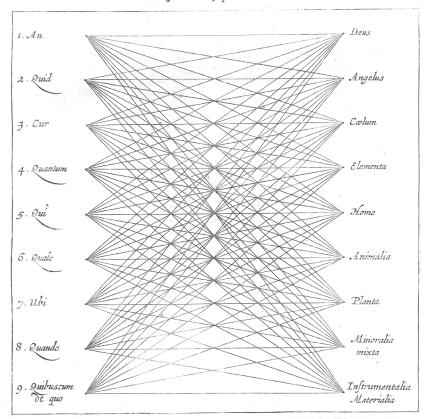


Figure 5, Athanasius Kircher, Ars Magna Sciendi, 1669, diagram following the tenets of Raymond Llull

to the discourse field of textual production in the broader sense. They are adopted for print formats and then find their way into the sidebars, hyperlinks, and headers that allow us to read and author effectively in digital environments. The navigational functions of graphical expressions are most conspicuously diagrammatic - the relational structures that make a header distinct from a phrase in a paragraph, a footnote other than an entry in the table of contents are vivid demonstrations of the ways spatial specificity organizes written language (or multimedia texts, for that matter). So conventionalised are the elements of texts and their codified relations that writing is produced with those structures in mind - the footnote segments itself from the main line of argument, the aside, the comment, the marginal note, the index, and chapter heads or subheads. Though hardly natural features of the intellectual landscape, these are so naturalised that they are prompted even in the process of composition (and certainly employed in the processes of editing). That they guide reading is obvious, of course. Similarly, conventions have quickly arisen in the organisation of screen space that guides its allocation to different purposes according to positions (figure 6).

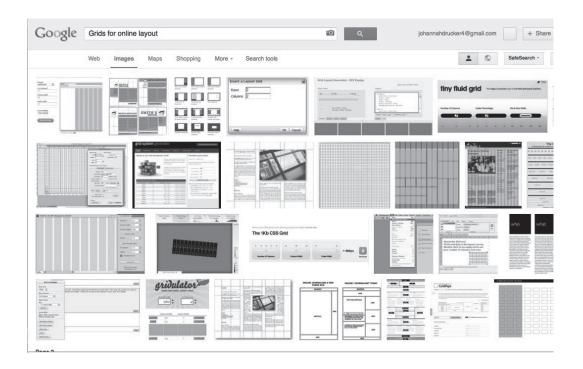


Figure 6, Web design showing allocation of space by content type and convention

The major distinction between the space of a manuscript page and that of a printed page is that the technology of print reinforces tendencies towards squareness (quadrature) and invariant type size and style. These are not absolute requirements for printed pages, but production means - letterpress, linotype, phototype, and digital typesetting - were all designed to support these conventions. Manuscript pages, by contrast, have to be created with demanding attention if their lines are to remain evenly sized and spaced. The affordances of each medium are fundamentally different. The lower limits of micrographia are determined only by the ability of a scribe to manipulate the point of a pen, and insertion of one line after another into the space between two pre-existing lines of text is governed only by a principle of elasticity, not strict decorum. Embedding and entangling texts is not only easy in manuscript form, it is almost irresistible - and in handwritten drafts of contemporary texts such practices continue to be the norm. Wandering lines, insertions, deletions of branched options, thoughts that begin and end, are dropped, aborted, abandoned, their unfinished lines broken partway through their expression. At every point in composition, a text suggests directions that cannot be followed in a strict linear pattern, pruning and editing keep the rhizomatic tendencies in check because convention has asserted this should be so. In the elaborated commentaries that decorate the pages of manuscripts in the middle ages, when conventions of navigation, reading, and writing were being established as customs for use, the origins of convention exist alongside the opportunities that had to be let go within the constraints of printed forms. Artists and innovative writers may have played with visual and spatial writing within the avant-gardes of the twentieth and twenty-first centuries, but the design of digital platforms for daily use has hardly begun to accommodate the imaginative possibilities of diagrammatic composition. The design of digital displays arose at the intersection of the capacities of code (mainly html), the desire to optimise the use of screen real estate, and the rush towards conventions and standards to improve efficiency.

In pausing to think about the ways authoring absorbs and depends on provocations coded into the graphical space that maps relations among one bit of text and another, questions about the authoring platforms and potential/ poetential of electronic space come into view. Formats in electronic space have reprised some of the older textual modes of production, even as these are interpenetrated with the now ubiquitous structure of cross-references and linking. Blogs are scroll forms, social media sites are galleries, a list of tweets has some peculiar resemblance to those archaic cuneiform inventories. The diagrammatic codes that structure a Wiki, dividing its screen display into topic, introduction, overview outline, and other features does not mimic any particular script predecessor, but preserves the footnote and reference conventions of print resources. Scrolling texts, pop up windows, rapid refresh in screen displays all introduce a more rapid temporal rate of re-inscription than print allowed, but the flat space of display to which most screen writing is reduced is, if anything, far less diagrammatically sophisticated than the spaces of a three-dimensional codex. In terms of the screen, most writing space unfold the downward, along the vector of the scroll, to extend the writing space and the infinite sidebar as a way of navigating. Gauging a place using a sliding sidebar does not necessarily provide a good sense of the overall size or scope of the whole text. The accumulating tail of a blog seems even less constrained, as if it were simply unrolling over time, its chunks lopped off, to be archived by month or week or day. This is writing without constraint, a mode of production that has no limits in terms of quantity and frequency, and yet is very constrained in its appearance and rhetorical structures. Such unbounded, non-delimited, forms pose difficulties for logicians as well as designers, since the open-endedness makes it difficult to fix values.

But the potential for diagrammatic writing to express compositional possibilities that make use of the screen's flexible and fungible display space exists, not just as a place in which the forking paths metaphor or hyperlinked network is constantly invoked, but as a fully n-dimensional space. This possibility, to be enabled and enacted graphically, takes several forms: a kind of visio-logico-compositional authoring that engages mind-mapping, grids, matrices, lattices, and other spatialised structures whose semantic value as forms inflects and informs the production of meaning in the works they enable. Will conventions develop for thinking and writing along rays, arrays,

subdivisions and patterns of thought? Can the flexible morphology of screen display enable framing, enframing, embedment, entanglement, hierarchy, listing, and other schematic strategies of composition? These involve the production of multi-linear discourse as well as non-linear modes (so long as by non-linear we understand that alphanumeric sequence will remain at the level of word, phrase, sentence, and other units of discourse). In addition, the generation of automatic processing of intellectual material, texts in particular, into concordances, word lists, visual formats and n-grams, mined as 'data' and expressed visually will add other graphically specific conventions to the field of text production. Tag clouds, topic maps, other displays of textual material are now in common use and the hierarchy inscribed by size and frequency are readily understood. But the distribution of words across the space of screen real estate in these artefacts is often simply an effect of an instruction in the algorithm that is optimizing display and legibility. Deliberate use of the forms of graphical expression requires other conventions and understandings.

The list of characteristics of flexible morphology can be elaborated to describe structuring principles and compositional possibilities. The primitives of diagrammatic writing are: hierarchy, juxtaposition, embedment, entanglement, enframing, interjection, branching, recursion, herniation, extension, penetration. Each is a spatial logic (in a mathematically precise sense that distinguishes it from the other primitives). But each has rhetorical implications when used to make an argument. Finally, each can be described, abstractly, as a term that describes a relation between one text and another, between a zone of discrete activity and a relation to it. So, hierarchy suggests subjection, an ordering of authority, in which the claim to greatest significance is announced by the position of a text at the top of a page or area. Hierarchies subdivide quickly, and require at least two elements - one that asserts itself over another by size, scale, placement, or other graphic feature. Hierarchies can be elaborately detailed, as in the case of classification systems that go from step to step of ever-finer granularity. Hierarchies frequently structure the semantic field, whether in headlines, title pages, on menus and announcements. Any basic textbook of graphic design from the twentieth century will show thumbnails and have pointers for how to organise and use hierarchies to reinforce the content of a visual communication.

But other elements of diagrammatic writing are less codified. The structures of parallel arguments, of juxtapositions as a way to level hierarchies and replace them with dialogue or complement, are rarely used. When a text is distributed across four quadrants in a design, how do left/right and top/bottom zones assert different values? (figure 7) When a text is surrounded by another, embedding the initial expression in a commentary, has an act of strategy been performed, a military manoeuvre in which one flank of argument has positioned itself to dominate another? Is the embedded text protected or subdued? When a comment works itself around another, to enframe, it is claiming that it supersedes the original? When a line is inserted between others and then extends outward, bulging with ideas that swell the text into a balloon in the

margin, is it producing a herniation in the argument, a burst of impassioned verbal energy needing space to expand, breaking through implied constraints or protesting limitations? And when interjections are pointed into the text, anchored with small points in the stream of the whole, are they attributes, adding refinement and qualification? Or small darts of attack into the body of the argument? I'm deliberating indulging in vivid language here, metaphoric and dynamic, to emphasise the rhetorical force of compositional practices rather than simply relying on the old bromides of design composition that call attention to balance, symmetry, and dynamism on the page. Thinking about graphical composition as a set of manoeuvres for engagement in electronic space permits reflection on arrangements and moves that are strikingly different from those that occur on stable material supports.

As already noted, prose and poetry, print and manuscript, are only superficially linear. The production of meaning occurs across a field of text as references replay and resonate even if the inscription is a linear sequence

of alphabetic signs. The notion of a field is complicated by the shift from page to book and from book to networked text. In all instances, the many roles of textual and graphical elements participate in producing a navigation system as well as meaning across gaps, spaces, gutters, margins, turned pages, and recollected chapter titles, headers, and so on. Seen in that light, a book has something in common with a landscape or built environment in which signage operates to designate meaning, guide behaviour, orient a person finding their way, identify a place or building, or perform any of the many activities of signs in space. Web environments combine the surface organisation and structure of pages and the distributed complexity of landscapes, using both the schematic compositional techniques from print-based graphic design, the knowledge gleaned from human-computer interaction studies, and (perhaps not often enough) lessons learned from signage design. But they still do not take full advantage of the n-dimensionality of digital

Figure 7, The Talmud's layout organises a hierarchy of commentary within commentary according to very strict conventions and guidelines http://jewish currents.org/wp-content/uploads/2010/06/talmud.gif

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space, or e-space and current conventions have too quickly constrained the design possibilities. We are still in the incunabula stage of digital design. Gestalt principles and the knowledge of basic graphic variables distilled from semiotics have been systematically employed for analysis and production of web site design, but these stop far short of the rhetorical and poetic engagements that would form a suggestive foundation for diagrammatic writing practices. Characterizing spatial relations among textual elements to discern the force fields and vectorial power of these dynamics is one part of understanding diagrammatic work. The other is to imagine a space in which the flexible elasticity of screen space could be optimised to support writing practices that don't conform to conventions set by print and reinforced by the wireframes that structure web environments. Activating the implied z-axis is one part of this. Thinking in terms of writing as a constantly bifurcating, associative, combinatoric, accretion rather than a linear distillation is another. Creating a graphic language and a support for its implementation is also essential, but the conceptual barriers are more difficult to overcome than the technical. Taking inspiration from manuscript modes of free-form writing in combination with the capacity for computational processing will produce alternative approaches to interactive arrays and displays in the interface.

The enthusiasm for databases was a harbinger of a combinatoric and diagrammatic approach to writing in electronic spaces, but the mechanistic division of content in advance of composition imposes a fixed structure on the types of text and their relations that can be generated from the semantic material entered into the fields. As topic maps and other semantic network visualisations have become more familiar, the rhetoric of their presentation seems to be filtering into common perception as a way of writing, not merely a way of displaying information. The free-form notion of a diagrammatic writing suggests a more associational structuring of argument, one that gives rise to relations and organisation that may, in turn, be captured, extracted, studied as a schematic form, but is not the determining mechanism or structure of composition. The flexibility of variable spacing, the ability to change scale and insert lines within lines, commentary wrapped around commentary, discursive strategies marshalling arguments with the spatial dynamics of a battle campaign or a move in a complex dance are all features of the manuscript page that are so difficult to enact within the technologies of print production for all the reasons discussed above. So far, screens have remained stuck in print imitation; making them responsive to the combination of manuscript and digital potential to produce a new hybrid, fluid and n-dimensional, is an as yet unrealised possibility.

Diagrammatic writing makes use of graphical organisation for semantic effects. It engages principles that are integral to logical and philosophical

reflections on the processes of meaning-production, but employs them in the rhetorical and poetical spaces of applied design. This shifts the discussion from abstractions to particulars, from discussions of matters of distinction or difference to descriptions of specific practices. Diagrammatic techniques used in note taking express associative thinking about ideas and arguments. The diagrammatic imagination emerges in handwritten doodles and whiteboard sketches, in marginalia and commentary, in outline forms and elaborate lists. But the potential of the electronic environment to create those multiplicities of argument structure that are possible within the digital spaces of an n-dimensional screen has not yet been activated. How does a line become a bridge, a rib of text across which a rhetorical gesture stretches to extend a track of thought? What happens when an argument divides, following all of its details and possible branching, refinements, or qualifications into intimate detail so it reveals the minutiae of thought and refinement? A text or idea can be unravelled through contrast with all its other versions, witnesses, and evidence of its production. In such an image, the wandering manuscript commentary of medieval scribes would be revived in electronic form, tracing thought trails wherever they go, into and out of the spaces between paragraphs, lines, or words. In electronic displays, a table of contexts (rather than contents) might be generated through associations data mined from a concordance, or from phrases highlighted in reading, or from commentary that promotes dialogue across many exchanges among readers. The running heads might actually run, streaming across a frame, pitched forward, changing to create their own commentary in anticipation, on reflection, or with retrospection. When these activities appear, the 'page' on the screen will be able to reconfigure and regenerate. The elaborating possibilities of the embroidered argument will be released from their latency. A tool set of moves will become as familiar as footnotes and paragraphs, as bullet points and paraphrases, as marginalia and discourse fields to which our references serve as vectors and points. The diagrammatic potential of writing would be fully engaged. With all this in view, a material poetics of diagrammatic writing enabled by graphical possibilities of expression might be envisioned. Whether or not such potential is ever realised depends on many other factors, not least of which is the resistance of conventions that stabilise meaning to the forces of change, and the entrenchedness of communities of practice, their attachment to familiar forms of knowledge production, and, of course, of knowledge itself.

Working Papers In Cultural Studies, Or, The Virtues Of Grey Literature

Ted Striphas and Mark Hayward

Abstract One of the more striking, if under-appreciated, aspects of publishing in cultural studies' early days was its provisionality. It is worth remembering that the chief publishing organ of the Birmingham Centre for Contemporary Cultural Studies was not called Cultural Studies, or something similarly definitive, but rather Working Papers in Cultural Studies. By today's standards it would likely be considered 'grey literature', because the work appearing there announced itself as, on some level, in process. This essay offers a detailed history of cultural studies' early publication practices, particularly those associated with the Centre. Its purpose is to provide insight into the modes of scholarly communication through which the nascent field established itself in the 1960s and '70s. Equally, its purpose is to use this history as a means for taking stock of the field's apparatus of scholarly communication today. Cultural studies, the authors argue, might do well to open a space once again for less finished scholarly products - work that is as much constitutive (i.e., about community building) as it is instrumental (i.e., about conveying new research).

Keywords cultural studies, working papers, grey literature, scholarly communication, Birmingham Centre for Contemporary Cultural Studies

This essay focuses on the writing and publication practices that developed in and around the Birmingham Centre for Contemporary Cultural Studies from the time of its founding in 1964 until the cessation of the journal Working Papers in Cultural Studies, arguably its chief publication, in the late 1970s. Through our engagement with these practices, we want to develop an approach to the question 'what is cultural studies?' that is historical, speculative, and above all, materialist. It is historical insofar as it revisits the 'moment' of Birmingham, albeit from the perspective of its serial publications. It is speculative to the extent that we hope to build upon these historical traces and make some arguments for the ways in which textual production in cultural studies might be reformulated to allow for more productive engagements with the contemporary conjuncture. Finally, our approach is materialist because we want to de-emphasise the conceptual and biographical aspects of the work that took place at the Centre - the content, as it were - and to draw attention instead to the varied functions of that work vis-à-vis its form.1

What this amounts to, essentially, is 'a trip "below decks" into the "boiler

1. Of course, the risk of such an approach is to attribute too much to form, i.e., to assume that form determines content, circulation and reception. We want to be clear that we are not making a purely formalist argument in this sense. Indeed, we go to some length to show how form is not an abstract or sedentary category but one that emerges out of an ongoing process of meaning making. Similarly, while we believe strongly that form has some bearing on the modes of circulation and reception of texts (e.g., a heavy print dictionary is, in principle, less circulable than a lightweight magazine), we would not presume to suggest that one could simply read either of those two aspects off a textual form.

room" which was to become Cultural Studies', as Stuart Hall has described it.2 Beyond all the rows, beyond all the major works and their intellectual history lies a more mundane but no less important story to be told about Birmingham, and about cultural studies more generally. This is a story about the instruments with which, and the infrastructure through which, cultural studies developed at the Centre and seeped out into the world. At its heart is the category 'grey literature', a term we borrow from library and information science to refer to pamphlets, conference proceedings, reports, white papers, newsletters, self-published journals, and other types of fugitive publications that lack high production values, the endorsement of blind peer review, or both. Grey literature may be academic, but its authority is typically in doubt. Also central to our story is process, or rather a range of methods for writing, duplicating, and publishing that came to be condensed under the heading of 'working'. Our argument is that the success of the Birmingham Centre is attributable not only to the intellectual content of the work produced there in the 1960s and '70s but also, and in no small part, to the grey literature in and through which those ideas circulated.

Given how the present moment is marked by debates and struggles at the intersection of knowledge production, intellectual property and labour, reconstructing this earlier moment might help to remind those of us currently working in cultural studies that the modes of research, writing and publication that are dominant today (namely, those that favour the single author and the discrete, properly credentialed text) were not always the only, or even primary, ones that mattered. 4 As we will suggest in the conclusion, recovering the history of diverse forms of textual production identified with an earlier incarnation of cultural studies gives some precedence for allowing - perhaps even embracing - a much greater diversity of textual forms today. Moreover, while we develop this history in relationship to particular forms of writing, mainly the working paper, we do not only see this as being about different kinds of outcomes per se (e.g., grey literature versus peer-reviewed articles, or even monographs). Rather, we would like to position this essay as an invitation to consider the ways in which different modes of writing might relate to different forms of scholarly knowledge production. Of course, such an engagement with the routines and institutional contexts of the Birmingham Centre for Contemporary Cultural Studies during the 1960s and '70s will highlight the extent to which the structures that define research and education have radically changed in the intervening decades. The challenge is not to view this as a tragedy and lament what was lost, but to use historical precedent as a way of setting the stage for contemporary struggles.

GETTING INTO PRINT

The history of publication at the Birmingham Centre often begins with, or at least moves quickly to, 'the big four': Richard Hoggart's *Uses of Literacy*

- 2. Stuart Hall, 'Preface', in Ann Gray et al (eds), CCCS Selected Working Papers, Volume 2, New York, Routledge, 2007, pxi.
- 3. Stuart Hall, 'The Emergence of Cultural Studies and the Crisis of the Humanities', October, Vol. 53 (Summer 1990): 11; Charlotte Brunsdon, 'A Thief in the Night: Stories of Feminism in the 1970s at CCCS', in D. Morley and K-H Chen (eds), Stuart Hall: Critical Dialogues in Cultural Studies, London, Routledge, 1996, pp278-80.
- 4. See especially The Edufactory Collective (eds), Toward a Global Autonomous University: Cognitive Labor, The Production of Knowledge and Exodus from the Education Factory, New York, Autonomedia, 2009; Andrew Ross, Nice Work If You Can Get It: Life and Labor in Precarious Times. New York, New York University Press, 2009; Ted Striphas, 'Acknowledged Goods: Cultural Studies and the Politics of Academic Journal Publishing', Communication and Cultural/Critical Studies 7, 1 (2010): 3-25.

5. Centre for Contemporary Cultural Studies (CCCS), First Report, 1965-66, Birmingham, Centre for Contemporary Cultural Studies, Birmingham University, November 1966.

6. John Mowitt has recently discussed the essay in some detail in *Radio:*Essays in Bad
Reception, Berkely,
University of
California Press,
2011, pp156-66.

7. CCCS, *Third Report*, *1965-66*, op. cit., p26.

8. Raymond Williams, 'Just what is Labour's policy for radio?', *Tribune*, 18 February 1966, p8.

9. CCCS, *Third Report*, *1965-66*, op. cit., p20.

10. CCCS, First Report, Birmingham, Centre for Contemporary Cultural Studies, Birmingham University, September 1964, p10.

11. Raymond Williams, 'The Future of Cultural Studies' in Tony Pinkney (ed), *The* Politics of Modernism: Against the New Conformists, London, Verso Books, 1989, p154.

12. Mowitt, op., cit., 17.

(1957); Raymond Williams' Culture and Society (1958) and Long Revolution (1961); and E. P. Thompson's *The Making of the English Working Class* (1963). While there were other texts that similarly informed the direction of work at the Centre (e.g., Williams and Orrom's Preface to Film and, later, Stuart Hall and Paddy Whannel's *The Popular Arts*), these four books immediately preceded the Centre's founding and served as touchstones for its fledgling intellectual enterprise.⁵ There is a another publication, however, that deserves to be included in this pantheon. While hardly lost to history, rarely does it figure in relationship to the big four: Rachel Powell's twenty-two page essay 'Possibilities for Local Radio', published in December 1965 as the Centre's first 'Working Paper'.6 According to the Centre's third annual report to the University of Birmingham, dated 1966, Powell's essay was 'widely circulated and commented on', although it is difficult to substantiate in any detail what this claim meant.⁷ Among the commentators was Raymond Williams, who, in the Tribune, called it 'a detailed and imaginative account of what local broadcasting could really do if it could be, from the beginning, unambiguously a social service'.8

Powell was full-time staff Research Associate working on the 'Gulbenkian project' (named for its funding agency), whose charge was to investigate 'the relationship between the providers of television programmes and their audiences' (and, obviously, that of radio). 'Possibilities for Local Radio' is the first indication of the Centre's ability to deliver on one of its more ambitious promises, namely that it would not only pursue but also *publish* scholarly research. As Williams has noted, the slow development of cultural studies did not immediately or cleanly lend itself to publishing:

[I]n the late forties, and with notable precedents in army education during the war, and with some precedents ... even in the thirties, Cultural Studies was extremely active in adult education. It only got into print and gained some kind of general intellectual recognition [later on]. I often feel sad about the many people who were active in that field at that time who didn't publish, but who did as much as any of us did to establish this work.¹¹

The appearance of Powell's paper thus marked the crossing of an important threshold for cultural studies, at least in Britain, where publication had tended to be more the exception than the rule. More to the point, her Working Paper was an important first step in establishing a publishing *routine* for cultural studies.

The designation of the text as a 'Working Paper' merits closer examination, however, as the lexicon used to describe the publication and circulation of texts does not seem to have been determinate at this point in the Centre's history. The Birmingham Centre annual report from 1964 refers to this type of publication as an 'occasional paper'. The lack of capitalisation suggests a strong degree of informality for the work that would eventually be appearing

under this rubric. The same type of publication is referred to in the report dated October 1965 as an 'Occasional Paper'. In fact Powell's essay, which was then in preparation, was referred to as such in the report. ¹³ The capitalisation likely indicates a higher degree of formalisation and a growing recognition of this body of work's potential intellectual and practical import for the emergent project of cultural studies in Britain, particularly as it involved reassuring university administrators and various sources of funding for the Centre.

The second release in the Centre's burgeoning series, Alan Shuttleworth's 'Two Working Papers in Cultural Studies', occurred during the 1966-1967 academic year. Here, though, 'Working Paper' functioned as a particular, not categorical, description. Its presence in the title referred as much to what Hall and Hoggart identified as the central question raised by the essays - 'Is this the Centre's notion of a finished piece of work?' - as it did to the ongoing research at the Centre emerging from the recently organised 'Texts' seminar. ¹⁴ Indeed, in the annual report dated January 1968, the series was once again referred to as 'Occasional Papers', which was consistent with the cover page of the Shuttleworth text. ¹⁵ In other words, the Shuttleworth piece was a work-in-progress belonging to what was now understood to be, more or less conclusively, a series of intermittently released publications tracing developments at the Centre. ¹⁶

Clearly, more was at stake in the decision to call the series 'Occasional Papers' than just a name. Because the papers were a primary point of public contact for the Centre, they would be instrumental in helping to secure scholarly authority for its faculty and students. They would also then help to establish credibility for the little-known field of cultural studies, beyond the Centre's walls. The decision to stress the periodicity ('Occasional') of these papers over their provisionality ('Working') seems to have been an outcome of these types of considerations. When the series was discontinued, in 1971, it totalled seven publications in all. The Centre report dated October 1968 notes they were 'distributed to our growing mailing list' and 'also available on general purchase' by writing to the office secretary, Felicity Reeve. 17 The same report contains an extensive list of contacts at the University of Birmingham and at host of other universities scattered throughout the United Kingdom, Europe, and North America, which, presumably, comprised the bulk of the mailing list.18 While this reveals little about the actual uptake of the material, it does provide a rough indication of the extent to which it may have travelled.

(UN)FINISHED PRODUCTS

While the publication of Powell's 'Possibilities for Local Radio' marked a significant development in Cultural Studies in Britain, it was already apparent to Hoggart and his colleagues that the Occasional Papers were a necessary but insufficient vehicle for promoting the Centre and its work. Hence the claim, appearing in the second report (October 1965), that 'there is an

13. CCCS, First Report, op. cit., p18.

14. Stuart Hall and Richard Hoggart, 'Introduction' to Alan Shuttleworth, Two Working Papers in Cultural Studies, Birmingham, Centre for Contemporary Cultural Studies, 1966, np.

15. CCCS, Fourth Report, 1966-1967, Birmingham, Centre for Contemporary Cultural Studies, Birmingham University, January 1968, p38; Shuttleworth, op. cit., np.

16. It should be noted that Shuttleworth's essays were published as a typescript by the Centre itself rather than being typeset and printed professionally.

17. CCCS, Fifth Report, 1968-1969, Birmingham, Centre for Contemporary Cultural Studies, Birmingham University, October 1969, p22.

18. Ibid., pp23-4.

19. CCCS, Second Report, Birmingham, Centre for Contemporary Cultural Studies, Birmingham University, October 1965, p21. urgent need for a regular journal devoted to the study of contemporary cultural problems'. The report says little beyond this, however, other than to note the indeterminacy of the audience and a prohibitive lack of finances. ¹⁹ The subsequent report (November 1966) goes into greater detail about the proposed publication and the Centre's plans for it:

We are now in need of a regular journal, devoted to cultural studies, in which research work can be published regularly, the critical books reviewed and new ideas put into the common pool. We could carry such a publication ourselves, especially if we were able to draw on other people working in much the same field, who are anxious to be in closer discussion with us and for whom no publication outlet at present exists. We have published one Working Paper [i.e., Occasional Paper], and two others are in preparation: but a journal would ease the pressure a good deal, and provide a stimulus to further research. Without such a journal the field lacks definition, contributions tend to be haphazard and the flow of work spasmodic.²⁰

20. CCCS, *Third Report*, *1965-66*, op. cit., p33.

This passage underscores just how important the Centre's leadership imagined this publication would be and, indeed, how different they considered it from the Occasional Papers. Whereas the latter were conceived of as 'either short studies of some cultural problem, or a contribution to a current matter under discussion in the cultural field', the former would be endowed with loftier goals.²¹ It would define cultural studies; raise awareness about new research and regularise its release; and involve scholars from outside the Centre.

21. CCCS, Second Report, op. cit., p18.

The final goal was arguably the most important. It pointed to an impending shift in the sociality of cultural studies and its publications. The Occasional Papers were primarily broadcast texts. The emanated (appropriately enough) from the Centre and diffused into the world. This is not to suggest the flow of communication was strictly one-way, although the nature of the series was such that its main purpose was to get the word out about the Centre, its people and their research.²² The proposed journal would have a different orientation. It would continue the job of getting the word out, yet it would also be tasked with bringing the word in given its openness to the research of scholars unaffiliated with the Centre. Thus it promised to transform Birmingham from a broadcast centre into a hub for cultural studies, at least where publication was concerned. Moreover, the journal would in principle align better than the Occasional Papers with the traffic of people into and out of the Centre, which had already become a crossroads for visiting scholars including Daniel Boorstin, Alexander Cockburn, Dell Hymes, Fredric Jameson, Leo Lowenthal, David Riesman, E.P. Thompson, and Raymond Williams, among numerous others.²³

22. CCCS, *Third Report*, *1965-66*, op. cit., p26.

Despite the fact that the journal was fairly well conceptualised by 1966,

23. CCCS, Seventh Report, 1972-1974, Birmingham, Centre for Contemporary Cultural Studies, Birmingham University, January 1974, p13. it would be another five years before it materialised in print. Released in the summer of 1971, the first issue of *Working Papers in Cultural Studies* was a major achievement for the Centre. It also posed something of a risk, according to the report dated December 1971: 'The journal represents a considerable investment by the Centre both intellectually and financially so it is important this attempt to make more public the Centre's work should succeed'.²⁴ The appearance of the journal (particularly in its name) marked a kind of homecoming, too - specifically, to the language of process Hoggart and his colleagues had embraced and then quickly abandoned with regard to the Occasional Papers. Like the return of the repressed, 'Working' was back and more prevalent than ever, now as the lead term of the Centre's flagship publication.

Writing in 2008, Hall observed that Working Papers in Cultural Studies 'was launched in this period to raise the profile of the Centre's work (the tentative character of whose title tells its own story)'.25 But to what extent is it fair to say the journal's title 'tells its own story?' Indeed, just as the meaning of 'Working' was hardly straightforward within the context of the Occasional Papers, so it was (and is) within the context of the journal. If nothing else, it seemed to connote more than just 'tentative'. Consider what the report dated December 1971 had to say about the Centre's scholarly endeavours: 'We ... regard our editorial and publicity work on finished products, and our production of a journal, as integral to our attempt to establish a radical and disciplined approach to the study of social and cultural communication'. The report then went on to indicate that Working Papers 'is intended as an academic publication'.26 As such it would address a scholarly audience, primarily, and conform to many if not most of the conventions of scholarly writing. The subsequent report, dated January 1974, added that the journal would 'print work of a high quality'. 27 'Disciplined'. 'Academic'. 'High quality'. These are probably not the first adjectives that come to mind for a journal whose express purpose was to present works-in-progress (at least, not today) - and yet, there they are.

It is possible to make sense of this tension by stressing the bureaucratic function of the Centre reports. Convincing the Birmingham administration of the integrity of the journal, and of the unit more broadly, must have been on the minds of Hoggart and his colleagues. During its first five years the Centre had been self-sustaining, propped up financially by grants from Penguin Books, Chatto & Windus, the Observer Trust, and an undisclosed 'well-wisher'.²⁸ When the Centre finally started receiving direct financial support from the University, in 1969, the change surely would have heightened its sense of accountability to the institution and thus its need to tout the seriousness of its scholarly initiatives.

While there is probably merit to this story, it risks explaining away the tension at the heart of *Working Papers* more than actually explaining it. It may be that the journal managed to strike a unique balance between rigour

24. CCCS, Sixth Report, 1969-1971, Birmingham, Centre for Contemporary Cultural Studies, Birmingham University, December 1971, p17.

25. Stuart Hall, 'Preface', Op. cit., ix.

26. CCCS, Sixth Report, 1969-1971, op. cit., pp16-7.

27. CCCS, Seventh Report, 1972-1974, Op. cit., p13.

28. CCCS, First Report, op. cit., p13; Ted Striphas, 'Banality, Book Publishing and the Everyday Life of Cultural Studies', International Journal of Cultural Studies, Vol. 5, No. 4 (July 2002): 438-60, http://doi.org/ bncg6b 29. Stuart Hall, personal communication.

30. Paul Buhle, 'Working Papers in Cultural Studies', Radical History Review, 19 (Winter 1978-79): 161-3.

31. Ibid., p163.

39 Rosalind Coward, 'Class, "Culture" and the Social Formation', Screen 18, 1 (Spring 1977): 75-106; Iain Chambers, et al, 'Debate: Marxism and Culture', Screen 18, 4 (Winter 1977): 109-19; Rosalind Coward, 'Debate: Response by Rosalind Coward', Screen 18, 4 (Winter 1977):120-2.

33. Chambers et al, op. cit., p109.

34. Ibid.

35. CCCS, Report, 1975-1976, Birmingham, Centre for Contemporary Cultural Studies, Birmingham University, 1976, p7.

36. Working Papers is listed as part of a reading list on 'Popular Culture and Mass Media Studies' prepared by the BFI Education Department published in Screen, 11, 4-5 (1970): 148-71.

37. Terry Bolas, Screen Education: From Film Appreciation to Media Studies, Bristol, Intellect, 2009, pp266-8.

38. 'Noticeboard', History Workshop Journal, 2, 1 (1976): and provisionality, one that proved highly productive for the Centre and its interlocutors. As Hall has recently put it:

We did not think of these as necessarily finished products. We wanted to publicize the work we were doing to any other intellectual communities that might have been interested (without knowing who they were necessarily) and to a wider public. And we wanted to know who was interested, and to converse with them.29

Provisionality was not a liability, but a way to start a conversation. Paul Buhle affirmed as much in 1978, in a review of Working Papers published in the American journal Radical History Review: 'Sometimes the essays in the journal appear to have been snatched out of that atmosphere too nimbly, without the gun-and-camera guide that readers (particularly non-Britishers) could use to understand the entire intellectual and political context of the study'.30 Buhle quickly reversed course, however, observing that the journal's contributors were working through 'matters of great importance' and achieving promising results. The material, wrote Buhle, 'is head and shoulders above what American historians, sociologists and journalists have given us on similar subjects'.31

From around the same period, a similar presentation of the provisional nature of the Working Papers can be seen in an essay published in Screen in late 1977 by the members of the Centre's working group on subcultures, in response to an article by Rosalind Coward from earlier that year.³² The bulk of the response is taken up with a repudiation of Coward's description of 'a single, monolithic "Centre line" on ideology and class.³³ While taking up the arguments raised by Coward, the response also argues for a different way of approaching the texts. Rather than fixing and identifying the positions outlined in the essays with a particular school of thought, the authors posit that Working Papers should be treated as 'ongoing work' and 'a provisional sketch'.34

At its height Working Papers had an impressive initial print run of 2500 copies per issue, with a frequency of two issues per year. And according to the Centre report for the years 1975-1976, the eight issues of the journal thus far produced had all sold out 'despite occasional re-printings'. While it is clear that Working Papers (and, by extension, the Centre) was gaining an audience, it is difficult to trace with clarity the readership for the initial publications. There are, however, some traces of the paths along which it travelled.³⁵ The exchange published in Screen was the product of a longer relationship between the circle of researchers associated with the two journals that dated back at least to the early 1970s. ³⁶ Elsewhere, Hall has commented on the relationship between the work going on at the Centre and the importance of the Screen publication in the 1970s.³⁷ In 1976, History Workshop Journal listed Working Papers as one of the 'journals to notice'. 38 However, the Centre's publications

were not always judged to be successful when it came to speaking to a broader public. An article examining the relationship between educational reform and working class culture published in 1974 laments that, in spite of the relevance of the work being done at Birmingham to the diverse community engaged with these issues, its impact has been limited: 'much of this work is conducted and reported within the very closed world of research papers, small-run poorly distributed pamphlets and inaccessible academic publications'.³⁹

Regardless of the ways in which the language of process conflicted with the practice of preparing texts for an increasingly visible publication, it is worth recognising the extent to which the provisional nature of the journal was foregrounded in relationship to the nature of debate such a publication might engender. What emerged was a way of talking about publication that never fully settled the relationship between the process of research, the formalisation of writing and the circulation of particular texts. This way of talking about publication also challenged the relationship between the practice of research and the resulting textual object by drawing attention to the ways in which the physical circulation of the texts might also produce particular kinds of social relations. While such an attitude towards publication sometimes stood in tension with the fixed nature of the texts themselves, it is important to see it as part of the ongoing institutional and intellectual displacements taking shape as part of the project of cultural studies.

39. Ken Worpole, 'The School and the Community: Towards a Common Culture', *The Urban Review* 7, 2, (1974):

RAPID COMMUNICATION

The history of the *Working Papers* presented so far can be seen to develop in two, seemingly contradictory directions. First, there was a growing trend towards the formalisation of publication - the gradual move from generic occasional papers to the nominal 'Occasional Papers', and on to the appearance of *Working Papers in Cultural Studies*. Second, there was an ongoing commitment to acknowledging the provisionality, partiality and dialogic nature of the project of cultural studies as captured in these publications. However, the concept of 'Working' was still more complicated than simply suggesting that the published material would continue to develop, since it was operationalized within a context including publications other than just *Working Papers in Cultural Studies*.

The journal's launch coincided with the cancellation of the existing series of Occasional Papers. The former's structured publication schedule meant that new research in cultural studies would henceforth be appearing more predictably. But it also meant that the Centre was less equipped than it had been to respond to current events, for its scholarly output was now subject to the dictates of an artificially imposed time-frame. Out of this was born a new series of Stencilled Occasional Papers, launched in 1974. The Centre report for 1975-1976 describes them as 'a means of rapid communication of Centre work to interested people and groups'. In contrast to the previous series of

40. CCCS, *Report*, 1975-1976, op. cit., p35.

41. Ibid., pp35-6; We are also grateful to Lawrence Grossberg (personal communication) for the information about the mimeograph machine.

42. John Clarke, personal communication, February 28, 2012.

43. CCCS, *Report*, 1975-1976, Op. cit., p35.

44. John Clarke, personal communication, op. cit.

45. CCCS, Ninth Report, 1977-8, Birmingham, Centre for Contemporary Cultural Studies, Birmingham University, January 1978, pp2, 25.

46. CCCS, Ninth Report, 1977-8, op. cit; Centre for Contemporary Cultural Studies, Twelfth Report, 1980-81, Birmingham, Centre for Contemporary Cultural Studies, Birmingham University, January 1981.

47. CCCS, *Ninth Report*, *1977-8*, op. cit., p24.

Occasional Papers, which had been professionally printed and bound in slick, glossy covers, the Stencilled Occasional Papers were 'produced as cheaply as possible, stapled without binding or card covers'.⁴⁰ They were copied inhouse on a Gestetner mimeograph machine and sold for between fifteen and fifty-five pence, postpaid (except for overseas orders, which required an additional shipping charge).⁴¹ They were also passed along informally among faculty, students and friends of the Centre.⁴²

The look of the Stencilled Occasional Papers both embodied and conveyed the speed of their production. And in this respect they shed additional light on how the concept of 'Working' was to be understood with respect to the journal. The material form of these essays seemed to suggest they were even more provisional than the articles appearing in *Working Papers in Cultural Studies*, which, though rough around the edges itself, exuded relatively higher production values. That is to say, the Stencilled Occasional Papers were evidently more 'Working' than the *Working Papers*. The Centre report for 1975-1976 adds to this, noting the provisionality of their content as well. The Stencilled Occasional Papers 'commonly consist of worked-up versions of papers given by Centre members at conferences or to internal seminars. Some are specially commissioned by the Centre; others are the product of theses, projects or collective work in sub-groups'. Or as John Clarke, who as a graduate student was attached to the Centre from 1972-1980, put it: 'they were things we wrote about two-thirds of the way through thinking about things'.

The Centre produced fifty-four Stencilled Occasional Papers by the end of 1978 and added a few more titles to the list in subsequent years. At least some appear to have enjoyed significant uptake beyond the Centre, particularly within the realm of tertiary education.⁴⁵ Their circulation flowed from their timeliness and strength of intellectual contribution, no doubt, yet it seems reasonable to surmise that it also had something to do with the minimalism of their *matériel* and hence the ease with which they could be shared. Moreover, their 'legs' may have had something to do with the way in which they were packaged in the Centre reports. The Stenciled Occasional Papers are grouped into series - 'Media Series', 'Sub- and Popular Culture Series', 'Women Series', etc. - in the reports dated January 1978 and January 1981, suggesting an ease of fit with courses on these and other relevant topics.⁴⁶

FROM ARTISANSHIP TO MODERN PRODUCTION

It was around this time (the late-1970s) that the Centre's whole publishing apparatus experienced a major metamorphosis. In 1976 the Centre embarked on what it called a 'new' series of pamphlets, whose look and feel resembled the first series of Occasional Papers. In contrast to the Occasional Papers, the pamphlets would be 'written in a less academic style with a wider audience in mind, and with a more topical focus'. ⁴⁷ An element of professionalism complemented the ethos of public engagement. Orders for the pamphlets

would be fulfilled not by the Centre, as had been the custom for most of its other serials, but by the London-based Publications Distribution Cooperative, or PDC. But to call the pamphlet series 'new' was not entirely accurate. The Centre had been producing pamphlets throughout the 1970s, albeit sporadically. In fact *Policing the Crisis* had begun life as a pamphlet called *Twenty Years*, released in 1973 (price: 15p).⁴⁸ Thus the 'new' series seems to have represented an attempt to formalise what, up until that point, had been a more or less informal type of publication. It proved to be the Centre's least developed publishing venture for reasons that remain unclear. Despite the tone of optimism surrounding the pamphlets in the Centre reports from the late-1970s, only two were ever produced: one, by Roger Grimshaw and Paul Lester, on *The Meaning of the Loch Ness Monster* (price: 60p); and the other, by the Women in Fascism Study Group, entitled *Breeders for Race and Nation - Women and Fascism in Britain Today* (price: 50p).⁴⁹

As Working Papers in Cultural Studies gained visibility throughout the 1970s, its structure and status underwent a transformation as well. The covenant from Penguin Press, which had underwritten the Centre financially since its inception, finally lapsed in 1976. That translated into a loss of £2400 per year, or about £16,000 in today's terms. While that might not seem like a significant loss, the impact must have been felt given the complaint about 'slender financial resources' appearing in the report dated January 1978. Indeed it was becoming less tenable, economically, for the Centre to continue producing Working Papers without outside assistance. In 1977 the Centre inked a deal with PDC to start distributing the journal, which seems to have reduced the pressure somewhat.

Working Papers helped to raise the Centre's profile, but along the way it became something of an albatross. The daily grind of managing, editing, typesetting and promoting a successful journal was also taking a toll, consuming precious time that faculty and students might otherwise have devoted to research. As was noted in the report from 1978, '[O]utside support [to aid with the publication of the journal] will release our own previously extensive labours in journal production for other work, and other publications'. 51 Hall, Director since Hoggart's resignation in 1973, and his colleagues thus decided to reduce the frequency of the journal to a single issue per year, starting in 1976.52 When that failed to make Working Papers more manageable, they decided on a more radical plan. Issue ten (spring 1977) would be the final one appearing under the Centre's imprimatur. Hutchinson, which had produced the reprint of the acclaimed issue 'Resistance Through Rituals' (number seven/eight, 1975), picked up the publication thereafter. It would henceforth be published annually as series of Centre books, beginning with what would have been issue eleven of Working Papers: 'Women Take Issue: Aspects of Women's Subordination'. The latter, according to the report dated December 1978, represented a definitive shift 'from artisan-journal to modern production methods' and perhaps, then, a sense in which the series 48. CCCS, Seventh Report, 1972-1974, op. cit., pp15-6.

49. CCCS, Eleventh Report, 1979-80, Birmingham, Centre for Contemporary Cultural Studies, Birmingham University, November 1979, p26.

50. CCCS, *Ninth Report*, *1977-8*, op. cit., p22.

51. CCCS, *Ninth Report*, *1977-8*, op. cit., p3.

52. CCCS, Supplement to Eighth Report, Birmingham, Centre for Contemporary Cultural Studies, Birmingham University, 1977, p9. 53. CCCS, *Eleventh Report*, *1979-80*, op. cit., p4.

54. Pricing was as follows: 70p/issue, or \$2.25/issue USA (£7.75/\$12.00 in today's terms); a one-year, two issue subscription cost £1.20, or \$4.00 USA (£13.50/\$21.25 in today's terms). CCCS, Sixth Report, 1969-1971, op. cit., p18.

55. CCCS, Seventh Report, 1972-1974, op. cit., p23.

56. CCCS, *Report*, 1975-1976, op. cit., p35b.

57. CCCS, *Ninth Report*, *1977-8*, op. cit., p35.

58. CCCS, *Ninth Report*, *1977-8*, op. cit., p5.

had become even less 'Working' than it had been previously.⁵³

There is a final type of publication, one rarely acknowledged yet deeply important, by which Birmingham also became known to the world: the Centre reports. The first five, issued between 1964 and 1968, read as if they were first and foremost bureaucratic instruments intended for University administrators. They consisted largely of internal accounting - of courses, students, visitors, projects, publications, finances, facilities, and goals - framed more often than not by remarks about the Centre's efforts to define cultural studies. The tone of these documents shifted with the sixth report, dated December 1971. It opened with the most thoroughgoing description of the development of cultural studies, and of the Centre, to date. Maybe even more significant, though, was the first appearance of pricing information for its publications, specifically for the newly-launched Working Papers in Cultural Studies. 54 The subsequent report, dated January 1974, ended with a full-page ad for the journal, including pricing information for individuals, libraries, and bookshops.⁵⁵ The eighth report, covering the years 1975-1976, contained a price list for the Stencilled Occasional Papers.⁵⁶ The ninth report, dated January 1978, included a similar list plus an order form.⁵⁷

Together the advertisements, order forms and price lists suggest a shift in the mode of address of the Centre reports. They continued to speak to university administrators, to be sure, but throughout the 1970s they also came to address audiences beyond Birmingham. If nothing else, the reports were positioned as marketing vehicles for the Centre's other - more recognisably scholarly - publications. By the same token, the reports had their own scholarly dimension, too. Most are strewn with citations, block quotes, and other aspects of academic apparatus, especially in the opening discussions of the field of cultural studies and in the extended reflections on the intellectual ambitions of the Centre's graduate seminars. In the interval between the 'big four' and the appearance of *Working Papers in Cultural Studies*, the Centre reports filled a major void in terms of defining the field publicly, and indeed regularly.

Their reach was impressive, moreover, at least in the years leading up to Hall's resignation from the Centre in 1979. The report dated January 1978 puts its circulation at around 3000 copies, distributed to 'all manner and shade of inquirers'. ⁵⁸ The unusual qualifier at the end suggests the mailing list exceeded the Centre's aforementioned institutional connections *and* its network of former students and faculty affiliates. To accept the status of the 'reports' at face value is thus to do them a disservice by over-emphasising their administrative role. As an archival resource, they offer fascinating glimpses into developments at the Centre both in the day-to-day and over the longer-term. In their own time they helped to lay important definitional groundwork for cultural studies and to promote the Centre's range of other publishing initiatives.

By tracing how Working Papers in Cultural Studies took shape over time and in relation to other modes of publication, our purpose is not simply to outline the development of one or more of the field's groundbreaking serials. Rather, the purpose of this journey through the archives is to highlight the variety of modes of textual production that characterised cultural studies in these years. As we have seen, it is important to recognise that a publication in cultural studies at Birmingham took shape with respect to several different modes of writing and forms of materialization, which themselves involved a variety of different temporalities, scales and institutional orientations. The transition between these was not always clear, for example the relationship between the 'administrative' writing of the Centre reports, the intermittent nature of the Occasional Papers and the increasingly professionalised structures of Working Papers as an academic journal. The work at Birmingham was not unique in this regard, however, and it is important to remember the degree to which the development of cultural studies in contexts outside of Britain was similarly mixed.⁵⁹ Indeed there are a great many stories yet to be told about the means and material of cultural studies' entextualisation.

Alongside the diversity of textual genres that characterised writing at the Birmingham Centre for Contemporary Cultural Studies, the degree to which its members' patterns of working and writing needed to be invented is worth highlighting, as is the way in which those patterns affected both the form and content of the Centre's publications. The various forms of publication must be seen as part of an ongoing struggle to develop a mode of writing that extended the exchanges and encounters of everyday life at the Centre. It is along these lines that Hoggart and Hall characterise the general purpose of Shuttleworth's 'Working Papers' in their preface to the volume. And, as we have seen, this is a theme that returned to the fore as *Working Papers* became an increasingly formal space of publication, especially when the Stencilled Occasional papers started to appear. While the extent to which the various publications were, or were not, successful in this goal remains open to debate and further historical examination. Nonetheless, texts tended to be seen as a deeply social rather than solitary objects at Birmingham.

The social nature of texts at the Centre points directly to a second key aspect when understanding the innovative nature of its writing and publishing: its commitment to the ethics of circulation. In some ways, this commitment is telegraphed boldly in every bibliography of the Centre; after all, 'Stencilled Papers' is a clear reminder of the extent to which work at the Centre relied on the existence of cheap and accessible reproduction technologies. But, beyond this, one should also bear in mind the degree to which publication as a mode of circulating multiple copies of text in production was seen as central to the 'work' of cultural studies. While the visibility brought by the *Working Papers* can be read as part of a project of institutional justification, it must also be

59. For a similarly complex history of publication in cultural studies in Australia, see 'Relations of Theory: Meaghan Morris Talks With Stephen Muecke', in D. Carter (ed), Outside the Book: Contemporary Essays on Literary Periodicals, Sydney, Local Consumption Publications, 1991, pp57-78.

60. Hoggart and Hall, 'Introduction' to Shuttleworth, op. cit.

61. For this reason, it is worth considering the relationship between the work in Birmingham and the work that emerged from another collective, *Social Text*, based in Madison, Wisconsin and later New York City.

62. Lawrence Grossberg, personal communication.

63. Ted Striphas, 'Acknowledged Goods', op. cit.

64. http://doi.org/ dzc7rt

65. CCCS, Report, 1975-1976, op. cit., p36; CCCS, Twelfth Report, 1980-81, op. cit., p2.

66. 'Relations of Theory', op. cit., p67.

67. Hall, op. cit., p12; emphasis in original. See also Gilbert B. Rodman, 'Cultural Studies is Ordinary', in M. Seidl, et al (eds), Aboul Raymond Williams, London, Routledge, 2010, p157.

seen as part of a project in which the circulation of research in progress was seen as an important - even essential - part of intellectual practice. Indeed, this is a commitment that extended beyond the publications we have been concentrating on here. As Lawrence Grossberg recalls, shortly after his arrival at the Centre in 1968, he received a paper outlining the Centre's protocols: 'one of the bold things it says is, there is one rule in the Centre. Your greatest research tool is not the library, but carbon paper. Everything should be ... typed on carbon paper'. ⁶²

With an eye to the present, the significance of this ethics of circulation has only grown in importance. The Centre's fledgling efforts to give legs to its own and others' research stand in contrast to the channels through which cultural studies gets distributed today. Dozens of highly-formalised international journals now service the field, a preponderance of them owned and operated by two for-profit companies: Taylor & Francis and Sage Publications. Both have done a great service in terms of promoting cultural studies and helping to usher the field into the digital age. However, their exorbitant subscription prices, embargoes on digital pre- and post-prints, content paywalls, costly licensing fees, and other strictures have created a situation in which cultural studies now seems to circulate less freely than it did in the era of mimeograph machines and postage stamps. 63 One telling example: a digital copy of Stuart Hall's essay 'Marx's Notes on Method: A "Reading" of the "1857 Introduction" [to the Grundrisse]', reprinted in Cultural Studies in 2003, costs about £22 on the Taylor & Francis website. 64 The same essay, published originally as a Stencilled Occasional Paper in the mid-1970s, cost between 25p and 50p postpaid from the Centre, or approximately £2.35-£4.75 in inflation-adjusted terms. 65 Clearly, there is something to be said for independent 'artisan-journals' and ad-hoc distribution networks, notwithstanding the resources it takes to make and maintain them.

But the issue here is deeper than accessibility and cost. Also at stake is the sociality of intellectual production. As Stephen Muecke put it in 1991: 'If Cultural Studies ends up only for academics or libraries because of its cost, what happens to the old indeterminate spaces where a lot of these journals emerged?'66 There is, as we have suggested, a close tie between specific forms of publication and the modes of producing for them; a change in the one is bound to affect the other, as in an ecosystem. For cultural studies this has meant a move deeper into the academy, as its publication outputs have become more recognisably 'scholarly' and tightly enmeshed in institutionalised structures of reward (e.g., grants, promotion and tenure, etc.). The move has not strictly been a loss, for it has lent the field greater intellectual credibility - but there is a trade-off. Hall once described the Birmingham Centre as 'the locus to which we [he and his colleagues] retreated' and not, as it were, the place from which their discourse about culture and politics proceeded. That happened instead in 'the dirty outside world', where scholars do not have the luxury of addressing one another exclusively.⁶⁷

The fact that Birmingham has endured as an intellectual - even mythical - touchstone for cultural studies is attributable to a complex mix of factors, among them the modes and material of its publications in the 1960s and '70s. Indeed, the Centre's success is a testament to the virtues of architecting an apparatus of 'scholarly' communication chiefly around grey literature. The history we have presented shows how grey literature is not the other of rigorous intellectual work but, in the case of cultural studies, a key condition of the success of the field. It also shows how the scholarly value (credibility, authority) of grey literature is relative and not absolute, sometimes shifting as new types of documents get introduced into an existing publishing repertoire. That Working Papers in Cultural Studies appears to have become less provisional, 'working' or grey upon the introduction of the series of Stencilled Occasional Papers bears witness to this elasticity, as does all the uncertainty about how to imagine the earlier series of Occasional (née Working) Papers from the 1960s. Moreover, the two-volume, 1100-page compendium CCCS Selected Working Papers, published in 2007 by Routledge, points to the capacity of grey literature to cross over into officialdom, especially in instances where it has stood the test of time. ⁶⁸ Finally, the history of grey literature at the Centre lends further credence to Gary Hall, Kathleen Fitzpatrick, and others' arguments about how the forms of scholarly communication today ought to be expanded to include not only monographs and peer-reviewed articles but also 'artifacts of a more unusual nature'.69 But this is also the limit of our argument, at least for the time being, given the contemporary academy's obsession with measurable outcomes, aversion to risk, and narrow understanding of how scholarly credentialing can and should occur. Indeed, the growing pressures of these modes of assessment, specifically the Research Assessment Exercises of 2001, played some role in the closure of the Centre in 2002.70

Our purpose in outlining this history is not to lament what has been lost but to provide a richer understanding of the ways in which research and publication intersected during a particularly salient 'moment' for cultural studies. This process remains ongoing, of course, occurring in a more densely packed textual ecosystem than before, when scholarly essays and books stood as dominant forms of communication. Today, printed monographs and journal essays sit alongside blogs, social networking sites, peer-to-peer file sharing services, mobile apps, virtual environments, and a host of other technologies that academics are now conscripting to their cause. But what the Birmingham Centre teaches us - and here we refer to the 'lesson' of 2002 - is that the social and institutional contexts in which scholarly texts circulate matter at least as much as the technological ones.71 While there might be a desire to have such alternative forms of scholarly production recognized as substantial contributions to scholarly discourse, such a goal runs the risk of simply furthering the kinds of managerial oversight that restrain rather than encourage intellectual community, curiosity, and debate. Instead of seeking to adapt contemporary scholarly writing so that these insurgent forms 'count',

68. Ann Gray et al (eds), CCCS Selected Working Papers, 2 Vols., New York, Routledge, 2007; see also 'Relations of Theory', op. cit., p57.

69. Gary Hall, Digitize This Book! The Politics of New Media, or Why We Need Open Access Now, Minneapolis, University of Minnesota Press, 2008, p163; see also Kathleen Fitzpatrick, Planned Obsolescence: Publishing, Technology, and the Future of the Academy, New York, NYU Press, 2011, p79.

70. Frank Webster, 'Cultural Studies and Sociology at, and After, the Closure of the Birmingham School', *Cultural Studies*, 18, 6 (2004): 848-852, http://doi.org/ff22mq

71. Fitzpatrick, op. cit., pp116, 121, 126, 192.

perhaps the project should be to develop more autonomous venues in which research can be divorced from strict demands for accountability. It is here that one might begin to interrogate the structure and modes of address in the texts themselves, rethinking not just practices of publication and the circulation of texts but the texture and tone of scholarly writing itself. What the Birmingham Centre also teaches us - and here we refer to the 'lesson' of the 1960s and '70s - is that cultural studies seems to function best when it embraces an ethics of experimentation where publication is concerned. It teaches us to approach any such experimentation with humility, moreover, knowing that it takes significant labour to produce forms of scholarly literature - grey or otherwise - that are content rich, smartly curated, and enduring.

72. Hall, 'Emergence of Cultural Studies', op. cit., p11.

When Stuart Hall says that 'cultural studies is not one thing; it has never been one thing', it seems useful in light of the foregoing to adopt as materialist a sense of the 'what' of cultural studies as possible.⁷² Indeed the field is not only many positions but also many things, not least of which are the physical forms in and through which it has found embodiment. Cultural studies is people, places, words, and ideas, but it is also, and in no small part, textual matter - matter, we believe, that offers perspective on what cultural studies was or is, and where it should be going.

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LITERARY DIGITAL HUMANITIES AND THE POLITICS OF THE INFINITE

Sas Mays

Abstract In the context of relationships between traditional and digital forms of memory and dissemination, this essay discusses two key positions in the digital humanities. The aestheticist position is broadly defined by the extension of literary values into the digital milieu, as it is articulated in the work of Johanna Drucker, N. Katherine Hayles, and Jerome McGann. The populist position rather emphasises engagement with contemporary social media, as it is represented by the work of Pierre Lévy and Henry Jenkins. This comparison is designed to analyse a problematic parity between the two positions that is couched in their conception of archives and texts as being infinite; an infinitude that is political in the sense that engagement with it may facilitate or prohibit subjective agency and collective knowledge. Yet, through deconstruction, this analysis is designed to propose an alternate conception that negotiates the difficult relation between the finite and the infinite aspects of technological memory accumulation, and that poses the possibility of an alternate politics that problematically links the poles of engagement and disengagement with such accumulation.

Keywords archive, deconstruction, Derrida, digital humanities, Drucker, Hayles, Jenkins, McGann

INTRODUCTORY REMARKS: QUANTITATIVE AND QUALITATIVE INFINITES

As Johanna Drucker aptly summarises, digital humanities broadly thought concerns the 'migration of our cultural legacy into digital form and the creation of new, born-digital materials and tools'. This field of study then necessarily concerns differences between mnemotechnical forms - technologies of cultural memory and dissemination. The mnemotechnical shift indicated here is thus not only from the codex form to digital media of inscription, but a shift from the library to the database. These are, of course, institutions of the material and structural accumulation of knowledge - that is: archival forms. In the digital humanities generally speaking, we might polarise two forms of activity in relation to such archival accumulations: the functional, and the interpretive. While both are linked in their practices, the former prioritises technical methods of accreting and structuring information; the latter prioritises engagement with the epistemological, cultural and political meaning of such accumulations. Nevertheless, both aspects are

1. Johanna Drucker, SpecLab: Digital Aesthetics and Projects in Speculative Computing, Chicago and London, University of Chicago Press, 2009, pxii, henceforth SL in the text.

necessarily entwined, and at this intersection, this article is concerned with two kinds of discourse.

In the main part of this essay, the understanding of mnemotechnics pertains to a mode of analysis that might be designated as *aestheticist*. Broadly put, the aestheticist approach here is characterized by a specialist attention to traditional and digital literary texts, bibliographic and fictional, and by an affirmation of individual interpretive agency. It is also explicitly wary of the commodification, capitalisation, and instrumentalisation of knowledge. In the first main section and the conclusion to the essay, this literary digital humanities discourse will be compared to another that is defined by attention to popular media use in convergence culture studies, and by an affirmation of the creation of collective, dispersed knowledges. This involves an engagement with capitalized systems of information and communication, in order to assert democratic principles. This mode might then be referred to as *populist*. Each discourse thus refers to a different ethos - that of an extension of literary values in the digital world; that of an immersion in capitalised forms of online engagement.

Yet I want to suggest that despite their institutional, methodological, and cultural divergences, both these discourses are linked by a problematic parity. This association is couched in their shared conceptualization of texts and their accumulation, as being, in various ways, from the ideational to the material, *infinite*. Simply put, the representation of traditional or digital mnemotechnics in both discourses tends towards the rhetoric of infinity and its cognates - the indefinite, the incommensurable, the endless, for example. There are a number of permutations and valorisations in this rhetoric that should be abstractly schematised here prior to their more concrete articulation in this article.

Traditional or digital texts may be thought of, qualitatively speaking, as being endless in their interpretive possibilities. Likewise, the quantitative accumulations of written texts, or digital files, may be thought of as an endless extension. Such infinitude may be positively or negatively valorised. The infinity of the text and the archive may appear as the positive possibility of subjective agency, and ongoing cultural production considered as the generation of multiple meanings. On the other hand, it can be negatively valorised as a multiplicity that defers determinate knowledge. Clearly, this opposition between the positive and negative valorisations of determinacy and indeterminacy could be thought of in terms of the split between some humanities discourses and scientific positivism.

But we must also recognize that the affirmation of the infinity of texts or archives, qualitative or quantitative, must be understood in complex relation to ideas of finitude. In order to indicate more concretely how such complexity concerns us here, we should refer to *Writing Machines* (2002), where N. Katherine Hayles explicitly engages with the issue of such infinity in terms of discursive conflicts between science and art:

As practiced in the sciences, theory distils from experience a few underlying regularities, thus reducing a seemingly infinite number of particularities into a parsimonious few. The more instances that can be reduced, the more powerful the theory is meant to be [...]. Reduction is good, proliferation is bad.²

In literary study, conversely, such a programmatic function of interpretation 'represses the text's power to generate new meanings and so to renew itself'. Hence, 'reduction is bad, proliferation good' (WM, p104). Hayles' understanding of this difference is that science can colonize new phenomena in order to maintain its institutional persistence - in other words, it extends itself indefinitely by advancing beyond the ground it has seemingly regularized. Literature conversely has 'an established canon of a finite number of texts', such that their 'inexhaustibility' has a positive value: 'Rather than trying to eradicate noise', as in scientific practice, 'literary scholars have a vested interest in preserving it' (WM, p105). Thus, the mnemotechnical archive of canonical literature is materially finite in a quantitative sense, yet qualitatively and ideationally infinite. The economic dimension implicit in Hayles' description makes this finitude, this scarcity, the material basis of critical interpretation, a precious commodity. But we should also recognize here that, despite the quantitative finitude of the literary canons invoked here, the purpose of affirming the qualitative indeterminacy of its texts must necessarily be linked to the accumulation of their interpretation: the qualitative infinity of the quantitatively finite canon gestures toward the quantitative accretion of (no doubt, ultimately, qualitatively indeterminate) critical texts - an endless, if dispersed and fragmented archive.

However, the affirmation of endlessness as represented here by the literary is not a universal feature of the digital humanities. As Hayles discusses, in How We Think: Digital Media and Contemporary Technogenesis, 'poststructuralist critique', with its 'hermeneutic of suspicion' toward capitalism, can be opposed by elements within the digital humanities that desire research development to be facilitated through commercial and corporate support. Indicative of an antipathy toward post-structuralism in this context, Cathy N. Davidson and David Theo Goldberg are quoted as arguing: 'What part of our inability to command attention is rooted in humanists' touting of critique rather than contribution as the primary outcome of the work? ... Is it not time we critiqued the mantra of critique?'.3 'Contribution', and what is referred to as 'productive theory', here suggests that, inversely, post-structuralism is merely negative, a discourse that stymies, or unmakes. In extrapolation, this suggests, through Hayles' association of poststructuralism with the 'close scrutiny of individual texts', that poststructuralism would only defer 'contribution' through an endless proliferation of detailed negations; a proliferation that would also logically gesture toward an endless archival accumulation.4 Yet Hayles' association of poststructuralism and close reading is problematic where deconstruction

2. N. Katherine Hayles, Writing Machines, Cambridge and London, the MIT Press, 2002, p104, henceforth WM in the text.

- 3. N. Katherine Hayles, How We Think: Digital Media and Contemporary Technogenesis, Chicago and London, University of Chicago Press, 2012, p41, henceforth HWT in the text.
- 4. In terms of institutional politics, collaboration becomes a necessary response to the glut of digital information in Hayles' pertinent and incisive discussion of relations and differences between two digital humanities institutions in regard of their various relations to corporate support. See Hayles, How We Think, op. cit., p34, p37, pp53-4.

is concerned. It perhaps renders deconstruction too easily amenable to traditional conventions of the reading practices and institutions of literary study. As I will come to argue in this essay, such an association misses the necessary differentiality of deconstruction, and, in this context, its relation to one of close reading's binary opposites: not reading *at all*.

Specifically, then, this essay concerns the institutional and political implications of the ways in which digital humanities discourses conceptualise and valorise quantitative accumulations of knowledge and qualitative understandings of texts within wider understandings of epistemological, cultural, and political value. In order to approach these issues, I will begin by providing an articulation of the finitudes and infinitudes of the text and the archive in the thought of Pierre Lévy. Using key concepts and structures from Lévy's work, the main parts of this essay will discuss positions in the digital humanities that are defined by literary-theoretical traditions focused on the construction and analysis of metatextual digital archives. Much of this discussion will concern what I take here to be the canonical work in this context - that of Jerome McGann, Johanna Drucker, and N. Katherine Hayles. This discussion is divided into four sections, which concern: the issue of the quantitative finitude and infinitude of the archive, traditional or digital; the qualitatively infinite ambiguity of the literary text and its relation to the role of human thought; the relation of the digital and the human conceived in the idea of autopoietic systems; and the status of the database in terms of its closure or finality, and its relation to subjective agency. The concluding section of the essay will compare the literary conceptions of these issues to the convergence culture analyses of Henry Jenkins, in comparison to Ted Striphas and Mark Fisher, in terms of popular forms of engagement with online memory and communication. In order to polemically suggest an alternative to the shared problems of such theories, and practices, this essay will finally turn to a deconstructive interpretation of the notion of the archive, and the necessity of a complex relation to it that requires not only its close reading and attention, but a specific and problematic mode of its obviation and forgetting.

CAPITALISED ARCHIVES AND KNOWLEDGE ECONOMIES

In order to establish some parameters for understanding the epistemological, cultural, and political ramifications of the text and the archive as mnemotechnical forms, an extended example should here suffice: Pierre Lévy's Collective Intelligence: Mankind's Emerging World in Cyberspace. This book finds its place here in part by being the theoretical background to Henry Jenkins' Convergence Culture: Where Old and New Media Collide, which I will come to discuss toward the end of this essay. Collective Intelligence finds part of its own basis in the work of Humberto Maturana and Francisco Varela, who are also referents for McGann and Drucker, and in Bruno Latour, who

is a referent for Hayles. As a work emerging from continental thought, it also finds its place here because it is structured by a traditional philosophical conception of the accumulation of material memory, despite its new ageist techno-politics. This conception will provide a schema for understanding the thought of the digital archive in the literary digital humanities discourses analysed in this essay.

In Collective Intelligence, Lévy states that 'conventional writing is by nature a system of static and discontinuous traces', 'an inert body, fragmented, dispersed, ever growing'. Thus, while writing is limited by its discontinuity, it nevertheless continues to accumulate problematically as such. Interpretation of its inscriptions is an act of mind 'attempting to coax the inert body of the letter into graceful motion', the 'evocation of an author's breath in the presence of dead signs'. In terms that should inevitably incite specific reference to Lacan, as much as the idealism of so much of Western philosophy, 'living spirit' is here opposed to 'the dead letter'. ⁵ This antipathy toward written memory is articulated at an archival level: in his defence of a mobile 'nomadology' as against the territorializing strategies of the state, Lévy describes individuals' relation to the earth as one determined by the records of land survey - the 'register of orthodoxy', the 'great book of civil government', the 'tax roll'. Stifling territoriality is thus intimately bound up with the material accumulation of bureaucratic, administrative archival records (CI, p152, p160).6

We might contextualise this antipathy toward the written archive and mark the possibility of its transcendence through electronic media by noting Lévy's description of four successive epistemological spaces: 'earth', 'territory', 'commodity space', and 'knowledge space'. In the first, 'The substrate of knowledge, the encyclopedia of the earth, is the earth itself. But it is our physical bodies [...] our memory and repeated actions that bear the world's knowledge. On earth, when an old man dies, a library goes up in flames' (*CI*, p209). In the second space, this organic encyclopaedia is displaced by 'the Book' - 'the Bible, the Koran, sacred texts, the classics, Confucius, Aristotle' - 'the infinitely interpretable book or utterance that contains all, explains all, can interpret all' (*CI*, p211). Such desire for power and totality finds its development in commodity space, but with paradoxical effect. For Lévy, the French Enlightenment 'marks the end of an era in which a single human being was able to comprehend the totality of knowledge'. It also marks the end of systematic epistemological order:

Diderot and d'Alembert have now abandoned the architectonic diagram, the well-ordered hierarchy, since the *Encyclopédie* is now arranged in alphabetical disorder. A hypertext, organized according to its network of internal links. The encyclopaedic library pushes the Book aside. And the library continues to expand, overflow, attempts to find its way through file cards and indexes. [...] Soon, scientific journals will grow in number,

5. Pierre Lévy, Collective Intelligence: Mankind's Emerging World in Cyberspace, Robert Bononno (trans), Cambridge, Massachusetts, Perseus Books, 1997, pp109-10, henceforth CI in the text; see also Jacques Lacan, 'The Insistence of the Letter in the Unconscious, or Reason Since Freud', 1957.

^{6.} This antipathy toward the archival and administrative functions of the state and the affirmation of the nomadic is clearly contiguous with Deleuze and Guattari's A Thousand Plateaus, 1980.

drowning us in seas of articles, which will in turn supply innumerable databanks (CI, p213).

This image we might refer to as the archival sublime, specifying that as such it relates to what Burke describes as the 'artificial infinite', what Kant refers to as the 'mathematical sublime', and what Hegel refers to as the 'spurious infinity' of the ad infinitum - an endless extension without closure or resolution. The 'bad' sublime is, in this endlessness, distinct from the transcendental force of the sublime proper - Kant's dynamical sublime, for example; and we should also think here of Hegel's image of the development of absolute knowledge.⁷ Yet the kind of excessive accumulation indicated by Lévy swamps the possibility of determinate meaning, deferring it in an endless linear extension. Indeed such linearity defines the encyclopedia of the commodity space for Lévy: it connotes only an 'operation of indefinite referral' (CI, p215). Against the traditional, codexical form of the encyclopaedia and its repository, the library, Lévy posits the electronic 'cosmopedia' of the fourth kind of epistemological space - knowledge space - a shared, dehierarchised, dispersed repository of living human knowledge. It is technologically facilitated, but not determined: 'For the virtual world is no more than a substrate for cognitive, social, and affective processes that take place among actual individuals' (CI, p216, p112).8 Thus, while electronic media transcend traditional forms of inscription, they are still secondary in comparison to human thought and action.

The salient points of the idea of the cosmopedia for this essay should be marked here in a gesture of summarisation. It is a multi-platform, multimedia assemblage which, by reducing the importance of traditional writing in favour of the visual, allows for 'a new kind of simplicity' - that of 'implication'. Thus, for Lévy, 'It is through the process of implication that we filter the large numbers typical of the commodity space. It is through the simplicity of our immersion that we escape its complexity, its labyrinthine networks' (CI, pp218-9). Collective Intelligence thus claims technological communication as an escape from commodity space, and its negatively infinite accumulation of written archives, and an entry into the 'indefinite variety of collective intellects' (p222). The collective intellect is, for Lévy, 'its own formal cause' - 'it is born from the will of its members and not from some outside impulse' - a 'creative circularity' that 'is inherent in all autonomic or autopoietic production' (CI, p114). We should note here that this knowledge does not oppose capital, which, Lévy claims, is 'eternal' (CI, pp136-7). Rather, towards a 'generalized liberalism', Lévy aims to escape mere commodification through engagement with the very forms of capitalist techno-communication (CI, p34, p234). Hence, in terms of politics, Lévy argues that 'the canonical form of politics in the knowledge space is a kind of direct, computer-assisted democracy no longer based on the representation of statistical majorities but on the selforganization of intelligent collectives, in which minorities have an opportunity to experiment and take initiatives' (CI, p229).

7. I discuss the figure of the archival sublime more fully in terms of the history of philosophy in 'Consigning Badiou to the Past: the Encyclopaedia and Philosophy's Gendered Relation to the Legal Archive', Cultural Politics 5, 1 (2009).

8. This affirmation of the neutrality of the substrate could be usefully questioned through Derrida's discussion of the paper support in 'Paper or Me, You Know ... (New Speculations on a Luxury of the Poor)' [1997], in Paper Machine, 2001, Rachel Bowlby (trans), Stanford, Stanford University Press, 2005, pp53-4. Here Derrida links the idea of the historical retreat of the dominance of paper-based technologies to the idea of the retreat of the substrate behind the inscriptive mark. In this sense, then, and like the discussion of the khora as the original surface of inscription in Dissemination, 1972, the substrate is not entirely neutral - indeed, it may be resistant.

Collective Intelligence thus indicates a certain hierarchical organization in which technological forms of memory and accumulation are subordinate to various conceptions of 'life', movement, and circulation. This hierarchisation involves the conceptualization of the written archive as a site of endless accumulation opposed to the positive infinitude of human thought and praxis, as facilitated by engagement in digital communication. The following section of this essay, then, specifically negotiates this antipathy toward the material accumulation of written texts, and the prioritization of digital forms of memory and communication. As we will see through this discussion, the digital archive, as conceived in the aestheticist discourses of the literary digital humanities, pertains to a greater complexity and difficulty that significantly problematises the epistemological and political claims made by Lévy. Yet what follows will also indicate the proximity of literary digital humanities to the opposition between the encyclopaedia and the cosmopedia, to the idea of the mnemotechnical substrate, and to the idea of the autopoietic.

QUANTITATIVE ISSUES: LIBRARIES AND DATABASES IN THE LITERARY DIGITAL HUMANITIES

The relation between codexical and digital forms of technological memory is articulated in Jerome McGann's *Radiant Textuality: Literature after the World Wide Web*. As McGann states, the Internet, 'an archive of archives', 'originally designed precisely as a decentred, nonhierarchical structure', 'resembles our oldest hypertextual structure, the library, which is also an archive (or in many cases an archive of archives). As with the Internet and hypertext, a library is organized for indefinite expansion'. However, we should note that there is a complex *finitude* to the book form and its archival collection. It is this finitude that partly necessitates the shift toward the kind of metacritical digital archives represented by McGann's *The Rossetti Archive* project, and its effort to bring together 'archival and editorial mechanisms with their critical and reflective functions' (*RT*, p17).

9. Jerome McGann, Radiant Textuality: Literature after the World Wide Web, New York and Basingstoke, Palgrave, 2001, p72, henceforth RT in the text.

Editing in codex forms generates an archive of books and related materials. This archive then creates its own metastructures - index and other study mechanisms - to facilitate navigation and analysis of the archive. Because the entire system develops through the codex form, however, duplicate, near-duplicate, or differential archives appear in different places [...] If the coming of the book vastly increased the spread of knowledge and information, history has slowly revealed the formal limits of all hardcopy's informational and critical powers. The archives are sinking in a white sea of paper (*RT*, p56).

With evident comparability to Lévy, then, the problem is that the limitations of the codex form produce a proliferation of variously differentiated and

disconnected other editions of codices - a bad form of proliferation gesturing toward the bad archival sublime. The power of the electronic edition, in comparison, means that 'the book's (heretofore distributed) semantic and visual features can be made simultaneously present to each other' (RT, p57). Unlike a traditional library, in which there are foci of attention governed by definitive texts, but like the Internet, 'every documentary moment in the hypertext is absolute with respect to the archive as a whole, or with respect to any subarchive' within it (RT, pp73-4). This positive shift from the traditional definitive edition to the electronic text and its accumulation is also marked by McGann's sense that the codex form is *closed* by its covered bindings, while the digital archive is *open* - it 'can be indefinitely expanded and developed' (RT, p69).

Something like this relation between traditional and digital archives is also stated by N. Katherine Hayles in *How We Think: Digital Media and Contemporary Technogenesis*. Here, Hayles marks key differences between the traditional and digital humanities' relations to the collection, analysis and dissemination of archival information. As she argues, the shift from the traditional to the digital involves a shift in research location from the library to the Web and Internet; and a shift in recording from narrative to database (*HWT*, p2, p4, p16). In this context,

The constant expansion of new data accounts for an important advantage that relational databases have over narratives, for new data elements can be added to existing databases without disrupting their order. [....] This flexibility allows databases to expand without limitation (subject, of course, to the amount of memory storage allocated to the database) (*HWT*, p182).

In this description, then, and with some comparability to McGann's sense of the finitude of the codex, while narratives are finite, databases are, in potentiality, if not in practice, quantitatively infinite. Indeed, Hayles' description of quantitative digital accumulation necessarily encounters the problems of excessive accumulation - of million plus online book searches 'limited only by ever-increasing processor speed and memory storage' (*HWT*, p27). There is thus also a shift in attention from close reading to distant reading, including hyper reading and machine reading (*HWT*, pp12, 17, 28-31). The latter forms of attention are, clearly, designed in various ways to finitise or commensurate the glut of data. Not only are such accumulations too vast for close reading analysis: 'Machine queries frequently yield masses of information that are incomprehensible when presented as tables or databases of results. Visualization helps sort the information and makes patterns visible' (*HWT*, p33).

Issues of this shift toward digital archiving also concern *SpecLab: Digital Aesthetics and Projects in Speculative Computing*, where Johanna Drucker indicates that it has a dual possibility. On the one hand, the 'aggregation of information, access to surrogates of primary materials, and the manipulation of texts and

10. Literature's relation to such glut, as Hayles indicates, may be opposite. In the writings of Mark Z. Danielewski that Hayles analyses, two, polarized attitudes toward such massive information accumulation should be noted: 'a novel that attempts to incorporate all different kinds of discourses, sign systems, and information into itself, engorging itself in a frenzy of graphomania (i.e: House of Leaves) and a novel that operates through severe constraints, as if keeping the information deluge at bay through carefully constructed dikes and levees (i.e: Only Revolutions)'; ibid., pp16-17.

images in virtual space all provided breakthrough research tools' (*SL*, p3). On the other, it involves a certain risk:

Digital projects are usually defined in highly pragmatic terms: creating a searchable corpus, making primary materials for historical work available, or linking materials to an interactive map and timeline capable of displaying data selectively. Theoretical issues that arise are, therefore, intimately bound to practical tasks, and all the lessons of deconstruction and poststructuralism [...] threaten to disappear under the normalizing pressure of digital protocols (SL, p7).

The conflict between the technical and the theoretical here can be broadly characterised as one between two conceptions of order in Drucker's terms. *Mathesis* signifies an instrumental, totalising, objectivising formal logic marked in its relation to the history of rational mechanicity. *Aesthesis* signifies the partiality of subjective imagination linked to the traditions of aesthetics. The polarity here is complex, because, as Drucker argues, the extension of data-processing models into the visual arts, for example, renders the distinction problematic (*SL*, p182). Thus, this difference is, clearly, a matter of politics: it concerns the problem of formal logic and computational protocols being used to 'justify decisions about administration and management of cultural and imaginative life' (*SL*, p5).

We need to note, then, that the move toward digital archival forms has its own problems. As McGann puts it, while computerization has made available 'vast amounts of data in forms - relational as well as facsimile, that were previously unimaginable', it has disappointed scholarship as 'a tool for rethinking these materials' (*RT*, p16). If the question is, thus, 'Who will determine how knowledge is classified in digital representations', Drucker positions *speculative computing* in opposition to a *digital humanities* conceived as the attachment to unambiguous, objective data championed by 'computer culture' (*SL*, pp6-7). Hence, generally speaking, the literary discourse of the digital humanities positions aesthesis against mathesis, partly, as I will now proceed to indicate, through a recursive *poeticisation* of the digital sphere.

QUALITATIVE ISSUES: INFINITE DETAIL AND THE AESTHETICS OF THE SUBLIME

The problem, as with Drucker's thoughts on the totalizing and objectivising claims of mathesis, is that the digital realm of memory may be seen as being qualitatively finite, in the way that such information may be subject to disambiguating simplification. In computation, McGann states:

A formal 'language' is imposed upon natural language or on real objects that licenses a computer to manipulate the marked materials. Whatever

11. This schema appears complicated by the association of 'speculative computing' with mathematical mechanicity as against 'generative aesthetics' in Johanna Drucker (and Bethany Nowviskie), 'Speculative Computing: Aesthetic Provocations in Humanities Computing', in Susan Schreibman, Ray Siemens and John Unsworth (eds), A Companion to Digital Humanities, Massachusetts, Oxford and Victoria, Blackwell Publishing, 2004, http://doi.org/cs9m4s

is not formally marked is not merely unapparent, it is computationally nonexistent [...] But text - even printed or scripted text - is foundationally ambiguous. The ambiguity results not merely from the formidable complexity of every material textual form but because such forms only function in use (*RT*, p226).

Indeed, for McGann, traditional poetical texts are the 'most advanced' way of modelling textual codings, and are thus essential to 'understanding the structure of digital space' (*RT*, pxi-xii). As this prioritization of the poetic suggests, McGann's discourse is structured by a series of hierarchical oppositions: between science and art, quantity and quality, and instrumental and intellectual interest (*RT*, pp54, 16, 214). Such oppositions, as with the distinction between mathesis and aesthesis, are also associated with those for and against totality: 'disambiguated, fully commensurable signifying structures' and 'human ambiguities and incommensurables' (*RT*, pxiv).

In his engagement with Dante, McGann discusses how the meanings of the poetic text emerge from the way in which it can be infinitely divided into different units and relations. Thus, *infinite divisibility* is the effective substrate of interpretive meaning, which also means that the text is endlessly self-differential (*RT*, pp196-7, 206). McGann's sense of the analysis of such infinite divisibility furthermore attends to microscopic subdivision. The place of 'quantum poetics' appears as a reimagining of traditional literary close reading: it is an interstitial term at the convergence of art and science - where art has rigor, and science has vagueness; where both have ambiguity (*RT*, p228). Attention thus shifts away from the 'gross - even Newtonian - levels' of the poetic analysis of 'macrosopic' linguistic codes that assume words as atomic units. Rather, 'even the most pedestrian scrap of prose text - oral or typographical - might *and should*, for critical purposes, be investigated with a passion for fine, microscopic, for subatomic discriminations' (*RT*, p229).

In the face of the loss of the aesthetic dimension of ambiguity performed by computational simplification, then, McGann's electronic text fields attempt to archive ambiguity, rather than leaving it located merely in the contingencies of subjective intuition. In this sense the metatextual digital assemblage of *The Ivanhoe Game* attempts 'to expose to our thinking aspects of our own thought that would have otherwise remained only intuitively or randomly available to us' (*RT*, p227). The function of the digital archive might thus be equated with the function of poetry given to it by I.A. Richards - to preserve a way of complex *thinking* being lost by the standardizing drive of commercialisation and industrialisation.¹² Indeed, contiguously with Richards' intentionalism (the idea that the object of poetic analysis is to decode the author's intended meaning), McGann states that 'The subject of IVANHOE, after all, is not the subject of (say) physics or computer science - the natural world, digital order - it is the mind of those who have imagined and created those kinds of intellectual prostheses' exampled by literary texts (*RT*, p230).

12. See, for example, I.A. Richards, Practical Criticism: A Study of Literary Judgment, 1930.

This attention to the microscopic, and the endlessness of literary language as the substrate of creative agency, are also principles of Drucker's thought, as represented by SpecLab. In terms of the computer screen interfaces which mediate between database and user, Drucker argues that the rapid conventionalisation of Graphical User Interface elements (sidebars, hotlinks, tabs, etc) means that 'their character as representations has become invisible'; a mark of the 'smooth functioning' and 'efficient operation' of mathesis (SL, p9). The task of the design of the interfaces discussed by Drucker is thus effectively to interrupt such invisibility. This emphasis on the graphical quality of the user's interface with the database perhaps has some comparability to the Russian Formalist's attention to 'roughened form' - the formal qualities that mark a text as poetic, as against the content-centred meaning characteristic of practical language. 13 Thus, Drucker posits graphesis - a term that recognises the rhetorical force of visual design (SP, pxv). Here 'properties of visuality' appear 'unassimilable into either traditional linguistic and mathematical knowledge systems or digital systems'. As Drucker argues:

13. See, for example, Boris Eichenbaum, 'Theory of the "Formal Method", 1926.

Inherent to visual mark making, expression, are the qualities of infinite variety and greater specificity, properties that allow graphical marks to register subjective inflection yet resist the premises of finitude and closure (*SL*, p132).

As the terms 'infinite variety' and 'greater specificity' indicate, this difference between mathematical and the graphical bears strong resemblance to the idea of subatomic infinity in McGann's work, both offering a reworking of the traditional aesthetics of *infinite detail*. Comparably, as Lévy puts it, 'Within the domain of intellectual technology, progress consists in visualizing the very small or the very far, [...] in diagramming the inextricable complexity of process' (*CI*, p110).

14. See Naomi Schor, Reading in Detail: Aesthetics and the Feminine, New York and London, Methuen, 1987.

We might also see this kind of engagement with the traditional aesthetics of the sublime in Hayles' work. In *Electronic Literature: New Horizons for the Literary*, Hayles discusses the author Brian Kim Stefans' aesthetic of 'recombinant flux', where 'algorithms or programs that tap into real time data flows [...] create an infinite number of possible combinations'. Hence, 'The ontological security of the self is constantly threatened by this prospect of limitless information and limitless recombination' (*EL*, p156). We should also note here the argument, in reference to the works of James, Conrad, and Fitzgerald, that 'Narratives gesture toward the inexplicable, the unspeakable, the ineffable'. Updating this evident articulation of the development of the sublime proper in literature, Hayles also comments that 'Alan Liu, discussing the possibilities for this kind of gesture in a post-industrial information-intensive era, connects it with "the ethos of the unknown", and finds it expressed in selected artworks as a "data pour," an overflowing uncontainable excess that he links with transcendence' (*HWT*, p179).

15. N. Katherine Hayles, Electronic Literature: New Horizons for the Literary [2008], Indiana, University of Indiana Press, 2010, p58, henceforth EL in the text.

These intersections with and re-workings of the discourse of the sublime specifically lead us here to questions of romantic thought, and its conceptions of the relation between subject and world. In order to understand the conceptions of this relation in the literary digital humanities thinkers thus far discussed, we need now turn to the theory of autopoiesis - remembering that Lévy defines it as 'the process of continuous self-renewal' in the collective intelligence (*CI*, p263, n7).

AUTOPOIETIC AND AUTOIMMUNE SYSTEMS OF KNOWLEDGE

In terms of the polarity between classically objective and romantically subjective ideas of where meaning comes from, McGann discusses the quantum approach in the context of *The Ivanhoe Game* - a multifaceted digital text that allows for the recording and archiving of literary texts and intersubjective interpolations. McGann here understands a given interpretive meaning as 'a line in the (interactive) system's own development possibilities, within which the "interpreter" is immersed'. The perceiver thus becomes part of an "autopoietic" reality that sustains itself by communicating with itself' (RT, p218). With some difference in terminology, Hayles' attachment to ideas related to the autopoietic is articulated through the claims to 'epigenesis' and 'technogenesis'. Epigenesis refers to genetic changes driven by the environment rather than by the genetic code itself, and it thus indicates 'neural plasticity' - the ability of the brain to adapt to its environment (HWT, pp11, 82). Technogenesis is a theory of the 'coevolution' of humanity and technology, and the thought of nonhuman 'technical individuals' (HWT, pp 10, 13). Similarly, Drucker's sense of the aesthetic specifies that the relation between entity and system is 'codependent', such that subject and object cannot be considered 'discrete' (SL, p27).

The issue of the coevolutionary significantly bears on the conception of language in *How We Think*. As remarked here, the shift from Saussure to Lacan is one from an understanding of the unity of the sign to the priority of the signifier, and to its 'infinite chains of deferrals' (*HWT*, p216). Hence, as Hayles speculates in her discussion of *The Raw Shark Texts* (a multimedia agglomeration with a printed novel at its core):

What if language, instead of sliding along a chain of signifiers, were able to create a feedback loop of continuous reciprocal causality such that the mark and the concept would co-constitute each other? Such a dynamic would differ from Saussure, because there would be no theoretical distance between mark and concept; it would also differ from Lacan, because the signified not only re-enters the picture but is inextricably entwined with the signifier. Defying Lacan's logic of displacement, the result might be to enable an impossible desire to be realized, albeit at a terrible cost (*HWT*, p216).

16. Analogously, Lévy claims that the successive knowledge spaces do not destroy each other: 'existential configurations are put in reserve, stored in memory. And since they are always operational, they are available at all times. Everything is always present', Lévy, Collective Intelligence, op. cit., p227. This dream of total recall

In Hayles' discussion of this text, which is defined as being opposed to databases, this desire for linguistic presence is linked to an antipathy toward the excessive proliferation of writing (HWT, p16). With some comparability to Lévy's opposition between written and digital memory, one of the characters in The Raw Shark Texts finds, in a 'labyrinth of written material', an encyclopaedia that describes an "ancient Native American belief that all memories, events, and identities consumed by one of the great dream fishes would somehow be reconstructed and eternally present", creating "eternal vision-worlds recreated from generations of shared knowledge and experience" (HWT, pp214-5). ¹⁶ Thus, the desire for the immediacy of language, the nonseparation and co-originarity of signifier and signified, is linked to an idea of the total archive: the absolute presence of language and the presence of the archive to the subject converge. Such an idea is, in Derrida's terms, one of archive fever. To have this condition 'is to have a compulsive, repetitive, and nostalgic desire to return to the origin, a homesickness, a nostalgia for the return to the most archaic place of absolute commencement'. 17 Yet, as Hayles indicates, the text returns to difference and ambivalence: 'the doubled ending inscribes an ambiguity so deep and pervasive that only a reader's projections can give it final shape. The ambiguity highlights another way in which narrative differs from database: its ability to remain poised between two alternatives without needing to resolve the ambiguity' (HWT, p218). This ambiguity comes down, in the end, to whether one of the characters is understood to be a hallucination of another character, or 'an authentic subjectivity' (HWT, p218).

In terms of this kind of affirmation of the subject, SpecLab positions itself in relation to the historical existence of two forms of art formed through different perceptions of rationality. One is 'antilyrical, antisubjective', and aspires to science. The other is 'humanistic, lyrical' - a 'subjective romanticism that has opposed emotional, natural, and chaotic forces to those of technologically driven progress' (SL, p190). The remit of SpecLab clearly diverges from such a simple opposition between these two forms of reason, and from such a simple romanticism. Nevertheless, the tendency of the book is toward the subjectivist position. Subjective interpretation is argued to be 'central to the concept of knowledge as interpretation', 'the core of knowledge production' (SL, pxiii). Thus, despite the general claims of the autopoietic qua the indifferentiation of subject and object, it is clear that the human remains in some sense separable, and, indeed, prioritized. Hayles, for example, argues that 'People - not the technologies in themselves - will decide' how to 'redirect and reinvigorate humanistic enquiry' (HWT, p18). Likewise, 'narrative remains a uniquely human capacity', but something of the human precedes it: narrative is said to be a linguistic technology 'almost as old as the human species' (HWT, p219, 179). The point is that there appears to be an *inconsistency* between the radical implications of the autopoietic as demoting the subject to a genuine, interconnected, cybernetic equivalence with the system, and the affirmation of a prioritised, separable human agency - an ironic affirmation

sounds perhaps like Freud's model of the infinitely receptive unconscious prior to the publication of 'Beyond the Pleasure Principle', 1920. In the later model, as Derrida discusses in 'Freud and the Scene of Writing', 1966, the unconscious is subject to death drive, erasure, and technological finitude. Thus, the unconscious is not infinite, nor finite, but in-finite. This argument would have us recognize that the digital archive is structured likewise: its information is both indeterminate and partial, and its lapses and losses nevertheless leave traces that disturb any sense of complete absence or total plenitude.

17. Jacques
Derrida, Archive
Fever: A Freudian
Impression [1995],
Eric Prenowitz
(trans), Chicago and
London, University
of Chicago
Press, 1996, p91,
henceforth AF in
the text.

18. Such speciesism might be questioned by invoking cybernetics: if an animal nips another as a warning, it is an act of communication and a use of language that clearly involves the idea of a sequence of events - a narrative. Comparatively, the 'IF ... THEN' command in basic programming might be significant in this regard.

when coupled with reference to the Oulipo group, considering their intent to eradicate subjectivity from aesthetic production.

Hence, and despite the various references to poststructuralism, and to deconstruction more specifically in the literary digital humanities discourses under consideration in this article, we would have to note a certain limit to the amenability of these discourses. Where deconstruction is understood to affirm originary technicity, this would entail that the codependence or cooriginarity of the human and the machine, claimed by Hayles for example, could not be supported. Originary technicity indicates that there is no human prior to arche-writing, or gramme, or trace - that is, 'writing' in the expanded sense given it by Derrida, which destabilises the polarity of the natural and technical. Indeed, the human is but an episode in the histories of such arche-writing, and in this context we would also have to recognise that the particular technologies associated with the human are also subjunct to the histories of the trace. 19 Arche-writing thus stands as the basis of the human, but in the sense of an original impurity that is structured by différance. It is thus the condition of the possibility and impossibility of the human. The idea of autopoiesis would then find its problematisation in Derrida's related notion of autoimmunity, which argues that systems are ultimately subject to their own disruption by an exteriority that yet emerges from within; that all systems are thus necessarily bound up with their own non-dialecticisable self-destruction.²⁰

This distinction between the autopoietic and autoimmune is no doubt extremely complex, and depends upon the specific conception of difference in their articulation of system. Nevertheless, in general terms, where capital is understood qua system, it may be autoimmunity that gestures toward an exteriority internal to it that thus may not be simply capitalised. As the unfolding of a differential yet positively productive process, the idea of the autopoietic might thus be seen as a repression of more problematic systemic alterity. Indeed, the sense of an autopoietic system, as an unfolding of its own immanent possibilities, perhaps suggests in this context the continuing extension of capitalism. Such extension might be seen in the contradictory claim that technological system is directed by human agency, to the extent that it might reiterate a bourgeois form of individualism. In order to unpack these issues I want now to turn to Hayles' discussion of database ontology. Two, linked issues are at stake here: firstly, the question of the autoimmunity of database systems to their own closure - that is, their différance - and, secondly, the question of the programming of the human by such machinic indeterminacy.

THE NULL VALUE AND THE QUESTION OF THE SUBJECT

We might recall here McGann's argument that 'Whatever is not formally marked [...] is computationally nonexistent' (*RT*, p226). Against such totalisation, Hayles states the opposition between narrative and database in

19. Concerning originary technicity, and the complex priority of the trace, see: Jacques Derrida, Speech and Phenomena and Other Essays on Husserl's Theory of Signs [1967], David B. Allison (trans), Illinois, Northwestern University Press, 1973, pp84-5; and Jacques Derrida, Of Grammatology [1967], Gayatri Chakravorty Spivak (trans), Baltimore, Maryland, The Johns Hopkins University Press, 1974, p84. Nevertheless, it has been tendentiously claimed that deconstruction is haunted by a residual humanism, as with other discourses of technology; in that 'something - or rather someone - always precedes or exceeds technicisation'. See Arthur Bradley, Originary Technicity: The Theory of Technology from Marx to Derrida, Basingstoke and New York, Palgrave Macmillan, 2011, p15.

20. See Giovanna Borradori, Philosophy in a Time of Terror: Dialogues with Jurgen Habermas and Jacques Derrida, Chicago and London, University of Chicago Press, 2003, pp85-136. a language reminiscent of the sublime: 'No longer singular, narratives remain the necessary others to database's ontology, the perspectives that invest the formal logic of database operations with human meanings and gesture toward the unknown hovering beyond the brink of what can be classified and enumerated' (*HWT*, p183). Comparatively, and in line with McGann's use of Rosetti's dictum of the centrality of the subject, speculative computing for Drucker 'posits subjectivity and the inner standing point as the site of interpretation' and 'attempts to open the field of discourse to its infinite and peculiar richness' (*SL*, pp29-30). Yet we must recognise here Drucker's characterization of mathesis as a 'mythic ideal' (*SL*, p4). Indeed, Hayles' discussion of database search programmes, significantly problematises the very conception of the database as being totalizing or unambiguous other than in misrecognition or desire.

Hayles states that 'databases rely on enumeration, requiring explicit articulation of attributes and data values', but with one exception - the *null* value:

Indeterminate data - data that are not known or otherwise elude the boundaries of the pre-established categories - must either be represented through a null value or not be represented at all. Even though some relational databases allow for the entry of null values, such values work in set-theoretic operations as a contaminant, since any operation containing a null value will give a null value as a result (*HWT*, p178).

The null may in fact refer to missing or inapplicable information, that is, either the nonexistent or the unknown - that which does not fit into the database typology at the point of data input. In terms of the three logical positions allowed by Structured Query Language (SQL) programming, which performs database searches, its value is thus 'Unknown' rather than 'True' or 'False'. There are a number of subqueries in SQL that may refine results to some extent, but such cannot eradicate the indeterminacy of the null value responsible for the contamination. Where such searches are conducted, the null value causes a specific type of human interpretive action effectively *generated* by the indeterminacy of the system. Such an inversion of agency might then be linked to McGann's sense that human interpretation materializes the infinitely immanent possibilities of a system, but in a way that would significantly problematise the idea of the active role of the subject and the neutrality of such a substrate.²¹

Those attempts to resolve the indeterminacy of the null are, in Derridean terms, attempts to close the system that nevertheless add more to it, and thus endlessly deny its totality (*AF*, p68). In other terms, the qualifying search tries to form a *hors-texte* that would neutralize ambiguity. And the infamous phrase implied here - Derrida's 'Il n'y a pas de hors-texte' - means that there is no final metatextual commensuration of textual indeterminacy. As Rodolphe Gasché

21. If technology thus has a problematic performative power, it is nevertheless one that may or may not adhere to its programme, a technological indeterminism - see J. Hillis Miller, 'The Medium is the Maker: Browning, Freud, Derrida, and the New Telepathic Ecotechnologies', in The Oxford Literary Review, 30, 2, 2008. We might think, then, that technology has life - a possibility raised in Jacques Derrida, Specters of Marx: The State of the Debt, the Work of Mourning, and the New International [1993], Peggy Kamuf (trans), London and New York, Routledge, 1994, p153.

22. Rodolphe Gasché, The Tain of the Mirror: Derrida and the Philosophy of Reflection, Cambridge and London, Harvard University Press, 1986, p282.

23. 'On the level of conscious thought, attention [...] selects from the vast (essentially infinite) repertoire of physical attributes some characteristics for notice, and they in turn constitute an object's materiality', Hayles, How We Think, op. cit., p14.

24. Jacques Derrida, 'Force of Law: The "Mystical Foundation of Authority" [1994], in Gil Anidjar (ed), Acts of Religion, New York and London, Routledge, 2002,

25. Jacques Derrida, 'Structure, Sign, and Play in the Discourses of the Human Sciences' [1967], in Writing and Difference, Alan Bass (trans), London, Routledge & Kegan Paul, 1978, p289.

articulated this issue: 'The absence of all extra-text [...] is so not because of the general text's semantic wealth or unfathomable depth, nor because of the finitude of its human decipherer, but for structural reasons'.22 It is not a matter, then, of the 'infinite richness' of the field, or of the finitude of the human.²³ Similarly, as Derrida argued in 'Force of Law', concerning problems of judgment, 'we know that these problems are not infinite simply because they are infinitely numerous, nor because they are rooted in the infinity of memories and cultures (religious, philosophical, juridical, and so forth) that we shall never master'.24 Rather, it is because the very structure of any text, traditional or digital, aesthetic or formal, must be indefinite - positioned problematically between metaphysical concepts of the endlessness of the ad infinitum and the totality of the absolute infinite. As it is put in 'Structure, Sign, and Play in the Discourses of the Human Sciences': 'If totalization no longer has any meaning, it is [...] because instead of being an inexhaustible field, as in the classical hypothesis, instead of being too large, there is something missing from it: a centre which arrests and grounds the play of substitutions'. 25

Significantly, then, the problem of the null bears on the issue of the idea of the totality of a database. Because the idea of the closed database requires that every element within it be 'true' (assigned an actual value, including numerical zero (0) or 'empty string' (''), this cannot be the case where there are unknown values within the system. The null, thus, is what denies totality, opening the closed world of the relational database back onto an open world. Hence, the null appears to operate in a similar manner to that described by Hayles as the function of narrative: it must also 'gesture toward the unknown hovering beyond the brink of what can be classified and enumerated' (HWT, p183). The ensuing point, in deconstructive terms, is that it is these linguistic forms of quotidian transcendence that are the motor of the transcendent. We might also say that the idea of the absolute, the total, etc., are merely the inverse image of the reality of systems which, 'essentially', by their originary, internal, and consistent indeterminacy, produce, as their other, the idea of their own (impossible) completion. The mere pretension of a replete database in this example, problematising its difference to narrative, thus calls into question the schema of all of the associated oppositions that this difference heads: determinate / indeterminate, totality / selection, quantitative / qualitative, machinic / subjective.

We have to recognize here, of course, that these issues are those of a particular technology of database searching that is itself in a process of contestation and development. Nevertheless, the null will stand here to question the ultimate possibility of systemic closure in general, as much as it also serves to question the problematic *generativity* of technical-linguistic machines. The null, then, indicates a doubled inversion of the humanist position: the systemic machine precedes the human, and the human may be determined, or indetermined, by it. We must consequently question whether the affirmation of the individual subject's priority thus becomes a matter of idealist affirmation.

Given the intersections with romanticism thus far indicated, this then also raises the question of whether this is a matter of a specifically bourgeois thought, a matter of capitalism. We need to remember here that capitalism is *also* a system that valorises the subject; indeed, capitalism's ideology *is* that of a specific articulation of the human subject. So, while I have been discussing the conceptualisation of the relation between the subject and digital mnemotechnical assemblages as autopoietic systems, I will now turn toward their place in the contemporary system of capital.

CAPITALISM AND THE INFINITE

In order to contextualise these questions, I want now to move toward a comparison between the aesthetic relation to literary texts and populist analyses of cultural engagement with capitalized forms of communication and memory. To some extent the praxes indicated by these positions operate in different spheres - the professional and the amateur, the academic and the popular. And while the academies are increasingly being structured by private finance, these spheres are also, to some extent, defined by the difference of state funding and corporate investment in the possibilities of freely given leisure-time work. Nevertheless, such differences are perhaps less important, in the context of the overall argument here, than their general ideological orientation. What is at stake is the manner in which capitalized texts and their accumulation are envisaged as the substrate for individual interpretation and collective politics. While Hayles' engagement with the institutional and social politics of the infinite archive has been marked, such attention is rather more gestural in SpecLab and Radiant Textuality, but what this comparison aims to bring into question is the possibility that the populists' model of politics might be the logical extension of the aestheticians' theory of subject and system, as figured by autopoiesis. The relevance of this comparison, as I will now show, is located precisely in the shared conception of the subject's relation to the infinite archive.

In Jenkins' *Convergence Culture*, commercial video games are discussed as ways of 'expanding the storytelling experience' as an element within a number of linked platforms - film and video, web, traditional mass media, merchandising, etc. - that is, as 'transmedia storytelling'. ²⁶ Such is described by one of the Microsoft team responsible for putting together a transmedia experience connected to the Spielberg film *Artificial Intelligence: A.I.*

Create an entire self-contained world on the web, say a thousand pages deep, and then tell a story through it, advancing the plot with weekly updates, concealing each new piece of narrative in such a way that it would take clever teamwork to dig it out. Create a vast array of assets - custom

26. Henry Jenkins, Convergence Culture: Where Old and New Media Collide, New York and London, New York University Press, 2006, p8, p21, henceforth CC in the text.

27. Ibid., p128. In this context, I might refer to Feltes' materialist analysis of the economic dimensions of nineteenth-century print publication forms. Its grounding in the legacies of Althusser's theoretical assemblage would require negotiation of its theoretical inconsistencies, and its historically necessary attention to the role of the author-as-producer would need to be inverted to consider the role of the reader in the production of surplus value. Nevertheless it would be generative in thinking the specifities of digital forms of writing through their traditional precursors. As Feltes states: 'The series writer in the capitalist mode, however the task may be perceived ideologically, must produce or discover in each successive book, or instalment or part, that "virtually limitless multiplication" of ideological "inventions and combinations and configurations" which interpellate by constituting the bourgeois subject'. See N.N. Feltes, Modes of Production of Victorian Novels [1986], Chicago, University of Chicago Press, 1997,

28. "The Ivanhoe Game" is [...] a difference engine for stimulating selfreflection through interactive roleplaying', McGann, photos, movies, audio recordings, scripts, corporate blurbage, logos, graphic treatments, web sites, flash movies - and deploy them through a net of (untraceable) web sites, phone calls, fax systems, leaks, press releases, phony newspaper ads, and so on ad infinitum (*CC*, p128).²⁷

In Jenkins' account, the transmedia elements of the film *The Matrix* induce audience interaction conceptualized as 'knowledge communities' who 'dig deep into their libraries', and analyse texts as a 'bottomless pit of secrets'. Because 'The deeper you drill down, the more secrets emerge', 'The sheer abundance of allusions makes it nearly impossible for any given consumer to master the franchise totally' (*CC*, p101). Digital media are thus thought of in their 'encyclopaedic capacity' (*CC*, p118). But 'encyclopaedic', as against that totalizing dream of the Enlightenment, is in this sense incommensurable by a single user, or, indeed, by collective users. Furthermore, the total possible meanings of the assemblage are also beyond the bounds of its creators, 'since fan speculations and elaborations also expand on the world in a variety of directions' (*CC*, p116). Indeed, in Jenkins' discussion of fanfic, one adherent states that 'we have the ability to keep changing our characters and giving them new life over and over. [...] We can give them an infinite, always changing life, rather than the single life of their original creation' (*CC*, p267).

Hence, we might begin to think about the parallels suggested here between popular, digital archival engagement and its literary-aesthetic other: an (apparently) infinitely reconfigurable, multiple text allows for what appears as the insertion of endless subjective agency and creativity that has nevertheless been induced by the system. Fanfictional activity might thus be not absolutely unlike McGann's adoption of and invention of personae in the context of *The Ivanhoe Game*. ²⁸ We thus return to the issues of the subject / object relation as figured by the autopoietic conception of system. If capitalism is considered autopoietic, the question is whether what appears as agency will only be a reflection of the immanent possibilities of that system, and thus be interior to its own unfolding - despite, for example, McGann's sense that autopoietic systems may be self-transformative. In order to indicate how such might be the case for the populists, we should now turn to the image of politics as given in *Convergence Culture*.

The issue of information glut in the context of popular engagement is here specifically political and collective: 'the vast proliferation of specialized information serves only special interests, not the community'; and 'being deluged by undigested information on a vast unedited electronic blackboard' problematises possibilities of democratic consensus (*CC*, p248). On the other hand, citing W. Russel Newman, Jenkins counters that 'new developments in horizontal, user-controlled culture that allow the user to amend, reformat, store, copy, forward to others, and comment on the flow of ideas do not rule out mass communication' (*CC*, p254). Hence, the contradiction of digital media that runs through the book is that:

Radiant Textuality, op. cit., p222.

on the one hand, new media technologies have lowered production and distribution costs, expanding the range of available delivery channels, and enabled consumers to archive, annotate, appropriate, and re-circulate media content in powerful new ways. At the same time, there has been an alarming concentration of the ownership of mainstream commercial media, with a small handful of multinational media conglomerates dominating all sectors of the entertainment industry (*CC*, pp17-18).

Jenkins articulates a synthetic position between the poles of individual and mass communication (associated respectively with total fragmentation and centralizing oppression in their extreme forms). Thus, democratic participation operates between the diversification of grassroots public culture and the amplification of ideas allowed by top-down commercial broadcast media (CC, p268). Participation in this sphere, understood as gesturing toward the 'deliberative democracy' of the 'monitorial citizen', is understood specifically as an engagement with the capitalism of communications media. As Jenkins states: 'A politics of participation starts from the assumption that we may have greater collective bargaining power if we form consumption communities' (CC, pp246, 237, 260).²⁹ We should note here that the individual archives indicated here gesture to Lévy's idea of the collective intelligence, and to the cosmopedia, which appears as the fantastical presence of the total archive: it is 'the sum total of information held individually by the members of the group that can be accessed in response to a specific question' (CC, p27). Indeed, as with Lévy's ideas on this subject, which are consistently and explicitly recognized as the theoretical reference of Jenkins' book, commodity culture thus provides the framework for 'restoring democratic citizenship' (CC, p29).

In order to mark such an image of the political as a product of the system that it claims to mediate, we might refer to it, following Ted Striphas' invocation of Foucault, as 'neoliberal governmentality'. Here, claims to 'unprecedented levels of freedom, interactivity, and customization', must be qualified by the way in which such engagement might obscure 'the extent to which we're surveilled, mined for data, and compelled to act in ways contrary to our own interests'.30 We might also think this situation through Mark Fisher's discussion of precorporation: 'the pre-emptive formatting and shaping of desires, aspirations, and hopes by capitalist culture. Witness, for example, the establishment of settled 'alternative' or 'independent' cultural zones, which endlessly repeat older gestures of rebellion and contestation as if for the first time'.31 In this example of pre-determined recycling and modification, Fisher's conceptualisation of the 'reality' of capitalism is one that is 'infinitely plastic'. Indeed, it is 'akin to the multiplicity of options available on a digital document, where no decision is final, revisions are always possible, and any previous moment can be recalled at any time' (CR, p54). In Fisher's thought, then, capitalism is clearly attached to the endless deferrals of the ad infinitum, and it involves 'indefinite postponement', for

29. Ibid., p246, p237, p260. Something like the idea of the monitorial citizen also finds its theorization in Steve Mann's concept of sousveillance, See Vian Bakir, Sousveillance, Media and Strategic Political Communication: Iraq, USA, UK, London, Continuum, 2010.

30. Similarly, see Ted Striphas, The Late Age of Print: Everyday Book Culture from Consumerism to Control, New York and Chichester, Columbia University Press. 2009. pp184-5. Striphas' response to the problem is, in a considered sense, to advocate hacking as a political practice - to 'identify and exploit vulnerabilities in the technical and legal infrastructure according to which control sustains itself', in order to 'actualize absent alternatives, effectively writing them (back) into the realm of everyday existence', p186.

31. Mark Fisher, Capitalist Realism: Is There No Alternative?, Hampshire, Zero Books, 2009, p9, henceforth CR in the text. This is not only an issue of the right: 'One of the left's vices is its endless rehearsal of historical debates', p78.

32. On eclecticism, see Jean-François Lyotard, 'Answering the Question: What is Postmodernism?' [1982], in The Postmodern Condition: A Report on Knowledge [1979], Geoff Bennington and Brian Massumi (trans), Manchester, Manchester University Press, 1984, p76; and on the critical function of paralogy, see, in that volume, pp60-67. The theoretical eclecticism of the literary digital humanities can be recognised, for example, in references to the Oulipo group, Alfred Jarry, Humberto Maturana and Francisco Varela, and a plethora of poststructuralist and scientific discourses

33. See, for example, Robert Darnton, The Case for Books: Past, Present, and Future, New York, Perseus Books, 2009, pp76-7.

and thinkers.

34. Derrida, 'Force of Law', op. cit., p255.

example, in education and work. In addition, here, 'external surveillance is succeeded by internal policing' - the subject internalizes the bureaucratic function of the state (CR, p22). As with the productions of 'audit culture', what counts is for the accumulating documents of one's self-reflection to ward off further investigation (CR, p51). We might also see such self-documentation as an image of the effectivity of research productivity - part of the logic of techno-capitalist 'performance', as Lyotard describes it in The Postmodern Condition (1979). Indeed, given the disparate theoretical references collaged together by the literary humanists under discussion in this article, we might be minded here of Lyotard's distinction, in that book, between the possibility of a critical form of postmodernism and a postmodern eclecticism that reflects the epistemological fragmentation of capitalised knowledges.³² Polemically, then, we might bring this description into play with some moves in the digital humanities toward the layered accumulation of texts, analyses, and reflections, particularly as they are conceptualised and valorised through a heterogeneous theoretical matrix. This question concerns not only those archival structures constructed by the aestheticians, but also those convergent archival assemblages of ebooks and phooks and reflective commentaries envisioned by some as the future of the book.33

Engagement with such mnemotechnical forms is thus necessarily problematic: democracy thus thought appears as a part of the 'autopoietic' system of capital, just as knowledge production and distribution is modelled on consumption. I have already opened the difficult question of the relation between autopoietic and autoimmune systems, and the indefinite, rather than infinite, character of systematicity as such; but we might note, finally, that the understanding of deconstruction's engagement with such systems of archival memory is more complex than is sometimes thought. As I indicated in the introduction to this essay, via Hayles, there are those who associate poststructuralism with endless, millimetrically detailed critique. As Hayles says: 'Conditioned by several decades of post-structuralism, many humanistic disciplines associate "theory" with the close scrutiny of individual texts' (HWT, p31). Machine reading, as that which might, through further visual abstractions, produce some kind of determinate, functional data, clearly stands in opposition to such close reading. Yet this kind of opposition, which reiterates the association of deconstruction with endless critique, fails to recognise that for deconstruction, emphatic in its affirmation of difference, deferral must be subject to its own opposition, to its own displacement.

In 'Force of Law', for example, Derrida discusses the problematic relation between calculation and decision. Calculation is associated with 'juridico-, ethico-, politico-cognitive deliberation' that refers to existing knowledge.³⁴ Such knowledge, of necessity, must be located in mnemotechnical forms. As such forms are indefinite, calculation effectively encounters an endless archival engagement: there is an impossible demand to know everything about a situation in infinite, encyclopaedic detail. But, as Derrida also argues,

orthy 35. Ibid., p252. that edge nple,

such descriptive labour is subject to that of the performative: 'the *decision to calculate* is not of the order of the calculable'.³⁵ That is: any decision worthy of the name must cease the programmes of calculation in a moment that obviates and counters the indefinite accumulations of existing knowledge in order to open the possibility of a different future - different, for example, from the reiteration of the individual, social, and epistemological conditions given by the current relations of capitalism and mnemotechnical forms. Such decisions, by instituting ideas that must have a social or medial inscription, point towards further archival accumulation; and by repeating the gesture of institutionalisation, decision gestures backward toward an archival past. Yet there is thus, in deconstruction, a complex sense in which any just, ethical, or, rather, here, any political engagement worthy of the name, must require this problematic moment of forgetting, this complex point of non-cognition that is *a deferral* of *deferral*; a retraction from the indefiniteness of existing knowledge that is also a moment of radical archival suspension.

THE POLITICAL NATURE OF THE BOOK: ON ARTISTS' BOOKS AND RADICAL OPEN ACCESS

Janneke Adema and Gary Hall

Abstract In this essay we argue that the medium of the book can be a material and conceptual means, both of criticising capitalism's commodification of knowledge (for example, in the form of the commercial incorporation of open access by feral and predatory publishers), and of opening up a space for thinking about politics. The book, then, is a political medium. As the history of the artist's book shows, it can be used to question, intervene in and disturb existing practices and institutions, and even offer radical, counter-institutional alternatives. Yet if the book's potential to question and disturb existing practices and institutions includes those associated with liberal democracy and the neoliberal knowledge economy (as is apparent from some of the more radical interventions occurring today under the name of open access), it also includes politics and with it the very idea of democracy. In other words, the book is a medium that can (and should) be 'rethought to serve new ends'; a medium through which politics itself can be rethought in an ongoing manner.

Keywords Artists' books, academic publishing, radical open access, politics, democracy, materiality

INTRODUCTION

The medium of the book plays a double role in art and academia, functioning not only as a material object but also as a concept-laden metaphor. Since it is a medium through which an alternative future for art, academia and even society can be enacted and imagined, materially and conceptually, we can even go so far as to say that, in its ontological instability with regard to what it is and what it conveys, the book serves a political function. In short, the book can be 'rethought to serve new ends'. At the same time, the medium of the book remains subject to a number of constraints: in terms of its material form, structure, characteristics and dimensions; and also in terms of the political economies, institutions and practices in which it is historically embedded. Consequently, if it is to continue to be able to serve 'new ends' as a medium through which politics itself can be rethought - although this is still a big if - then the material and cultural constitution of the book needs to be continually reviewed, re-evaluated and reconceived. In order to explore critically this 'political nature of the book', as we propose to think of it, along with many of the fundamental ideas on which the book as both a

1. Johanna Drucker, The Century of Artists' Books, 2nd ed., Granary Books, New York, 2004, p49.

concept and a material object is based, this essay endeavours to demonstrate how developments undergone by the artist's book in the 1960s and 1970s can help us to understand some of the changes the scholarly monograph is experiencing now, at a time when its mode of production, distribution, organisation and consumption is shifting from analogue to digital and from codex to net. In what follows we will thus argue that a reading of the history of the artist's book can be generative for reimagining the future of the scholarly monograph, both with respect to the latter's potential form and materiality in the digital age, and with respect to its relation to the economic system in which book production, distribution, organisation and consumption takes place. Issues of access and experimentation are crucial to any such future, we will suggest, if the critical potentiality of the book is to remain open to new political, economic and intellectual contingencies.

THE HISTORY OF THE ARTIST'S BOOK

With the rise to prominence of digital publishing today, the material conditions of book production, distribution, organisation and consumption are undergoing a rapid and potentially profound transformation. The academic world is one arena in which digital publishing is having a particularly strong impact. Here, the transition from print to digital, along with the rise of self-publishing (Blurb, Scribd) and the use of social media and social networks (Facebook, Twitter, Academia.edu) to communicate and share scholarly research, has lead to the development of a whole host of alternative publication and circulation systems for academic thought and knowledge.

Nowhere have such changes to the material conditions of the academic book been rendered more powerfully apparent than in the emergence and continuing rise to prominence of the open access movement. With its exploration of different ways of publishing, circulating and consuming academic work (specifically, more open, Gratis, Libre ways of doing so), and of different systems for governing, reviewing, accrediting and legitimising that work, open access is frequently held as offering a radical challenge to the more established academic publishing industry. Witness the recent positioning in the mainstream media of the boycott of those publishers of scholarly journals - Elsevier in particular - who charge extremely high subscription prices and who refuse to allow authors to make their work freely available online on an open access basis, in terms of an 'Academic Spring'. Yet more potentially radical still is the occupation of the new material conditions of academic book production, distribution, organisation and consumption by those open access advocates who are currently experimenting with the form and concept of the book, with a view to both circumventing and placing in question the very print-based system of scholarly communication - complete with its ideas of quality, stability and authority - on which so much of the academic institution rests.

In the light of the above, our argument in this essay is that some of these

more potentially radical, experimental developments in open access book publishing can be related on the level of political and cultural significance to transformations undergone in a previous era by the artist's book. As a consequence, the history of the latter can help us to explore in more depth and detail than would otherwise be possible the relation in open access between experimenting with the medium of the book on a material and conceptual level on the one hand, and enacting political alternatives in a broader sense on the other. Within the specific context of 1960s and 1970s counterculture, the artist's book was arguably able to fill a certain political void, providing a means of democratising and subverting existing institutions by distributing an increasingly cheap and accessible medium (the book), and in the process using this medium in order to re-imagine what art is and how it can be accessed and viewed. While artists grasped and worked through that relation between the political, conceptual and material aspects of the book several decades ago, thanks to the emergence of open access online journals, archives, blogs, wikis and free text-sharing networks one of the main places in which this relation is being explored today is indeed in the realm of academic publishing.²

In order to begin thinking through some of the developments in publishing that are currently being delved into under the banner of open access, then, let us pause for a moment to reflect on some of the general characteristics of those earlier experiments with the medium of the book that were performed by artists. Listed below are six key areas in which artists' books can be said to offer guidance for academic publishing in the digital age, not just on a pragmatic level but on a conceptual and political level too.

1) The Circumvention of Established Institutions

According to the art theorist Lucy Lippard, the main reason the book has proved to be so attractive as an artistic medium has to do with the fact that artists' books are 'considered by many the easiest way out of the art world and into the heart of a broader audience'. Books certainly became an increasingly popular medium of artistic expression in Europe and the United States in the 1960s and 1970s. This was largely due to their perceived potential to subvert the (commercial, profit-driven) gallery system and to politicise artistic practice - to briefly introduce some of the different yet as we can see clearly related arguments that follow - with the book becoming a 'democratic multiple' that breached the walls held to be separating so-called high and low culture. Many artist-led and artist-controlled initiatives, such as US-based Franklin Furnace, Printed Matter and Something Else Press, were established during this period to provide a forum for artists excluded from the traditional institutions of the gallery and the museum. Artists' books played an extremely important part in the rise of these independent art structures and publishing ventures.4 Indeed, for many artists such books embodied the ideal of being able to control all aspects of their work.

- 2. The relation in academic publishing between the political, conceptual and material aspects of the book has of course been investigated at certain points in the past, albeit to varying degrees and extents. See the 'Working Papers' and other forms of stencilled grey literature that were produced and distributed by the Birmingham Centre for Contemporary **Cultural Studies** in the 1960s and 1970s, as discussed by Ted Striphas and Mark Hayward in their contribution to this issue.
- 3. Lucy R. Lippard, 'The Artist's Book Goes Public', in Joan Lyons (ed), Artists' Books: a Critical Anthology and Sourcebook, Rochester, New York, Visual Studies Workshop Press, 1993, p45.
- 4. Joan Lyons, 'Introduction', in *Artists' Books*, op. cit., p7.

Yet this movement toward liberating themselves from the gallery system by publishing and exhibiting in artists' books was by no means an easy transition for many artists to make. It required them to come to terms with the idea that publishing their own work did not amount to mere vanity self-publishing, in particular. Moore and Hendricks describe this state of affairs in terms of the power and potential of 'the page as an alternative space'. From this perspective, producing, publishing and distributing one's own artist's book was a sign of autonomy and independence; it was nothing less than a way of being able to affect society directly.6 The political potential associated with the book by artists should therefore not be underestimated. Accordingly, many artists created their own publishing imprints or worked together with newly founded artists' book publishers and printers (just as some academics are today challenging the increasingly profit-driven publishing industry by establishing not-for-profit, scholar-led, open access journals and presses). The main goal of these independent (and often non-commercial) publisherprinter-artist collectives was to make experimental, innovative work (rather than generate a profit), and to promote ephemeral art works, which were often ignored by mainstream, mostly market-orientated institutions.⁷ Artists' books thus fitted in well with the mythology Johanna Drucker describes as surrounding 'activist artists', and especially with the idea of the book as a tool of independent activist thought.8

2) The Relationship with Conceptual and Processual Art

In the context of this history of the artist's book, one particularly significant conceptual challenge to the gallery system came with the use of the book as a platform for exhibiting original work (itself an extension of André Malraux's idea of the museum without walls). Curator Seth Siegelaub was among the first to publish his artists - as opposed to exhibiting them - thus becoming, according to Germano Celant, 'the first to allow complete operative and informative liberty to artists'. 9 The Xerox Book and March 1-31, 1969, featuring work by Sol LeWitt, Robert Barry, Douglas Huebler, Joseph Kosuth, Lawrence Weiner and other international artists, are both examples of artists' books where the book (or the catalogue) itself is the exhibition. As Moore and Hendricks point out, this offered all kinds of benefits when compared with traditional exhibitions: 'This book is the exhibition, easily transportable without the need for expensive physical space, insurance, endless technical problems or other impediments. In this form it is relatively permanent and, fifteen years later, is still being seen by the public'. 10 Artists' books thus served here as an alternative space in themselves and at the same time functioned within a network of alternative spaces, such as the above-mentioned Franklin Furnace and Printed Matter. Next to publishing and supporting artists' books, such venues offered a space for staging often highly politicised, critical, experimental and performance art.11 It is important to emphasise

- 5. Hendricks and Moore, 'The Page as Alternative Space: 1950 to 1969', in *Artists' Books*, op. cit., p87.
- 6. Pavel Büchler, 'Books as Books', in Jane Rolo and Ian Hunt (eds), Book Works: a Partial History and Sourcebook, London, Book Works, 1996.
- 7. Clive Phillpot, 'Some Contemporary Artists and Their Books', in Cornelia Lauf and Clive Phillpot (eds), Artist/ Author: Contemporary Artists' Books, New York, Distributed Art Publishers, 1998, pp128-9.
- 8. Drucker, *The Century of Artists' Books*, op. cit., pp7-8.
- 9. Germano Celant, Book as Artwork 1960-1972, New York, 6 Decades Books, 2011, p40.
- 10. Hendricks and Moore, 'The Page as Alternative Space. 1950 to 1969', op. cit., p94.
- 11. Brian Wallis, 'The Artist's Book and Postmodernism', in *Artist/Author*, op. cit.

12. Adrian Johns, The Nature of the Book: Print and Knowledge in the Making, Chicago, University of Chicago Press, 1998, http://doi.org/msw

13. Hendricks and Moore, 'The Page as Alternative Space', op. cit., pp94-95.

14. Joan Lyons, 'Introduction', in Artists' Books, op. cit., p7.

15. Lippard, 'The Artist's Book Goes Public', p48; Lippard, 'Conspicuous Consumption: New Artists' Books', in Artists' Books, op. cit., p100. Is there a contradiction here between a politics of artists' books that is directed against commercial profitdriven galleries and institutions, but which nevertheless uses the tools of mass consumer culture to reach a wider audience (see also the critique Lippard offers in the next section)? And can a similar point be made with respect to the politics of some open access initiatives and their use of social media and (commercial, profit-driven) platforms such as Google Books and Amazon?

16. Drucker, The Century of Artists' Books, op. cit., p72.

this aspect of artist book publishing, as it shows that the book was used as a specific medium to exhibit works that could not otherwise readily find a place within mainstream exhibition venues (a situation which, as we will show, has been one of the main driving forces behind open access book publishing). This focus on the book as a place for continual experimentation - be it on the level of content or form - can thus be seen as underpinning what we are referring to here as the 'political nature of the book' (playing on the title of Adrian Johns' classic work of book history). 12

3) The Use of Accessible Technologies

As is the case with the current changes to the scholarly monograph, the rise of artists' books can be perceived to have been underpinned (though by no means determined) by developments in technology, with the revolution in mimeograph and offset printing helping to take artists' books out of the realm of expensive and rare commodities by providing direct access to quick and inexpensive printing methods.¹³ Due to its unique characteristics - low production costs, portability, accessibility and endurance - the artist's book was regarded as having the potential to communicate with a wider audience beyond the traditional art world. In particular, it was seen as having the power to break down the barriers between so-called high and low culture, using the techniques of mass media to enable artists to argue for their own, alternative goals, something that presented all kinds of political possibilities. 14 The artist's book thus conveyed a high degree of artistic autonomy, while also offering a far greater role to the reader or viewer, who was now able to interact with the art object directly (eluding the intermediaries of the gallery and museum system). Indeed, Lippard even went so far as to envision a future where artists' books would be readily available as part of mass consumer culture, at 'supermarkets, drugstores and airports'. 15

4) The Politics of the Democratic Multiple

The idea of the book as a real democratic multiple came into being only after 1945, a state of events that has been facilitated by a number of technological innovations, including those detailed above. Yet the concept of the democratic multiple itself developed in what was already a climate of political activism and social consciousness. In this respect, the democratic multiple was part of both the overall trend toward the dematerialisation of art and the newly emergent emphasis on cultural and artistic processes rather than ready-made objects. 16 Artists' desire for independence from established institutions and for the wider availability of their works thus resonated with the democratising and anti-institutional potential of the book as a medium. What is more, the book offered artists a space in which they were able to experiment with the materiality of the medium itself and with the practices that comprised it, and thus ultimately with the question of what constituted art and an art object. This reflexivity of the book with regard to its own nature is one of the key characteristics that make a book *an artist's book*, and enable it to have political potential in that it can be 'rethought to serve new ends'. Much the same can be said with respect to the relation between the book and scholarly communication: witness the way reflection on the material nature of the book in the digital age has led to questions being raised regarding how we structure scholarly communication and practice scholarship more generally.

5) Conceptual Experimentation: Problematising the Concept and Form of the Book

Another key to understanding artists' books and their history lies with the way the radical change in printing technologies after World War II led to the reassessment of the book form itself, and in particular, of the specific nature of the book's materiality, of the very idea of the book, and of the notions and practices underlying the book's various uses.

When it came to reevaluating the materiality of the book, many experiments with artists' books tried to escape the linearity brought about by the codex form's (sequential) constraints, something which had long conditioned both writing and reading practices. Undoubtedly, one of the most important theorists as far as rethinking the materiality of the book in the period after 1945 is concerned is Ulises Carrión. He defines the book as a specific set of conditions that should be (or need to be) responded to.¹⁷ Instead of seeing it as just a text, Carrión positions the book as an object, a container and a sequence of spaces. For him, the codex is a form that needs to be responded to in what he prefers to call 'bookworks'. These are 'books in which the book form, as a coherent sequence of pages, determines conditions of reading that are intrinsic to the work'. From this perspective, artists' books interrogate the structure and the meaning of the book's form.

Yet the book is also a metaphor, a symbol and an icon to be responded to.²⁰ Indeed, it is difficult to establish a precise definition or set of characteristics for artists' books as their very nature keeps changing. As Sowden and Bodman put it, 'What a book *is* can be challenged'.²¹ Drucker, meanwhile, is at pains to point out that the book is open for innovation, although the latter has its limits: 'The convention of the book is both its constrained meanings (as literacy, the law, text and so forth) and the space of new work (the blank page, the void, the empty place).' Books here 'mutate, expand, transform'. Accordingly, Drucker regards the transformed book as an intervention, something that reflects the inherent critique that book experiments embody with respect to their own constitution.²² One way of examining reflexively the structures that make up the book is precisely by disturbing those structures. In certain respects the page can be thought of as being *finite* (e.g. physically, materially), but it can also be understood to be *infinite*, not least as a result of being potentially different on each respective viewing/reading. This allows the

- 17. James Langdon (ed), *Book*, Birmingham, Eastside Projects, 2010.
- 18. Ulises Carrión, 'Bookworks Revisited', in James Langdon (ed), Book, Birmingham, Eastside Projects, 2010.
- 19. Drucker, *The Century of Artists' Books*, op. cit., pp3-4.
- 20. Ibid., p360.
- 21. Tom Sowden and Sarah Bodman, A Manifesto for the Book, Impact Press, 2010, p9.
- 22. Drucker, *The Century of Artists' Books*, op. cit.

book to be perceived as a self-reflexive medium that is extremely well-suited to formal experiments. At the same time, it allows it to be positioned as a potentially political medium, in the sense that it can be used to intervene in and disturb existing practices and institutions.

6) The Problematisation of Reading and Authorship

As part of their constitution, artists' books can be said to have brought into question certain notions and practices relating to the book that had previously been taken too much for granted - and perhaps still are. For instance, Brian Wallis shows how, 'in place of the omnipotent author', postmodern artists' books 'acknowledge a collectivity of voices and active participation of the reader'. ²³ Carrión, for one, was very concerned with the thought that readers might consume books passively, while being unaware of their specificity as a medium.²⁴ The relationship between the book and reading, and the way in which the physical aspect of the book can change how we read, was certainly an important topic for artists throughout this period. Many experiments with artists' books focused on the interaction between author, reader and book, offering an alternative, and not necessarily linear, reading experience.²⁵ Such readerly interventions often represented a critical engagement with ideas of the author as original creative genius derived from the cultural tradition of European Romanticism. Joan Lyons describes this potential of the artists' book very clearly: 'The best of the bookworks are multinotational. Within them, words, images, colors, marks, and silences become plastic organisms that play across the pages in variable linear sequence. Their importance lies in the formulation of a new perceptual literature whose content alters the concept of authorship and challenges the reader to a new discourse with the printed page'.26 Carrión thus writes about how in the books of the new art, as he calls them, words no longer transmit an author's intention. Instead, authors can use other people's words as an element of the book as a whole so much so that he positions plagiarism as lying at the very basis of creativity. As far as artists' books are concerned, it is not the artist's intention that is at stake, according to Carrión, but rather the process of testing the meaning of language. It is the reader who creates the meaning and understanding of a book for Carrión, through his or her specific meaning-extraction. Every book requires a different reading and opens up possibilities to the reader.²⁷

27. Ulises Carrión, 'The New Art of Making Books', in Book, op. cit.

THE INHIBITIONS OF MEDIATIC CHANGE

We can thus see that the very 'nature' of the book is particularly well suited to experimentation and to reading against the grain. As a medium, the book has the potential to raise questions for some of the established practices and institutions surrounding the production, distribution and consumption of printed matter. This potential notwithstanding, it gradually became

- 24. Langdon, Book, op. cit.
- 25. This has been one of the focal points of the books published and commissioned by UK artist book publisher Book Works, for instance, Jane Rolo and Ian Hunt, 'Introduction', in Book Works: A Partial History and Sourcebook, op. cit.
- 26. Joan Lyons, 'Introduction', Artists' Books, op. cit., p7.

apparent (for some this realisation occurred during the 1960s and 1970s, for others it only came about later) that the ability of artist's books to bring about institutional change in the art world, and to question both the concept of the book and that of art as the singular aesthetic artefact bolstered by institutional structures, was not particularly long-lasting. With respect to the democratisation of the artist's book, for example, Lippard notes that, by losing its distance, there was also a chance of the book losing its critical function. Here, says Lippard, the 'danger is that, with an expanding audience and an increased popularity with collectors, the artist's book will fall back into its edition de luxe or coffee table origin ... transformed into glossy, pricey products'. For Lippard there is a discrepancy between the characteristics of the medium which had the potential to break down walls, and the actual content and form of most artists' books which was highly experimental and avantgarde, and thus inaccessible to readers/consumers outside of the art world.²⁸

28. Lippard, 'The Artist's Book Goes Public', op. cit., pp47-48.

PROCESSES OF INCORPORATION AND COMMERCIALISATION

Interestingly, Carrión was one of the sharpest critics of the idea that artists' books should be somehow able to subvert the gallery system. In his 'Bookworks Revisited', he showed how the hope surrounding this supposedly revolutionary potential of the book as a medium was based on a gross misunderstanding of the mechanisms underlying the art world. In particular, Carrión attacked the idea that the artist's book could do without any intermediaries. Instead of circumventing the gallery system, he saw book artists as merely adopting an alternative set of intermediaries, namely book publishers and critics.²⁹

Ten years later Stewart Cauley updated Carrión's criticisms, arguing that as an art form and medium, the artist's book had not been able to avoid market mechanisms and the celebrity cult of the art system. In fact, by the end of the 1980s the field of artists' publications had lost most of its experimental impetus and had become something of an institution itself, imitating the gallery and museum system it was initially designed to subvert.30 Those interested in artists' books initially found it difficult to set up an alternative system, as they had to manage without organised distribution, review mechanisms or funding schemes. When they were eventually able to do so in the 1970s, the resulting structures in many ways mirrored the very institutions they were supposed to be criticizing and providing an alternative to.31 Cauley points the finger of blame at the book community itself, especially at the fact that artists at the time focused more on the concept and structure of the book than on using the book form to make any kind of critical political statement. The idea that artists' books were disconnected from mainstream institutional systems has also been debunked as a myth. As Drucker makes clear, many artists' books were developed in cooperation with museums or galleries, where they were perceived not as subversive artefacts but rather as low-cost tools for gathering additional publicity for those institutions and their activities.32

^{29.} Carrión, 'Bookworks Revisited'; Johanna Drucker, 'Artists' Books and the Cultural Status of the Book', *Journal of Communication*, 44 (1994).

^{30.} Stewart Cauley, 'Bookworks for the '90s', *Afterimage*, 25, 6, May/June (1998).

^{31.} Stefan Klima, Artists Books: A Critical Survey of the Literature, Granary Books, New York, 1998, pp54-60.

^{32.} Drucker, *The Century of Artists' Books*, op. cit., p78.

Following Abigail Solomon-Godeau, this process of commercialisation and incorporation - or, as she calls it, 'the near-total assimilation' of art practice (Solomon-Godeau focuses specifically on postmodern photography) and critique into the discourses it professed to challenge - can be positioned as part of a general tendency in conceptual and postmodern 'critical art practices'. It is a development that can be connected to the changing art markets of the time and viewed in terms of a broader social and cultural shift to Reaganomics. For Solomon-Godeau, however, the problem lay not only in changes to the art market, but in critical art practices and art critique too, which in many ways were not robust enough to keep on reinventing themselves. Nonetheless, even if they have become incorporated into the art market and the commodity system, Solomon-Godeau argues that it is still possible for art practices and institutional critiques to develop some (new) forms of sustainable challenge from within these systems. As far as she is concerned, 'a position of resistance can never be established once and for all, but must be perpetually refashioned and renewed to address adequately those shifting conditions and circumstances that are its ground'.33

33. Abigail Solomon-Godeau, 'Living with Contradictions: Critical Practices in the Age of Supply-Side Aesthetics', Social Text, 21 (1989).

34. See, for

example, Janneke

Adema and Birgit Schmidt, 'From

Service Providers to

Content Producers: New Opportunities

For Libraries in

Publishing', New Review of Academic

Librarianship, 16

(2010).

Collaborative Open Access Book

THE PROMISE OF OPEN ACCESS

At first sight many of the changes that have occurred recently in the world of academic book publishing seem to resemble those charted above with respect to the artist's book. As was the case with the publishing of artists' books, digital publishing has provided interested parties with an opportunity to counter the existing (publishing) system and its institutions, to experiment with using contemporary and emergent media to publish (in this case academic) books in new ways and forms, and in the process to challenge established ideas of the printed codex book, together with the material practices of production, distribution and consumption that surround it. This has resulted in a new wave of scholar-led publishing initiatives in academia, both formal (with scholars either becoming publishers themselves, or setting up cross-institutional publishing infrastructures with libraries, IT departments and research groups) and informal (using self-publishing and social media platforms such as blogs and wikis).34 The phenomenon of open access book publishing can be located within this broader context - a context which, it is worth noting, also includes the closing of many book shops due to fierce rivalry from the large supermarkets at one end of the market, and online e-book traders such as Amazon at the other; the fact that the major high-street book chains are increasingly loath to take academic titles - not just journals but books too; and the handing over (either in part or in whole) to for-profit corporations of many publishing organisations designed to serve charitable aims and the public good: scholarly associations, learned societies, university presses, nonprofit and not-for-profit publishers.

From the early 1990s onwards, open access was pioneered and developed

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most extensively in the science, technology, engineering and mathematics (STEM) fields, where much of the attention was focused on the online selfarchiving by scholars of pre-publication (i.e. pre-print) versions of their research papers in central, subject or institutionally-based repositories. This is known as the Green Road to open access, as distinct from the Gold Road, which refers to the publishing of articles in online, open access journals. Of particular interest in this respect is the philosophy that lies behind the rise of the open access movement, as it can be seen to share a number of characteristics with the thinking behind artists' books discussed earlier. The former was primarily an initiative established by academic researchers, librarians, managers and administrators, who had concluded that the traditional publishing system thanks in no small part to the rapid (and, as we shall see, ongoing) process of aggressive for-profit commercialisation it was experiencing - was no longer willing or able to meet all of their communication needs. Accordingly, those behind this initiative wanted to take advantage of the opportunities they saw as being presented by the new digital publishing and distribution mechanisms to make research more widely and easily available in a far faster, cheaper and more efficient manner than was offered by conventional printon-paper academic publishing. They had various motivations for doing so. These include wanting to extend the circulation of research to all those who were interested in it, rather than restricting access to merely those who could afford to pay for it in the form of journal subscriptions, etc;35 and a desire to promote the emergence of a global information commons, and, through this, help to produce a renewed democratic public sphere of the kind Jürgen Habermas propounds. From the latter point of view (as distinct from the more radical democratic philosophy we proceed to develop in what follows), open access was seen as working toward the creation of a healthy liberal democracy, through its alleged breaking down of the barriers between the academic community and the rest of society, and its perceived consequent ability to supply the public with the information they need to make knowledgeable decisions and actively contribute to political debate. Without doubt, though, another motivating factor behind the development of open access was a desire on the part of some of those involved to enhance the transparency, accountability, discoverability, usability, efficiency and (cost) effectivity not just of scholarship and research but of higher education itself. From the latter perspective (and as can again be distinguished from the radical open access philosophy advocated below), making research available on an open access basis was regarded by many as a means of promoting and stimulating the neoliberal knowledge economy both nationally and internationally. Open access is supposed to achieve these goals by making it easier for business and industry to capitalise on academic knowledge - companies can build new businesses based on its use and exploitation, for example - thus increasing the impact of higher education on society and helping the UK, Europe and the West (and North) to be more competitive globally.³⁶

35. John Willinsky, The Access Principle: The Case for Open Access to Research and Scholarship, Cambridge Mass., The MIT Press, 2009, p5.

36. Gary Hall, Digitize This Book! The Politics of New Media, or Why We Need Open Access Now, Minneapolis, University of Minnesota Press, 2008; Janneke Adema, Open Access Business Models for Books in the Humanities and Social Sciences: An Overview of Initiatives and Experiments, OAPEN Project Report, Amsterdam, 2010. David Willetts, the UK Science Minister, is currently promoting 'author-pays' open access for just these reasons. See David Willetts, 'Public Access to Publicly-Funded Research', BIS: Department for Business, Innovation and Skills, May 2, 2012: http://www. gov.uk/government/ speeches/publicaccess-to-publiclyfunded-research--2.

37. David Harvie, Geoff Lightfoot, Simon Lilley and Kenneth Weir, 'What Are We To Do With Feral Publishers?', submitted for publication in *Organization*, and accessible through the Leicester Research Archive: http://hdl.handle.net/2381/9689.

38. See the Budapest Open Access Initiative, 'Self-Archiving FAQ, written for the Budapest Open Access Initiative (BOAI)', 2002-4: http://www.eprints.org/self-faq/.

39. Although 'author-pays' is often positioned as the main model of funding open access publication in the STEMs, a lot of research has disputed this fact. See, for example, Stuart Shieber, 'What Percentage of Open-Access Journals Charge Publication Fees', The Occasional Pamphlet on Scholarly Publishing, May 9, 2009, http:// blogs.law.harvard. edu/pamphlet/2009/ 05/29/whatpercentage-of-openaccess-journalscharge-publicationfees/.

40. Maria Bonn, 'Free Exchange of Ideas: Experimenting with the Open Access Monograph', College and Research Libraries News, 71, 8, September (2010): 436-439: http://crln.acrl.org/ content/71/8/436.full.

41. Patrick Alexander, director To date, the open access movement has progressed much further toward its goal of making all journal articles available open access than it has toward making all academic books available in this fashion. There are a number of reasons why this is the case. First, since the open access movement was developed and promoted most extensively in the STEMs, it has tended to concentrate on the most valued mode of publication in those fields: the peer-reviewed journal article. Interestingly, the recent arguments around the 'Academic Spring' and 'feral' publishers such as Informa plc are no exception to this general rule.³⁷

Second, restrictions to making research available open access associated with publishers' copyright and licensing agreements can in most cases be legally circumvented when it comes to journal articles. If all other options fail, authors can self-archive a pre-refereed pre-print of their article in a central, subject or institutionally-based repository such as PubMed Central. However, it is not so easy to elude such restrictions when it comes to the publication of academic books. In the latter case, since the author is often paid royalties in exchange for their text, copyright tends to be transferred *by* the author *to* the publisher. The text remains the intellectual property of the author, but the exclusive right to put copies of that text up for sale, or give them away for free, then rests with the publisher.³⁸

Another reason the open access movement has focused on journal articles is because of the expense involved in publishing books in this fashion, since one of the main models of funding open access in the STEMs, author-side fees, 39 is not easily transferable either to book publishing or to the Humanities and Social Sciences (HSS). In contrast to the STMs, the HSS feature a large number of disciplines in which it is books (monographs in particular) published with esteemed international presses, rather than articles in highranking journals, that are considered as the most significant and valued means of scholarly communication. Authors in many fields in the HSS are simply not accustomed to paying to have their work published. What is more, many authors associate doing so with vanity publishing. 40 They are also less likely to acquire the grants from either funding bodies or their institutions that are needed to cover the cost of publishing 'author-pays'. That the HSS in many Western countries receive only a fraction of the amount of government funding the STEMs do only compounds the problem,41 as does the fact that higher rejection rates in the HSS, as compared to the STEMs, mean that any grants would have to be significantly larger, as the time spent on reviewing articles, and hence the amount of human labour used, makes it a much more intensive process.⁴² And that is just to publish journal articles. Publishing books on an author-pays basis would be more expensive still.

Yet even though the open access movement initially focused more on journal articles than on monographs, things have begun to change in this respect in recent years. Undoubtedly, one of the major factors behind this change has been the fact that the publication of books on an open access basis

has been perceived as one possible answer to the 'monograph crisis'. This phrase refers to the way in which the already feeble sustainability of the print monograph is being endangered even further by the ever-declining sales of academic books. 43 It is a situation that has in turn been brought about by 'the so-called "serials crisis", a term used to designate the vertiginous rise of the subscription to STEM journals since the mid-80s which... strangled libraries and led to fewer and fewer purchases of books/monographs'.44 This drop in library demand for monographs has led many presses to produce smaller print runs; focus on more commercial, marketable titles; or even move away from monographs to concentrate on text books, readers, and reference works instead. In short, conventional academic publishers are now having to make decisions about what to publish more on the basis of the market and a given text's potential value as a commodity, and less on the basis of its quality as a piece of scholarship. This last factor is making it difficult for early career academics to publish the kind of research-led monographs that are often needed to acquire that all important first full-time position. This in turn means the HSS is, in effect, allowing publishers to make decisions on its future and on who gets to have a long-term career on an economic basis, according to the needs of the market - or what they believe those needs to be. But it is also making it hard for authors in the HSS generally to publish monographs that are perceived as being difficult, advanced, specialised, obscure, radical, experimental or avant-garde - a situation reminiscent of the earlier state of events which led to the rise of artists' books, with the latter emerging in the context of a perceived lack of exhibition space for experimental and critical (conceptual) work within mainstream commercial galleries.

Partly in response to this 'monograph crisis', a steadily increasing number of initiatives have now been set up to enable authors in the HSS in particular to bring out books open access - not just introductions, reference works and text books, but research monographs and edited collections too. These initiatives include scholar-led presses such as Open Humanities Press, re.press, and Open Book Publishers; commercial presses such as Bloomsbury Academic; university presses, including ANU E Press and Firenze University Press; and presses established by or working with libraries, such as Athabasca University's AU Press. 45

Yet important though the widespread aspiration amongst academics, librarians and presses to find a solution to the monograph crisis has been, the reasons behind the development of open access book publishing in the HSS are actually a lot more diverse than is often suggested. For instance, to the previously detailed motivating factors that inspired the rise of the open access movement can be added the desire, shared by many scholars, to increase accessibility to (specialised) HSS research, with a view to heightening its reputation, influence, impact and esteem. This is seen as being especially significant at a time when the UK government, to take just one example, is emphasizing the importance of the STEMs while withdrawing support

of the Pennsylvania State University Press, provides the following example: 'Open Access STEM publishing is often funded with tax-payer dollars, with publication costs built into researchers' grant request ... the proposed NIH budget for 2013 is \$31 billion. NSF's request for 2013 is around \$7.3 billion. Compare those amounts to the NEH (\$154 million) and NEA (\$154 million) and you can get a feel for why researchers in the arts and humanities face challenges in funding their publication costs'. (Adeline Koh, 'Is Open Access a Moral or a Business Issue? A Conversation with The Pennsylvania State University Press, The Chronicle of Higher Education, July 10, 2012: http:// chronicle.com/blogs/ profhacker/is-openaccess-a-moral-ora-business-issue-aconversation-withthe-pennsylvaniastate-universitypress/41267)

42. See Mary Waltham's 2009 report for the National Humanities Alliance, 'The Future of Scholarly Journals Publishing among Social Sciences and Humanities Associations': http:// www.nhalliance.org/ research/scholarly communication/ index.shtml; and Peter Suber, 'Promoting Open Access in the Humanities', 2004: http://www.earlham. edu/~peters/writing/ apa.htm. 'On average, humanities

journals have higher rejection rates (70-90%) than STEM journals (20-40%)', Suber writes.

43. Greco and Wharton estimate that the average number of library purchases of monographs has dropped from 1500 in the 1970s to 200-300 at present. Thompson estimates that print runs and sales have declined from 2000-3000 (print runs and sales) in the 1970s to print runs of between 600-1000 and sales of between 400-500 nowadays. Albert N. Greco and Robert Michael Wharton, 'Should University Presses Adopt an Open Access [electronic publishing] Business Model for all of their Scholarly Books?', ELPUB. Open Scholarship: Authority, Community, and Sustainability in the Age of Web 2.0 - Proceedings of the 12th International Conference on Electronic Publishing held in Toronto, Canada 25-27 June 2008; John B. Thompson, Books in the Digital Age: The Transformation of Academic and Higher Education Publishing in Britain and the United States, Cambridge, Polity

44. Jean Kempf, 'Social Sciences and Humanities Publishing and the Digital "Revolution" unpublished manuscript, 2010: http://perso.univ-lyon2.fr/~jkempf/ Digital_SHS_ Publishing.pdf;

Press, 2005.

and funding for the HSS. Many scholars in the HSS are thus now willing to stand up against, and even offer a counter-institutional alternative to, the large, established, profit-led, commercial firms that have come to dominate academic publishing - and, in so doing, liberate the long-form argument from market constraints through the ability to publish books that often lack a clear commercial market.

TWO STRATEGIES: ACCESSIBILITY AND EXPERIMENTATION

That said, all of these reasons and motivating factors behind the recent changes in publishing models are still very much focused on making more scholarly research more accessible. Yet for at least some of those involved in the creation and dissemination of open access books, doing so also constitutes an important stage in the development of what might be considered more 'experimental' forms of research and publication; forms for which commercial and heavily print-based systems of production and distribution have barely provided space. Such academic experiments are thus perhaps capable of adopting a role akin to, if not the exact equivalent of, that we identified artists' books as having played in the countercultural context of the 1960s and 1970s: in terms of questioning the concept and material form of the book; promoting alternative ways of reading and communicating via books; and interrogating modern, romantic notions of authorship. We are thinking in particular of projects that employ open peer-review procedures (such as Kathleen Fitzpatrick's *Planned Obsolescence*, which uses the CommentPress Wordpress plugin to enable comments to appear alongside the main body of the text), wikis (e.g. Open Humanities Press' two series of Liquid and Living Books) and blogs (such as those created using the Anthologize app developed at George Mason University).46 These enable varying degrees of what Peter Suber calls 'author-side openness' when it comes to reviewing, editing, changing, updating and re-using content, including creating derivative works. Such practices pose a conceptual challenge to some of the more limited interpretations of open access (what has at times been dubbed 'weak open access'), 47 and can on occasion even constitute a radical test of the integrity and identity of a given work, not least by enabling different versions to exist simultaneously. In an academic context this raises questions of both a practical and theoretical nature that have the potential to open up a space for reimagining what counts as scholarship and research, and of how it can be responded to and accessed: not just which version of a work is to be cited and preserved, and who is to have ultimate responsibility for the text and its content; but also what an author, a text, and a work actually is, and where any authority and stability that might be associated with such concepts can now be said to reside.

It is interesting then that, although they can be positioned as constituting two of the major driving forces behind the recent upsurge in the current interest in open access book publishing, as 'projects', the at times more obviously or overtly 'political' (be it liberal-democratic, neoliberal or otherwise) project of using digital media and the Internet to create wider access to book-based research on the one hand, and experimenting - as part of the more conceptual, experimental aspects of open access book publishing - with the form of the book (a combination of which we identified as being essential components of the experimental and political potential of artists' books) and the way our dominant system of scholarly communication currently operates on the other, often seem to be rather disconnected. Again, a useful comparison can be made to the situation described by Lippard, where more (conceptually or materially) experimental artists' books were seen as being less accessible to a broader public and, in some cases, as going against the strategy of democratic multiples, promoting exclusivity instead.

It is certainly the case that, in order to further the promotion of open access and achieve higher rates of adoption and compliance among the academic community, a number of strategic alliances have been forged between the various proponents of the open access movement. Some of these alliances (those associated with Green open access, for instance) have taken making the majority if not indeed all of the research accessible online without a paywall (Gratis open access)48 as their priority, perhaps with the intention of moving on to the exploration of other possibilities, including those concerned with experimenting with the form of the book, once critical mass has been attained - but perhaps not. Hence Stevan Harnad's insistence that 'it's time to stop letting the best get in the way of the better: Let's forget about Libre and Gold OA until we have managed to mandate Green Gratis OA universally'. 49 Although they cannot be simply contrasted and opposed to the former (often featuring many of the same participants), other strategic alliances have focused more on gaining the trust of the academic community. Accordingly, they have prioritised allaying many of the anxieties with regard to open access publications - including concerns regarding their quality, stability, authority, sustainability and status with regard to publishers' copyright licenses and agreements - that have been generated as a result of the transition toward the digital mode of reproduction and distribution. More often than not, such alliances have endeavoured to do so by replicating in an online context many of the scholarly practices associated with the world of print-on-paper publishing. Witness the way in which the majority of open access book publishers continue to employ more or less the same quality control procedures, preservation structures and textual forms as their print counterparts: pre-publication peer review conducted by scholars who have already established their reputations in the paper world; preservation carried out by academic libraries; monographs consisting of numbered pages and chapters arranged in a linear, sequential order and narrative, and so on. As Sigi Jöttkandt puts it with regard to the strategy of Open Humanities Press in this respect:

Thompson, Books in the Digital Age, pp. 93-94

45. A list of publishers experimenting with business models for OA books is available at: http://oad.simmons.edu/oadwiki/Publishers_of_OA_books. See also Adema, Open Access Business Models.

46. See http://mediacommons.futureofthebook.org/mcpress/planned obsolescence; http://liquidbooks.pbwiki.com/; http://www.livingbooksaboutlife.org/; http://anthologize.org/.

47. See Peter Suber, SPARC OA newsletter, issue 155, March 2, 2011: http://www.earlham. edu/~peters/fos/ newsletter/03-02-11. htm

48. For an overview of the development of these terms, see: http://www.arl.org/sparc/publications/articles/gratisandlibre.shtml

49. Stevan Harnad, *Open Access: Gratis and Libre*, Open Access Archivangelism, Thursday, May 3, 2012. 50. Sigi Jöttkandt, 'No-fee OA Journals in the Humanities, Three Case Studies: A Presentation by Open Humanities Press', presented at the Berlin 5 Open Access Conference, From Practice to Impact: Consequences of Knowledge Dissemination, Padua, 19 September 2007, http:// openhumanities press.org/Jottkandt-Berlin5.pdf

51. Open **Humanities Press** (http://open humanitiespress. org/) and Media Commons Press (http://media commons.future ofthebook.org/ mcpress/) remain the most notable exceptions on the formal side of the publishing scale, the majority of experiments with the form of the book taking place in the informal sphere (e.g. blogbooks self-published by Anthologize, and crowd-sourced, 'sprint' generated books such as Dan Cohen and Tom Scheinfeldt's Hacking the Academy: http:// hackingtheacademy. org/).

52. See Peter
Suber on the BBB
definition here:
http://www.earlham.
edu/~peters/fos/
newsletter/09-02-04.
htm, where he
also states that
two of the three
BBB component
definitions (the
Bethesda and Berlin
statements) require
removing barriers to
derivative works.

We're intending OHP as a tangible demonstration to our still generally sceptical colleagues in the humanities that there is no reason why OA publishing cannot have the same professional standards as print. We aim to show that OA is not only academically credible but is in fact being actively advanced by leading figures in our fields, as evidenced by our editorial advisory board. Our hope is that OHP will contribute to OA rapidly becoming standard practice for scholarly publishing in the humanities.⁵⁰

Relatively few open access publishers, however, have displayed much interest in combining such an emphasis on achieving universal, free, online access to research and/or the gaining of trust, with a rigorous critical exploration of the form of the book itself.⁵¹ And this despite the fact that the ability to *re-use* material is actually an essential feature of what has become known as the Budapest-Bethesda-Berlin (BBB) definition of open access, which is one of the major agreements underlying the movement.⁵² It therefore seems significant that, of the books presently available open access, only a minority have a license where *price and permission* barriers to research are removed, with the result that the research is available under both *Gratis* and *Libre* (reuse) conditions.⁵³

REIMAGINING THE BOOK, OR RADICAL OPEN ACCESS

Admittedly, there are many in the open access community who regard the more radical experiments conducted with and on books as highly detrimental to the strategies of large-scale accessibility and trust respectively. From this perspective, efforts designed to make open access material available for others to (re)use, copy, reproduce and distribute in any medium, as well as make and distribute derivative works, coupled with experiments with the form of the book, are seen as being very much secondary objectives (and even by some as unnecessarily complicating and diluting open access's primary goal of making all of the research accessible online without a paywall).⁵⁴ And, indeed, although in many of the more formal open access definitions (including the important Bethesda and Berlin definitions of open access, which require removing barriers to derivative works), the right to re-use and re-appropriate a scholarly work is acknowledged and recommended, in both theory and practice a difference between 'author-side openness' and 'readerside openness' tends to be upheld - leaving not much space for the 'readerly interventions' that were so important in opening up the kind of possibilities for 'reading against the grain' that the artist's book promoted, something we feel (open access) scholarly works should also strive to encourage and support. 55 This is especially the case with regard to the publication of books, where a more conservative vision frequently holds sway. For instance, it is intriguing that in an era in which online texts are generally connected to a network of other information, data and mobile media environments, the open access book should for the most part still find itself presented as having definite limits and a clear, distinct materiality.

But if the ability to re-use material is an essential feature of open access - as, let us repeat, it is according to the Budapest-Bethesda-Berlin and many of other influential definitions of the term - then is working toward making all of the research accessible online on a Gratis basis and/or gaining the trust of the academic community the best way for the open access movement (including open access book publishing) to proceed, always and everywhere? If we do indeed wait until we have gained a critical mass of open access content before taking advantage of the chance the shift from analogue to digital creates, might it not by then be too late? Does this shift not offer us the opportunity, through its loosening of much of the stability, authority, and 'fixity' of texts, to rethink scholarly publishing, and in the process raise the kind of fundamental questions for our ideas of authorship, authority, legitimacy, originality, permanence, copyright, and with them the text and the book, that we really should have been raising all along? If we miss this opportunity, might we not find ourselves in a similar situation to that many book artists and publishers have been in since the 1970s, namely, that of merely reiterating and reinforcing established structures and practices?

Granted, following a *Libre* open access strategy may on occasion risk coming into conflict with those more commonly accepted and approved open access strategies (i.e. those concerned with achieving accessibility and the gaining of trust on a large-scale). Nevertheless, should open access advocates on occasion not be more open to adopting and promoting forms of open access that are designed to make material available for others to (re) use, copy, reproduce, distribute, transmit, translate, modify, remix and build upon? In particular, should they not be more open to doing so *right here*, *right now*, before things begin to settle down and solidify again and we arrive at a situation where we have succeeded merely in pushing the movement even further toward rather weak, watered-down and commercial versions of open access?

We began by looking at how, in an art world context, the idea and form of the book have been used to engage critically many of the established cultural institutions, along with some of the underlying philosophies that inform them. Of particular interest in this respect is the way in which, with the rise of offset printing and cheaper production methods and printing techniques in the 1960s, there was a corresponding increase in access to the means of production and distribution of books. This in turn led to the emergence of new possibilities and roles that the book could be put to in an art context, which included democratizing art and critiquing the status quo of the gallery system. But these changes to the materiality and distribution of the codex

53. An examination of the licenses used on two of the largest open access book publishing platforms or directories to date. the OAPEN (Open Access Publishing in Academic Networks) platform and the DOAB (Directory of Open Access Books), reveals that on the OAPEN platform (accessed May 6 2012) 2 of the 966 books are licensed with a CC-BY license, and 153 with a CC-BY-NC license (which still restricts commercial re-use). On the DOAB (accessed May 6 2012) 5 of the 778 books are licensed with a CC-BY license, 215 with CC-BY-NC.

54. See, for example, Stevan Harnad, *Open Access: Gratis and Libre*, Open Access Archivangelism, Thursday, May 3, 2012.

55. For more on author-side and reader-side openness respectively, see Peter Suber, SPARC OA newsletter: http://www.earlham.edu/~peters/fos/newsletter/03-02-11. htm

56. That said, there is currently something of a revival of print, craft and artist's book publishing taking place in which the paperbound book is being reimagined in offline environments. In this post-digital print culture, paper publishing is being used as a new form of avant-garde social networking that, thanks to its analog nature, is not so easily controlled by the digital data-gathering commercial hegemonies of Google, Amazon, Facebook et al. For more, see Alessandro Ludovico, 'Post-Digital Print - the Mutation of **Publishing Since** 1984', Onomatopee, 2012; and Florian Cramer, 'Post-Digital Writing', Electronic Book Review, December, 2012: http:// electronicbookreview. com/thread/ electropoetics/postal

57. For more details, see Wilhelm Peekhaus, 'The Enclosure and Alienation of Academic Publishing: Lessons for the Professoriate', tripleC, 10 (2), 2012: http://www.triple-c. at/index.php/tripleC/article/view/395

58. 'Accessibility, Sustainability, Excellence: How to Expand Access to Research Publications, Report of the Working Group on Expanding Access to Published Research Findings', June 18, 2012: http://www. book in particular - as an artistic product as well as a medium - were integrally linked with questions concerning the nature of both art and the book as such. Book artists and theorists thus became more and more engaged in the conceptual and practical exploration of the materiality of the book. In the end, however, the promise of technological innovation which underpinned the changes with respect to the production and distribution of artists' books in the 1960s and 1970s was not enough to generate any kind of sustainable (albeit repeatedly reviewed, refashioned and renewed) challenge within the art world over the longer term.

The artist's book of the 1960s and 1970s therefore clearly had the potential to bring about a degree of transformation, yet it was unable to elude the cultural practices, institutions and the market mechanisms that enveloped it for long (including those developments in financialisation and the art market Solomon-Godeau connects to the shift to Reaganomics). Consequently, instead of criticising or subverting the established systems of publication and distribution, the artist's book ended up being largely integrated into them. ⁵⁶ Throughout the course of this article we have argued that its conceptual and material promise notwithstanding, there is a danger of something similar happening to open access publishing today. Take the way open access has increasingly come to be adopted by commercial publishers. If one of the motivating factors behind at least some aspects of the open access movement - not just the aforementioned open access book publishers in the HSS, but the likes of PLoS, too - has been to stand up against, and even offer an alternative to, the large, profit-led firms that have come to dominate the field of academic publishing, recent years have seen many such commercial publishers experimenting with open access themselves, even if such experiments have so far been confined largely to journals.⁵⁷ Most commonly, this situation has resulted in the trialling of 'author-side' fees for the open access publishing of journals, a strategy seen as protecting the interests of the established publishers, and one which has recently found support in the Finch Report from a group of representatives of the research, library and publishing communities convened by David Willetts, the UK Science Minister.⁵⁸ But the idea that open access may represent a commercially viable publishing model has attracted a large amount of so-called predatory publishers, too,⁵⁹ who (like Finch and Willetts) have propagated a number of misleading and often quite mistaken accounts of open access.⁶⁰ The question is thus raised as to whether the desire to offer a counter-institutional alternative to the large, established, profit-led, commercial firms is likely to become somewhat marginalised and neutralised as a result of open access publishing being seen more and more by such commercial publishers as just another means of generating a profit. Will the economic as well as material practices transferred from the printing press continue to inform and shape our communication systems? As Nick Knouf argues, to raise this question, 'is not to damn open access publishing by any means; rather, it is to say that

open access publishing, without a concurrent interrogation of the economic underpinnings of the scholarly communication system, will only reform the situation rather than provide a radical alternative'. ⁶¹

With this idea of providing a radical challenge to the current scholarly communication system in mind, and drawing once again on the brief history of artists' books as presented above, might it not be helpful to think of open access less as a project and model to be implemented, and more as a process of continuous struggle and critical resistance? Here an analogy can be drawn with the idea of democracy as a process. In 'Historical Dilemmas of Democracy and Their Contemporary Relevance for Citizenship', the political philosopher Etiènne Balibar develops an interesting analysis of democracy based on a concept of the 'democratisation of democracy' he derives from a reading of Hannah Arendt and Jacques Rancière. For Balibar, the problem with much of the discourse surrounding democracy is that it perceives the latter as a model that can be implemented in different contexts (in China or the Middle East, for instance). He sees discourses of this kind as running two risks in particular. First of all, in conceptualizing democracy as a model there is a danger of it becoming a homogenizing force, masking differences and inequalities. Second, when positioned as a model or a project, democracy also runs the risk of becoming a dominating force - yet another political regime that takes control and power. According to Balibar, a more interesting and radical notion of democracy involves focusing on the process of the democratisation of democracy itself, thus turning democracy into a form of continuous struggle (or struggles) - or, perhaps better, continuous critical self-reflection. Democracy here is not an established reality, then, nor is it a mere ideal; it is rather a permanent struggle for democratisation.⁶²

Can open access be understood in similar terms: *less* as a homogeneous project striving to become a dominating model or force, and *more* as an ongoing critical struggle, or series of struggles? And can we perhaps locate what some perceive as the failure of artists' books to contribute significantly to such a critical struggle after the 1970s to the fact that ultimately they became (incorporated in) dominant institutional settings themselves - a state of affairs brought about in part by their inability to address issues of access, experimentation and self-reflexivity in an ongoing critical manner?

Certainly, one of the advantages of conceptualizing open access as a process of struggle rather than as a model to be implemented would be that doing so would create more space for radically different, conflicting, even incommensurable positions within the larger movement, including those that *are* concerned with experimenting critically with the *form of the book* and the way our system of scholarly communication currently operates. As we have shown, such radical differences are often played down in the interests of strategy. To be sure, open access can experience what Richard Poynder refers to as a 'bad tempered wrangles' over relatively 'minor issues' such as 'metadata, copyright, and distributed versus central archives'.⁶³ Still, much

researchinfonet. org/wp-content/ uploads/2012/06/ Finch-Group-report-FINAL-VERSIÓN. pdf. For one overview of some of the problems that can be identified from an HSS perspective in the policy direction adopted by Finch and Willetts, see Lucinda Matthews-Jones, 'Open Access and the Future of Academic Journals', Journal of Victorian Culture Online, November 21, 2012: http:// myblogs.informa. com/jvc/2012/11/21/ open-access-and-thefuture-of-academicjournals/

- 59. For a list of predatory OA publishers see: http:// scholarlyoa.com/ publishers/ This list has increased from 23 predatory publishers in 2011, to 225 in 2012.
- 60. See the reference to the research of Peter Murray Rust in Sigi Jöttkandt, 'No-fee OA Journals in the Humanities', op. cit.
- 61. Nicholas Knouf, 'The JJPS Extension: Presenting Academic Performance Information', *Journal of Journal Performance Studies*, 1 (2010).
- 62. Etienne Balibar, 'Historical Dilemmas of Democracy and Their Contemporary Relevance for Citizenship', Rethinking Marxism, 20 (2008).
- 63. Richard Poynder, 'Time to Walk the Walk', *Open and*

Shut?, 17 March, 2005: http:// poynder.blogspot. com/2005/03/timeto-walk-talk.html.

64. Chantal Mouffe, On the Political, London, Routledge, 2005, p11.

65. Ibid., p30.

of the emphasis has been on the importance of trying to maintain a more or less unified front (within certain limits, of course) in the face of criticisms from publishers, governments, lobbyists and so forth, lest its opponents be provided with further ammunition with which to attack the open access movement, and dilute or misinterpret its message, or otherwise distract advocates from what they are all supposed to agree are the main tasks at hand (e.g. achieving universal, free, online access to research and/or the gaining of trust). Yet it is important not to see the presence of such differences and conflicts within the open access movement in purely negative terms - the way they are often perceived by those working in the liberal tradition, with its 'rationalist belief in the availability of a universal consensus based on reason'.64 (This emphasis on the 'universal' is also apparent in fantasies of having not just universal open access, but one single, fully integrated and indexed global archive.) In fact if, as we have seen, one of the impulses behind open access is to make knowledge and research - and with it society - more open and democratic, it can be argued that the existence of such dissensus will help achieve this ambition. After all, and as we know from another political philosopher, Chantal Mouffe, far from placing democracy at risk, a certain degree of conflict and antagonism actually constitutes the very possibility of democracy.⁶⁵ It seems to us that such a critical, self-reflexive, processual, nongoal oriented way of thinking about academic publishing shares much with the mode of working of the artist - which is why we have argued that open access today can draw productively on the kind of conceptual openness and political energy that characterised experimentation with the medium of the book in the art world of the 1960s and 1970s.

MATERIALITIES OF INDEPENDENT PUBLISHING: A CONVERSATION WITH AAAAARG, CHTO DELAT?, I CITE, MUTE, AND NEURAL

Jodi Dean, Sean Dockray, Alessandro Ludovico, Pauline van Mourik Broekman, Nicholas Thoburn, and Dmitry Vilensky

Abstract This text is a conversation among practitioners of independent political media, focusing on the diverse materialities of independent publishing associated with the new media environment. The conversation concentrates on the publishing projects with which the participants are involved: the online archive and conversation platform AAAAARG, the print and digital publications of artist and activist group Chto Delat?, the blog I Cite, and the hybrid print/digital magazines Mute and Neural. Approaching independent media as sites of political and aesthetic intervention, association, and experimentation, the conversation ranges across a number of themes, including: the technical structures of new media publishing; financial constraints in independent publishing; independence and institutions; the sensory properties of paper and the book; the politics of writing; design and the aesthetics of publishing; the relation between social media and communicative capitalism; publishing as art; publishing as self-education; and post-digital print.

Keywords independent publishing, art publishing, activist publishing, digital archive, blog, magazine, newspaper

BETWEEN DISCOURSE AND ACT

Nicholas Thoburn (NT) In one way or another all of you have an investment in publishing as a political practice, where publishing might be understood loosely as a political 'gesture' located 'between the realm of discourse and the material act'. And in large measure, this takes the path of critical intervention in the form of the media with which you work - newspaper, blog, magazine, and digital archive. That is, media come forward in your publishing practice and writing as complex sets of materials, capacities, and effects, and as sites of political intervention and critical reflection.

The aim of this conversation is to concentrate on these materials, capacities, and effects of independent media (a term, 'independent media', that I use advisedly, given its somewhat pre-digital associations and a nagging feeling that it lacks purchase on the complexity of convergent media environments). I'm keen as much as possible to keep each of your specific

1. Nat Muller and Alessandro Ludovico, 'Of Process and Gestures: A Publishing Act', in Alessandro Ludovico and Natt Muller (eds) *The Mag.net Reader* 3, London, OpenMute, p6. publishing projects at the forefront of the conversation, to convey a strong sense of their 'materialities': the technical and aesthetic forms and materials they mobilise; what strategies of authorship, editorship, or collectivity they employ; how they relate to publics, laws, media paradigms, financial structures; how they model or represent their media form, and so on. To start us off, I would like to invite each of you to introduce your publishing project with a few sentences: its aims, the mediums it uses, where it's located, when established - that kind of thing.

Jodi Dean (JD) I started my blog, *I Cite*, in January 2005. It's on the Typepad platform. I pay about 20 dollars a year for some extra features.

I first started the blog so that I could 'talk' to people in a format that was not an academic article or an email. Or maybe it's better to say that I was looking for a medium in which to write, where what I was writing was not immediately constrained by the form of an academic piece, written alone, appearing once and late, if at all, or by the form of an email which is generally of a message sent to specific people, who may or may not appreciate being hailed or spammed every time something occurs to me.

There was another reason for starting the blog, though. I had already begun formulating my critique of communicative capitalism (in the book *Publicity's Secret* and in a couple of articles).² I was critical of the way that participatory media entraps people into a media mentality, a 24/7 mindset of reaching an audience and competing with the mainstream press. I thought that if my critique is going to be worth anything, I better have more firsthand experience, from the very belly of the beast.

Alessandro Ludovico (AL) I'm the editor in chief of Neural, a printed and online magazine established in 1993 in Bari (Italy) dealing with new media art, electronic music and hacktivism. It's a publication which beyond being committed to its topics, always experimented with publishing in various ways. Furthermore, I'm one of the founders (together with Simon Worthington of Mute and a few others) of Mag.net, electronic cultural publishers, a network of magazines related to new media art whose slogan is: 'collaboration is better than competition'. Finally, I'm finishing a book called Post-Digital Print, about the historical and contemporary relationship between offline and online publishing.³

Sean Dockray (SD) About five years ago, I wrote this description:

AAAARG is a conversation platform - at different times it performs as a school, or a reading group, or a journal.

AAAARG was created with the intention of developing critical discourse outside of an institutional framework. But rather than thinking of it like a new building,

2. Jodi Dean, Publicity's Secret: How Technoculture Capitalizes on Democracy, London, Cornell University Press, 2002.

3. Alessandro Ludovico, Post-Digital Print: The Mutation of Publishing Since 1894, Eindhoven, Onomatopee, 2012. imagine scaffolding that attaches onto existing buildings and creates new architectures between them.

More straightforwardly, the project is a website where people share texts: usually PDFs, anything from a couple of inspiring pages to a book or a collection of essays. The people who use the site tend to be writers, artists, organizers, activists, curators, architects, librarians, publishers, designers, philosophers, teachers, or students themselves. Although the texts are most often in the domain of critical or political theory, there are also technical documents, legal decisions, works of fiction, government declarations, poetry collections and so on. There is no moderation.

It's hard to imagine it now as anything other than it is - which is really a library, and not a school, a reading group, or a journal! Still, AAAARG supports quite a few self-organised reading groups, it spawned a sister project called The Public School, and now produces a small online publication, 'Contents'. It's used by many people in many ways, and even when that use is 'finished,' the texts remain available on the site for others to use as a shared resource.

Dmitry Vilensky (DV) The workgroup Chto Delat? (What Is to Be Done?) has been publishing a newspaper, of the same name, since 2003. The newspaper was edited by myself and David Riff (2003-2008) in collaboration with the workgroup Chto Delat?, and since 2008 is mostly edited by me in collaboration with other members of the group.

The newspaper is bilingual (Russian and English), and appears on an irregular basis (roughly 4-5 times a year). It varies between 16 and 24 pages (A3). Its editions (1,000-9,000 copies) are distributed for free at different cultural events, exhibitions, social forums, political gatherings, and universities, but it has no fixed network of distribution. At the moment, with an on-line audience much bigger than that for the paper version of the newspaper, we concentrate more on newspapers as part of the exhibition and contextualisation of our work - a continuation of art by other means.

Each newspaper addresses a theme or problem central to the search for new political subjectivities, and their impact on art, activism, philosophy, and cultural theory. So far, the rubrics and sections of the paper have followed a free format, depending on theme at hand. There are no exhibition reviews. The focus is on the local Russian situation, which the newspaper tries to link to a broader international context. Contributors include artists, art theorists, philosophers, activists, and writers from Russia, Western Europe and the United States.

It is also important to focus on the role of publication as translation device, something that is really important in the Russian situation – to introduce different voices and languages and also to have a voice in different international debates from a local perspective.

Pauline van Mourik Broekman (PvMB) After so many years - we've been at it for 17! - I seem to find it harder and harder to figure out what 'Mute' is. But sticking to the basic narrative for the moment, it formed as an artist-initiated publication engaging with the question of what new technologies (read: the internet and convergent media) meant for artistic production; asking whether, or to what degree, the internet's promise of a radically democratised space, where a range of gate-keepers might be challenged, would upset the 'art system' as was (and sadly, still is). Since that founding moment in 1994, when Mute appeared appropriating the format of the Financial Times, as producers we have gradually been forced to engage much more seriously - and materially - with the realities of Publishing with a capital 'P'. Having tried out six different physical formats in an attempt to create a sustainable niche for Mute's critical content - which meanwhile moved far beyond its founding questions - our production apparatus now finds itself strangely distended across a variety of geographic, institutional, professional and social spaces, ranging from the German Leuphana University (with whom we have recently started an intensive collaboration), to a series of active email lists, to a small office in London's Soho. It will be interesting to see what effect this enforced virtualisation, which is predominantly a response to losing our core funding from Arts Council England, will have on the project overall.4 Our fantastic and long-serving editorial board are thankfully along for the ride. These are: Josephine Berry Slater, Omar El-Khairy, Matthew Hyland, Anthony Iles, Demetra Kotouza, Hari Kunzru, Stefan Szczelkun, Mira Mattar and Benedict Seymour.

4. See Pauline van Mourik Broekman (2011) 'Mute's 100% Cut by ACE - A Personal Consideration of Mute's Defunding', http://www. metamute.org/en/ mute_100_per_cent_ cut_by_ace

WRITING POLITICS

NT Many thanks for your introductory words; I'm very pleased - they set us off in intriguing and promising directions. I'm struck by the different capacities and aims that you've highlighted in your publishing projects. Moving now to focus on their specific features and media forms, I'd like us to consider first the question of political writing, which comes across most apparently in the descriptions from Jodi and Dmitry of *I Cite* and Chto Delat?. This conversation aims to move beyond a narrow focus on textual communication, and we will do so soon, but writing is clearly a key component of the materialities of publishing. Political writing published more or less independently of corporate media institutions has been a central aspect of the history of radical cultures. Régis Debray recently identified what he calls the 'genetic helix' of socialism as the book, the newspaper, and the school/party.⁵ He argues, not uniquely, that in our era of the screen and the image, this nexus collapses, taking radical politics with it - it's a gloomy prognosis.

Jodi and Dmitry, whether or not you have some sympathy for Debray's diagnosis, I think it is true to say that political writing still holds for you some kind of political power, albeit that the conjunction of writing and radicalism

5. Régis Debray, 'Socialism: A Life-Cycle', *New Left Review* 46 (2007): 5-28.

has become most complicated. Dmitry, you talk of the themes of *Chto Delat?* newspapers contributing to a 'search for new political subjectivities'. Can you discuss any specific examples of that practice - however tentative or precarious they may be - from the concrete experience of publishing *Chto Delat?* Also, I'm interested in the name of your group, 'What Is to Be Done?' What effect does a name with such strong associations to the Russian revolutionary tradition have in Russia - or indeed the US and elsewhere - today? I'm reminded of course that it is in Lenin's pamphlet of that title that he sets out his understanding of the party newspaper as 'collective organiser' - not only in its distribution and consumption, but in its production also. How do you relate to that model of the political press?

And Jodi, with regard to your comment about *I Cite* enabling a different mode of 'talk' or 'writing' to that of academic writing or email, is there a *political* dimension to this? Put another way, you have been exploring the theme of 'communism' in your blog, but does this link up with the communicative form of blog talk at all - or are blogs always and only in the 'belly of the beast'?

ID Is there a political dimension to I Cite's enabling a different mode of 'talk' or 'writing'? This is hard. My first answer is no. That is, the fact of blogging, that there are blogs and bloggers, is not in itself any more politically significant than the fact that there is television, radio, film, and newspapers. But saying this immediately suggests the opposite and I need to answer yes. Just as with any medium, blogs have political effects. Much of my academic writing is about the ways that networked communication supports and furthers communicative capitalism, helping reformat democratic ideals into means for the intensification of capitalism - and hence inequality. Media democracy, mass participation in personal media, is the political form of neoliberal capitalism. Many participate, a few profit thereby. The fact that I talk about communism on my blog is either politically insignificant or significant in a horrible way. As with the activity of any one blog or blogger, it exemplifies and furthers the hold of capitalism as it renders political activity into individual acts of participation. Politics becomes nothing but the individual's contribution to the flow of circulating media.

Well, this is a pretty unpleasant way for me to think about what I do on *I Cite*, why I have kept track of the extremes of finance capital for over five years, why I blog about Žižek's writing, why I've undertaken readings of Lenin, etc. And lately, since the Egyptian revolution, the mass protests in Greece and Spain, and the movement around Occupy Wall Street in the US, I've been wondering if I've been insufficiently dialectical or have overplayed the negative. What this amazing outpouring of revolutionary energy has made me see is the collective dimension of blogs and social media. The co-production of a left communicative common, that stretches across media and is constituted through photos and videos uploaded from the occupations,

massive reposting, forwarding, tweeting, and lots of blog commentary, and that includes mainstream journalistic outlets like the *Guardian*, Al Jazeera, and the *New York Times*, this new left communicative common seems, for now at any rate, to have an urgency and intensity irreducible to any one of its nodes. It persists as the flow between them and the way that this flow is creating something like its own media storm or front (I'm thinking in part here of some of the cool visualisations of October 15 on Twitter - the modelling of the number of tweets regarding demonstrations in Rome looks like some kind of mountain or solar flare). I like thinking of *I Cite* as one of the thousands of elements contributing to this left communicative common.

DV When I talk about a 'search for new political subjectivities' I mean, first of all, that we see our main task as an educational process - to research certain issues and try to open up the process of research to larger audiences who could start to undertake their own investigations. Formally, we are located in the art world, but we are trying to escape from the professional art public and address the issues that we deal with to audiences outside of the art world. We also have a very clear political identification embodied in the name of our collective. The question of 'What is to be done?' is clearly marked by the history of leftist struggle and thinking. The name of our group is an actualisation of the history of the workers' movement and revolutionary theory in Russia. The name in itself is a gesture of actualisation of the past. I was very glad when the last Documenta decided to choose the same title for their leitmotif on education, so that now a rather broad public would know that this question comes from a novel written by the Russian nineteenth century writer Nikolai Chernyshevsky, and directly refers to the first socialist workers' self-organisation cells in Russia, which Lenin later actualised in his famous 1902 pamphlet What Is to Be Done? Chto Delat? also sees itself as a self-organizing collective structure that works through reflections on, and redefinitions of, the political engagement of art in society.

To be engaged means for us that we practice art as a production of knowledge, as a political and economic issue - and not a solitary contemplation of the sublime or entertainment for the ruling class. It means to be involved with all the complexities of contemporary social and political life and make a claim that we, with all our efforts, are able to influence and change this condition for the better. Whatever one means by 'better', we have an historical responsibility to make the world more free, human and to fight alienation.

To openly display one's leftism in the Russian historical moment of 2003 was not only a challenge in the sense of an artistic gesture; it also meant adopting a dissident civic stance. For my generation, this was a kind of return to Soviet times, when any honest artist was incapable of having anything to do with official culture. In the same way, for us the contemporary Russian art establishment had become a grotesque likeness of late-Soviet official culture, to which it was necessary to oppose other values. So this was not a particularly

unique experience for us: we simply returned to our dissident youth. Yet at the same time, in the 2000s, we had more opportunities to realise ourselves, and we saw ourselves as part of an overall movement. Immediately after us, other new civic initiatives arose with which it was interesting to cooperate: among them, the Pyotr Alexeev Resistance Movement (2004), the Institute for Collective Action (2004), the Vpered Socialist Movement (2005), and the Russian Social Forum (2005). It was they who became our main reference group: we still draw our political legitimacy from our relationships with them and with a number of newer initiatives that have clearly arisen under our influence.

At the same time, having positioned our project as international, we began discovering new themes and areas of struggle: the theory of the multitude, immaterial labour, social forums, the movement of movements, urban studies, research into everyday life, etc. We also encountered past thinkers (such as Cornelius Castoriadis and Henri Lefebvre) who were largely absent from Russian intellectual discourse, as well as newer figures that were much discussed at that time (such as Negri, Virno, and Rancière). There was a strong sense of discovery, and this always gives one a particular energy. We consciously strove to take the position of Russian cultural leftists who were open-minded and focused on involvement in international cultural activist networks, and we have been successful in realizing this aim.

MAGAZINE PLATFORM

NT I was a little concerned that starting a conversation about the 'materialities' of publishing with a question about writing and text might lead us in the wrong direction, but as is clear from Jodi's and Dmitry's comments, writing is of course a material practice with its own technological and publishing forms, cognitive and affective patterns, temporal structures, and subjectifying powers.

With regard to the materialities of digital publishing, your description, Jodi, of a 'media storm' emerging from the Occupy movement is very suggestive of the way media flows can aggregate into a kind of quasi-autonomous entity, taking on a life of its own that has agential effects as it draws participants up into the event. In the past that might have been the function of a manifesto or slogan, but with social media, as you suggest, the contributing parts to this agential aggregate become many and various, including particular blogs, still and moving image files, analytic frameworks, slogans or memes ('We are the 99%'), but also more abstract forms such as densities of reposting and forwarding, and, in that wonderful 'VersuS' social media visualisation you mention, cartographies of data flow. Here a multiplicity of social media communications, each with their particular communicative function on the day, are converted into a strange kind of collective, intensive entity, a digital 'solar flare' as you put it.⁶ Its creators, 'Art is Open Source', have made some intriguing comment about how this intensive mapping might be used

6. Art Is Open Source, 'VersuS - Rome, October 15th, the Riots on Social Networks', http://www. artisopensource. net/2011/10/16/ versus-rome-october-15th-the-riots-onsocial-networks/

7. See http:// upload.wikimedia. org/wikipedia/ commons/2/24/ Chartist meeting%2C Kennington_ Common.jpg

tactically in real time and, subsequently, as a means of rethinking the nature and representational forms of collective action - it would be interesting in this regard to compare the representational effects of this Twitter visualisation with the photograph of the 1848 'monster meeting' of the Chartists in Kennington Common, said to be the first photograph of a crowd.⁷

But returning to your own publishing projects, I'm keen to hear more from Pauline and Sean about the technical and organizational structure of Mute and AAAAARG. Pauline, as *Mute* has developed from a printed magazine to the current 'distended' arrangement of different platforms and institutions, has it been accompanied by changes in the way the editorial group have characterised or imagined *Mute* as a project? And can you comment more on how *Mute*'s publishing platforms and institutional structures are organised? I would be interested to hear too if you see *Mute* as having any kind of agential effects or quasi-autonomy, along the lines mentioned above - are there ways in which the magazine itself serves to draw certain relations between people, things, and events?

PvMB Reading across these questions I would say that, in Mute's case, a decisive role has been played by the persistently auto-didactic nature of the project; also the way we tend to see-saw between extreme stubbornness and extreme pragmatism. Overall, our desire has been, simply, to produce the editorial content that feels culturally, socially, politically 'necessary' in the present day (and of course this is historically and even personally contingent; a fundamentally embodied thing), and to find and develop the forms in which to do that. These forms range from textual and visual styles and idioms (artistic, experimental, academic, journalistic), the physical carriers for them, and then the software systems and infrastructures for which these are also converted and adapted. It bears re-stating that these need to be ones we are able to access, work with; and that grant us the largest possible audience for our work.

If you mix this 'simple' premise with the cultural and economic context in which we found ourselves in the UK, then you have to account for its interaction with a whole raft of phenomena, ranging from the dot com boom and yBa cultures of the '90s; the New Labour era (with its Creative Industries and Regeneration-centric funding programmes); the increasing corporatisation of mainstream cultural institutions and media; the explosion of cheap, digital tools and platforms; the evolution of anti-capitalist struggles and modes of activism; state incursion into/control over all areas of the social body; discourses around self-organisation; the financial crisis; and so on and so forth. In this context, which was one of easy credit and relatively generous state funding for culture, Mute for a long time did manage to eek out a place for its activity, adapting its working model and organisational economy in a spirit of - as I said - radical pragmatism. The complex material and organisational form that has resulted from this (which, to some people's

surprise, includes things like consultancy services in 'digital strategy' aimed at the cultural sector, next to broadly leftist cultural critique) may indeed have some kind of agential power, but it is really very hard to say what it is, particularly since we resist systematic analysis of, and 'singularising' into, homogenous categories of 'audience' or 'client base'.

Listening to other small, independent publications analyse their developmental process (like I recently did with, to name one example, the journal Collapse), I think there are certain processes at play which recur in many different settings.8 For me the most interesting and important of these is the way that a journal or magazine can act as a kind of connection engine with 'strangers', due to its function as a space of recognition, affinity, or attractive otherness (with this I mean that it's not just about recognising and being semi-narcissistically drawn to an image of oneself, one's own subjectivity and proclivities; but the manner readers are drawn to 'alien' ideas that are nonetheless compelling, troubling, or intriguing - hence drawing them into the reader - and potentially even contributor - circle of that journal). If there's quite an intense editorial process at the 'centre' of the journal - like there is, and has always been, with Mute - then this connection-engine draws people in, propels people out, in a continual, dynamic process, which, due to its intensity, very effectively blurs the lines of 'professionalism', friendship, editorial, social, political praxis.

For fear of being too waffley or recherché about this, I'd say this was - if any - the type of agential power *Mute* also had, and that this becomes heavily internationalised by dint of its situation on the Internet. In terms of how Editors then conjure that, each one would probably do it differently - some seeing it more like a traditional (print) journal, some getting quite swallowed up by discourses around openness/distributedness/community-participation. Aspects of that characterisation have probably also changed over time, in the sense that, circa 2006/7, we might have held onto a more strictly autonomous figure for our project, which is something I don't think even the most hopeful are able to do now – given our partnerships with an 'incubator' project in a university (Leuphana), or our state funding for a commercially oriented publishing-technology project (Progressive Publishing System / PPS). 9 Having said all that, the minute any kind of direct or indirect manipulation of content started to occur, our editors would cease to be interested, so whatever institutional affiliations we might be open to now that we would not have been several years ago, it remains a delicate balance.

ARCHIVE SCAFFOLDING

NT Sean, you talk very evocatively of AAAAARG as a generative 'scaffolding' between institutions. Can you say more about this? Does this image of scaffolding relate to discourses of media 'independence' or 'institutional critique'? And if scaffolding is the more abstract aspect of AAAAARG - its

8. http://www. afterall.org/online/ publicationsuniaayp; http:// urbanomic.com/ index.php

9. http://www. metamute.org/ services/r-d/ progressivepublishing-system governing image - can you talk concretely about how specific aspects of the AAAAARG platform function to further (and perhaps also obstruct) the scaffolding? It would be interesting to hear too if this manner of existence runs into any difficulties - do some institutions object to having scaffolding constructed amidst them?

SD The image of scaffolding was simply a way of describing an orientation with respect to institutions that was neither inside nor outside, dependent nor independent, reformist or oppositional, etc. At the time, the institutions I meant were specifically Universities, which seemed to have absorbed theory into closed seminar rooms, academic formalities, and rarefied publishing worlds. Especially after the momentum of the anti-globalisation movement ran into the aftermath of September 11, criticality had more or less retreated, exhausted within the well-managed circuits of the academy. 'Scaffolding' was meant to allude to both networked communication media and to prefigurative, improvisational quasi-institutions. It suggested the possibility of the office worker who shuts her door and climbs out the window.

How did AAAAARG actually function with respect to this image? For one, it circulated scans of books and essays outside of their normal paths (trajectories governed by geographic distribution, price, contracts, etc.) so that they became available for people that previously didn't have access. People eventually began to ask others for scans or copies of particular texts, and when those scans were uploaded they stayed available on the site. When a reading group uploaded a few texts as a way to distribute them among members, those texts also stayed available. Everything stayed available. The concept of 'Issues' provided a way for people to make subjective groupings of texts, from 'anti-austerity encampment movements' to 'DEPOSITORY TO POST THE WRITTEN WORKS OF AMERICAN SOCIALISM. NO SOCIAL SCIENCES PLEASE.' These groupings could be shared so that anyone might add a text into an Issue, an act of collective bibliography-making. The idea was that AAAAARG would be an infinite resource, mobilised (and nurtured) by reading groups, social movements, fringe scholars, temporary projects, students, and so on.

My history is too general to be accurate and what I'm about to write is too specific to be true, but I'll continue anyway: due in part to the seductiveness of *The Coming Insurrection* as well as the wave of student occupations beginning in 2009 (many accompanied by emphatic communiqués with a theoretical force and refusal to make demands) it felt as though a plug had been pulled. Or maybe that's just my impression. But the chain of events - from the revolution in Tunisia to Occupy Everything, but also the ongoing haemorrhaging of social wealth into the financial industry - has certainly re-oriented political discourse and one's sense of what is possible.

As regards your earlier question, I've never felt as though AAAARG has had any agential power because it's never really been an agent. It didn't speak or make demands; it's usually been more of a site of potential or vision of what's coming (for better or worse) than a vehicle for making change. Compared to publishing bodies, it certainly never produced anything new or original, rather it actively explored and exploited the affordances of asynchronous, networked communication. But all of this is rather commonplace for what's called 'piracy,' isn't it?

Anyway, yes, some entities did object to the site - AAAARG was ultimately taken down by the publisher Macmillan over certain texts, including *Beyond Capital*.

NT AAAAARG's name has varied somewhat over time. Can you comment on this? Does its variability relate at all to the structure and functionality of the web?

SD When people say or write the name they have done it in all kinds of different ways, adding (or subtracting) As, Rs, Gs, and sometimes Hs. It's had different names over time, usually adding on As as the site has had to keep moving. Since this perpetual change seems to be part of the nature of the project, my convention has been to be deliberately inconsistent with the name.

I think one part of what you're referring to about the web is the way in which data moves from place to place in two ways - one is that it is copied between directories or computers; and the other is that the addressing is changed. Although it seems fairly stable at this point, over time it changes significantly with things slipping in and out of view. We rely on search engines and the diligence of website administrators to maintain a semblance of stability (through 301 redirects, for example) but the reality is quite the opposite. I'm interested in how things (files or simply concepts) circulate within this system, making use of both visibility and invisibility. Another related dimension would be the ease of citation, the ways in which both official (executed internally) and unofficial (accomplished from the outside) copies of entire sites are produced and eventually confront one another. I've heard of people who have backed up the entirety of AAAAARG, some of whom even initiate new library projects (such as Henry Warwick's Alexandria project). The inevitable consequence of all of this seems to be that the library manifests itself in new places and in new ways over time - sometimes with additional As, but not always.

EXPERIMENTING WITH MEDIA FORM

NT The expression 'independent media' may still have some tactical use to characterise a publishing space and practice in distinction from commercial media, but it's clear from what Pauline and Sean say here that *Mute* and AAAAARG have moved a long way from the analytic frameworks of media 'independence' as some kind of autonomous or liberated media space. We might characterise these projects more as 'topological' media forms: neither

inside nor outside institutions, but emergent from the interaction of diverse platforms, political conjunctures, contributors, readers, concepts, and financial or legal structures. Media projects in this image of topology would be immanent to those diverse material relations, not delimited and autonomous bodies carved out from them. (Not, of course, that this kind of distributed and mutable structure in itself guarantees progressive political effects.)

I'd like to continue with this discussion of media form and consider in more detail some specific instances of experimentation with publishing practice. It seems to me that it is significant that most of you have a relation to art practice. The work that Humanities researchers and political activists generate with poststructuralist or Marxist theory should necessarily be self-critical of its textual and media form, but it frequently fails to be so. Whereas reflexive approaches would seem to be less easily avoided in art practice, at least once it engages with the same body of theory - shoot me down if that's naive! In any case, I would venture that experimentation in publishing form has a central place in the media projects we're discussing. Alessandro, you make that point, above, that *Neural* has 'always experimented with publishing in various ways'. Can you describe particular examples? It would be very interesting to hear from you about *Neural* in this regard, but also about your art projects 'Amazon Noir' and 'Face to Facebook'.

AL *Neural* started surrounded by the thrills of the rising global 'telematic' networks in 1993, reflecting an interest in intertwining culture and technology with publishing (either cyberpunk science fiction, internet artworks, or hacker technologies and practices) in both print and digital media. So, printing a magazine about digital art and culture in that historical moment meant to be surrounded by stimuli that pushed beyond the usual structural design forms and conceptual paradigms of publishing. After almost two decades we can recognise also that that time was the beginning of the most important mutation of publishing, through its new networked, screen-based and real time dimensions. And the printed page started also to have a different role in the late 2000s, but this role is still to be extensively defined.

At that time, in the mid-1990s, *Neural* tried to experiment with publishing through different perspectives. First, aesthetically: the page numbering was strictly in binary numbers, just zeros and ones, even if the printer started to complain that this was driving him crazy. But also sensorially: we referred to optical art, publishing large 'optical' artworks in the centrefold; and we published 'stereograms' apparently rude black and white images, that when viewed from a different angle revealed a three-dimensional picture, tricking the readers' eyes and drawing them into a new visual dimension for a while. And finally, politically: in issue #18 we published a hacktivist fake, a double page of fake stickers created by the Italian hacker laboratories' network. These fake stickers sarcastically simulated the real ones that are mandatory on any book or CD/DVD sold in Italy, because of the strict law supporting the

national Authors' and Musicians' Society (SIAE). On the ones we published the 'Unauthorized Duplication Prohibited' sentence was replaced by: 'Suggested Duplication on any Media'.

As another example, in issue #30 we delivered 'Notepad' to all our subscribers - an artwork by the S.W.A.M.P. duo. It was an apparently ordinary yellow legal pad, but each ruled line, when magnified, reveals itself to be 'microprinted' text enumerating the full names, dates, and locations of each Iraqi civilian death on record over the first three years of the Iraq War. And in issue #40 we've printed and will distribute in the same way a leaflet of the Newstweek project (a device which hijacks online major news websites, changing them while you're accessing internet on a wireless network) that at first glance seems to be a classic telco corporate leaflet ad. All these examples try to expand the printed page to an active role that transcends its usual mode of private reading.

With these and other experiments in publishing, we've tried to avoid the *ephemerality* that is the norm in 'augmented' content, where it exists just for the spectacular sake of it. Placing a shortcut to a video through a QR code can be effective if the connection between the printed resource and the online content is not going to disappear soon, otherwise the printed information will remain but the augmentation will be lost. And instead of augmenting the experience in terms of entertainment, I'm much more in favour of triggering specific actions (like supporting the online processes) and changes (like taking responsibility for activating new online processes) through the same smartphone-based technologies.

Another feature of our experimentation concerns the archive. The printing and distribution of paper content has become an intrinsic and passive form of archiving, when this content is preserved somewhere by magazine consumers, in contrast to the potential disposability of online content which can simply disappear at any minute if the system administrator doesn't secure enough copies. This is why I've tried to develop both theoretically and practically the concept of the 'distributed archive', a structure where people personally take the responsibility to preserve and share printed content. There are already plenty of 'archipelagos' of previously submerged archives that would emerge, if collectively and digitally indexed, and shared with those who need to access them. I'm trying to apply this to *Neural* itself in the 'Neural Archive' project, an online database with all the data about the publications received by *Neural* during the years, which should be part of a larger network of small institutions, whose final goal would be to test and then formulate a viable model to easily build and share these kind of databases.

Turning to my projects outside of *Neural*, these social and commercial aspects of the relation between the materiality of the printed page and the manipulability of its digital embodiment were foregrounded in Amazon Noir, an artwork which I developed with Paolo Cirio and Ubermorgen.¹⁰ This work explored the boundaries of copyrighting text, examining the intrinsic

10. http://amazonnoir.com/

technological paradox of protecting a digital text from unauthorised copying, especially when dealing with the monstrous amount of copyrighted content buyable from Amazon.com. Amazon features a powerful and attractive marketing tool called 'Search Inside the Book' which allows potential customers to search the entire text of a book; Amazon Noir merely exploited this mechanism by stretching it to its own logical conclusion. The software script we used obtained the entire text and then automatically saved it as a PDF file: once we had established the first sentence of the text, the software then used the last words of this sentence as a search term for retrieving the first words of the next sentence. By reiterating this process (a total of 2,000 to 3,000 queries for an average book) and automatically reconstructing the fragments, the software ended up collecting the entire text. In order to better visualise the process, we created an installation: two overhead projectors, displaying the project's logo and a diagram of the internal workings of our software, as well as a medical incubator containing one of the 'stolen' (and digitally reprinted) books. The book we chose to 'steal' was (of course) Steal This Book, the American 1970s counterculture classic by the activist Abbie Hoffman. In a sense, we literally 're-incarnated' the book in a new, mutated physical form. But we also put up a warning sign near the incubator:

The book inside the incubator is the physical embodiment of a complex Amazon.com hacking action. It has been obtained exploiting the Amazon 'Search Inside The Book' tool. Take care because it's an illegitimate and premature son born from the relationship between Amazon and Copyright. It's illegitimate because it's an unauthorized print of a copyright-protected book. And it's premature because the gestation of this relationship's outcome is far from being mature.

We asked ourselves: what's the difference between digitally scanning the text of a book we already own, and obtaining it through Amazon Noir? In strictly conceptual terms, there is no difference at all, other then the amount of time we spent on the project. We wished to set up our own Amazon, definitively circumventing the confusion of endless purchase-inducing stimuli. So we stole the hidden and disjointed connections between the sentences of a text, to reveal them for our own amusement and edification; we stole the digital implementation of synaptic connections between memories (both human and electronic) created by a giant online retailer in order to amuse and seduce us into compulsive consumption; we were thieves of memory (in a McLuhanian sense), stealing for the right to remember, the right to independently and freely construct our own physical memory.

Finally, in Face to Facebook (developed again with Paolo Cirio and part of the 'Hacking Monopolism' trilogy together with Amazon Noir and Google Will Eat Itself) we 'stole' 1 million Facebook profiles' public data, filtering them through their profile pictures with face-recognition software, and then

11. http://www.face-to-facebook.net/

posted all the filtered data on a custom-made dating website, sorted by their facial expression characteristics. 11 In the installation we produced, we glued more than 1,700 profile pictures on white-painted square wood panels, and projected also the software diagram and an introductory video. Here the 'printed' part deals more with materializing 'stolen' personal online information. The 'profile pictures' treated as public data by Facebook, and scraped with a script by Paolo and me, once properly printed are a terrific proof of our online fragility and at the same time of how 'printing' is becoming a contemporary form of 'validation'. In fact we decided to print them on the type of photographic paper once used for passport pictures (the 'silk' finish). The amazing effect of all these faces together was completely different when visualised in a video ('overwhelming' when zooming in and out), printed with ink-jet printers ('a huge amount of recognisable faces'), and on its proper 'validating' medium, photographic paper (giving the instant impression that 'all those people are real'). What does it mean when the picture (with your face) with which you choose to represent yourself in the potential arena of 700 Millions Facebook users is printed, re-contextualised, and exhibited somewhere else, with absolutely no user control? Probably, it reinforces the concept that print still has a strong role in giving information a specific status, because more than five centuries of the social use of print have developed a powerful instinctive attitude towards it.

POST-DIGITAL PRINT AND THE FUTURE OF THE BOOK

NT What you say here Alessandro about *Neural's* concern to 'expand the printed page' is very suggestive of the possibilities of print in new media environments. Could you comment more on this theme by telling us how you understand 'post-digital print', the topic of your current book project?

AL Post-Digital Print: the Mutation of Publishing since 1894 is the outcome of quite extensive research that I carried out at the Willem De Kooning Academy as guest researcher in the Communication Design program run by Florian Cramer. The concept behind it is to understand both historically and strategically the new role of print in the 2010s, dealing with the prophets of its death and its digital competitors, but also its history as something of a perfect medium, the oldest still in use and the protagonist of countless media experiments, not to mention its possible evolution and further mutations. The concept of post-digital print can be better explained through a description of a few of its chapters. In the first chapter, I analyze ten different moments in history when the death of paper was announced (before the digital); of course, it never happened, proving that perhaps even current pronouncements will prove to be mistaken (by the way, the first one I've found dates back to 1894, which explains the subtitle). In the second chapter I've tried to track a history of how avant-garde and underground movements have used print

tactically or strategically, reflecting or anticipating its evolutions. In the third chapter I go deeper in analyzing the 'mutation' of paper in recent years, and what 'material paper represents in immaterial times'. And the sixth chapter addresses the basis on which print can survive as an infrastructure and a medium for sharing content and experience, and also as a way of generating collective practice and alliances. Beyond this book, I'm continuing to research the relationship between print and online in various forms, especially artistic ones. Personally, I think this relationship will be one of the pivotal media arenas of change (and so of new potential territories for experimentation and innovation) in the coming years.

NT Taking a lead from some of these points, I'd like to turn to the material forms of the book and the archive. Sensory form has historically played a key role in constituting the body, experience, and metaphors of the book and the archive. For both Adorno and Mallarmé, the physical and sensory properties of the book are key to its promise, which lies to a large degree in its existence as a kind of 'monad'. For Adorno, the book is 'something self-contained, lasting, hermetic - something that absorbs the reader and closes the lid over him, as it were, the way the cover of the book closes on the text'. 12 And for Mallarmé, 'The foldings of a book, in comparison with the large-sized, open newspaper, have an almost religious significance. But an even greater significance lies in their thickness when they are piled together; for then they form a tomb in miniature for our souls'. 13 I find these to be very appealing characterisations of the book, but today they come with a sense of nostalgia, and the strong emphasis they place on the material form and physical characteristics of the printed book appears to leave little room for a digital future of this medium. Sean, I want to ask you two related questions on this theme. What happens to the sensory properties of paper in AAAAARG - are they lost, reconfigured, replaced with other sensory experiences? And what happens to the book in AAAAARG, once it is digitised and becomes less a self-enclosed and autonomous object than, as you put it, part of an 'infinite resource'?

W. Adorno, 'Bibliographical Musings' in Notes to Literature Volume 2, Shierry Weber Nicholsen (trans), Rolf Tiedemann (ed). New York. Columbia University Press, 1992, p20.

12. Theodor

13. Stéphane Mallarmé, 'The Book: A Spiritual Instrument', Bradford Cook (trans), in Hazard Adams (ed), Critical Theory Since Plato, New York, Harcourt Brace, 1971, p691.

SD It is a romantic way of thinking about books - and a way that I also find appealing - but of course it's a characterisation that comes after the fact of the book; it's a way that Adorno, Mallarmé, and others have described and generalised their own experiences with these objects. I see no reason why future readers' experiences with various forms of digital publishing won't cohere into something similar, feelings of attachment, enclosure, impenetrability, and so on.

AAAARG is stuck in between both worlds. So many of the files on the site are images of paper (usually taken with a scanner, but occasionally a camera) packaged in a PDF. You can see it in the underlines, binding gradients, folds, stains, and tears; and you can often, but not always, see the labour and technology involved in making the transformation from physical to digital.

So one's experience is often to be perhaps more aware of the paper that is not there. Of course, there are other files which have completely divorced themselves from any sense of the paper, whether because they are texts that are native to the digital - or because of a particularly virtuosic scanning job.

There are problems with the nostalgia for books - a nostalgia that I am most certainly stricken with. We can't take the book object out of the political economy of the book, and our attempts to recreate 'the book' in the digital will very likely also import legal and economic structures that ought to be radically reformulated or overthrown. In this context, as in others, there seem to be a few ways that this is playing out, simultaneously: one is the replication of existing territories and power structures by extending them into the digital; another, in the spirit of the California Ideology, would be that attempt to use the digital as a leading edge in reshaping the public, of subsuming it into the market; and a third could be trying to make the best of this situation, with access to tools and each other, in order to build new structures that are more connected to those contesting the established and emerging forces of control.

And what's more, it seems like the physical book itself is becoming something else - material is recombined and re-published and re-packaged from the web, such that we now have many more books being published each year than ever before - perhaps not as self-enclosed as it was for Adorno. I don't want to make equivalences between the digital and physical book - there are very real physiological and psychical differences between holding ink on paper versus holding a manufactured hard drive, coursing with radio waves and emitting some frequency of light - but I think the break is really staggered and imperfect. We'll never really lose the book and the digital isn't confined to pixels on a screen.

WHATEVER BLOGGING

NT Turning to social media, I want to ask Jodi to comment more on the technical structures of the blog. In *Blog Theory* you propose an intriguing concept of 'whatever blogging' to describe the association of blogs with the decline of symbolic efficiency, as expressions are severed from their content and converted into quantitative values and graphic representations of communication flow. The more we communicate, it seems, the more *what* is communicated tends toward abstraction, and the evacuation of consequence save for the perpetuation of communication. Can you describe the technical features and affective qualities of this process, how the field of 'whatever blogging' is constituted? And how might we oppose these tendencies? Can we reaffirm writing as deliberation and meaning? Are there any ways to make progressive use of the 'whatever' field?

14. Jodi Dean, Blog Theory: Feedback and Capture in the Circuits of Drive, Cambridge, Polity Press, 2010.

ID The basic features of blogs include posts (which are time-stamped,

permalinked, and archived), comments, and links. These features aren't necessarily separate insofar as posts have permalinks and can themselves be comments; for example, that a specific blog has disabled its comment feature doesn't preclude the possibility of a discussion arising about that blog elsewhere. Two further features of blogs arise from their settings: hits (that is, viewers, visitors) and a kind of generic legibility, or, what we might call the blog form (the standard visual features associated with but not exclusive to popular platforms like Blogger and Typepad). I bring up the latter point since so much of online content is now time-stamped, permalinked, and archived, yet we would not call it a blog (the *New York Times* website has blogs but these are sub-features of the site, not the site itself). All these features enable certain kinds of quantification: bloggers can know how many hits we get on a given day (even minute by minute), we can track which posts get the most hits, which sites send us the most visitors, who has linked to us or re-blogged our content, how popular we are compared to other blogs, etc.

Now, this quantification is interesting because it accentuates the way that, regardless of its content, any post, comment, or link is a contribution; it is an addition to a communicative field. Half the visitors to my blog could be rightwing bad guys looking for examples of left-wing lunacy - but each visitor counts the same. Likewise, quantitatively speaking, there is no difference between comments that are spam, from trolls, or seriously thoughtful engagements. Each comment counts the same (as in post A got 25 comments; post B didn't get any). Each post counts the same (an assumption repeated in surveys of bloggers - we are asked how many times we post a day). Most bloggers who blog for pay are paid on the basis of the two numbers: how many posts and how many comments per post. Whether the content is inane or profound is irrelevant.

The standardisation and quantification of blogging induce a kind of contradictory sensibility in some bloggers. On the one hand, our opinion counts. We are commenting on matters of significance (at least to someone - see, look, people are reading what we write! We can prove it; we've got the numbers!). Without this promise or lure of someone, somewhere, hearing our voice, reading our words, registering that we think, opine, and feel, there wouldn't be blogging (or any writing for another). On the other hand, knowing that our blog is one among hundreds of millions, that we have very few readers, and we can prove it - look, only 100 hits today and that was to the kitty picture - provides a cover of anonymity, the feeling that one could write absolutely anything and it would be okay, that we are free to express what we want without repercussion. So bloggers (and obviously I don't have in mind celebrity bloggers or old-school 'A-list bloggers') persist in this affective interzone of unique importance and liberated anonymity. It's like we can expose what we want without having to deal with any consequences - exposure without exposure. Thus, a few years ago there were all sorts of stories about people losing their jobs because of what they wrote on their blogs. Incidentally, the same phenomenon occurs in other social media - the repercussions of indiscrimination that made their way to Facebook.

The overall field of social media, then, relies on this double sense of exposing without being exposed, of being unique but indistinguishable. What registers is the addition to the communicative field, the contribution, not the content, not the meaning. Word clouds are great examples here - they are graphic representations of word frequency. They can say how many times a word is used, but not the context or purpose or intent or connotation of its use. So a preacher could use the word 'God' as many times as the profaner; the only difference is that the latter also uses the words 'damn it.'

Can this field where whatever is said counts the same as any other thing that is said be used progressively? Not really; I mean only in a very limited way. Sure, there are spam operations and ways to try to manipulate search engine results. But if you think about it, most critical work relies on a level of meaning. Satire, irony, comedy, deconstruction, détournement all invoke a prior meaningful setting into which they intervene. Rather than 'progressive use of the whatever field' I would urge a more direct and decisive assertion of collective political will, something that cuts through the bland whateverness without commitments to recognise that this is nothing but the maintenance of the malleable inhabitants of capitalism when what is really needed is the discipline of communist collectives.

NEWSPAPER AS PEDAGOGY AND MONUMENT

NT Dmitry, the Chto Delat? group produces work across a range of media-film, radio, performance, installation, website, blog - but the media form of the 'newspaper' has an especially significant place for you: Chto Delat? began its collective work through the production of a newspaper and has continued to produce newspapers as a key part of its exhibitions and interventions. Many will argue that the newspaper is now a redundant or 'retro' media form, given the superior distributive and interactive capacities of digital media. But such assessments fail to appreciate the complex form and functionality of the newspaper, which is not merely a means of information distribution. It is noteworthy in this regard that the Occupy movement (which has been a constant throughout this conversation) has been producing regular printed newspapers from the precarious sites of occupation, when an exclusive focus on new media might have been more practical.

So, I would like to ask you some questions about the appeal of the media form of the newspaper. First, Chto Delat?'s emphasis on self-education is influenced by Paulo Freire, but on this theme of the newspaper it is the pedagogical practice of Jean Oury and Félix Guattari that comes to my mind. For Oury and Guattari (building on work by Célestin Freinet on 'institutional pedagogy') the collectively produced publication works as a therapeutic 'third object', a mediator to draw out, problematise, and transversalise social and

15. Gary Genosko, Félix Guattari: A Critical Introduction, Cambridge, Pluto Press, 2009: Genosko, 'Busted: Félix Guattari and the Grande Encyclopédie des Homosexualités', Rhizomes 11/12 (2005/6), http:// www.rhizomes.net/ issue11/genosko. html; François Dosse, Gilles Deleuze and Félix Guattari: Intersecting Lives, D. Glassman (trans), New York, Columbia University Press, 2010.

libidinal relations among groups, be they psychiatric associations or political collectives. Gary Genosko has published some fascinating work on this aspect of Guattari's praxis, and it comes across clearly in the Dosse biography of Deleuze and Guattari. ¹⁵ With this question of group pedagogy in mind, what is the role of the newspaper in the self-organisation and self-education practice of Chto Delat?

DV The interrelations between all forms of our activity is very important, Chto Delat? is conceived as an integral composition: we do research on a film project and some materials of this research get published in the newspaper and in our on-line journal (which is on-line extension of the newspaper); we start to work on the publication and its outcomes inspire work on a new installation; we plan an action and build a collaboration with new actors and it triggers a new publication and so on. But in general, the newspaper is used as a medium of contextualisation and communication with the broader community, and as an interventionist pressure on mainstream cultural production.

I did not know about Guattari's ideas here, but I totally agree. Yes, for us the newspaper is also a 'third object' which carries a therapeutic function - when it is printed despite all the impossibilities of making it happen, after all the struggle around content, finance, and so on, the collective gets a mirror which confirms its own fragile and crisis-ridden existence.

NT If we turn to the more physical and formal qualities, does the existence of the newspaper as an 'object' have any value or significance to you? Chto Delat? has made enticing engagements with the Constructivist project - you talk of 'actualising' Constructivism in new circumstances. To that end, I wonder if the newspaper may be a way of actualising the Constructivist theme of the object as 'comrade', as Rodchenko put it, where the revolution is the liberation of the human *and* the object, what Arvatov called the 'intensive expressiveness' of matter? Another way of thinking this theme of the newspaper as a political object is through what Deleuze and Guattari call a 'monument', a compound of matter and sensation that 'stands up by itself', independent of its creator, as a product of the event and a projection into the future:

matter and sensation that 'stands up by itself', independent of its creator, a product of the event and a projection into the future:

the monument is not something commemorating a past, it is a bloc of present sensations that owe their preservation only to themselves and that provide the event with the compound that celebrates it. The monument's action is not memory but fabulation ... [I]t confides to the ear of the future the persistent sensations that embody the event: the constantly renewed

suffering of men and women, their recreated protestations, their constantly

DV Yes, the materiality (the 'weight') of newspaper is really important. You should carry it for distribution, pass it from hand to hand, there is an

16. Christina
Kiaer, Imagine
No Possessions:
The Socialist
Objects of Russian
Constructivism,
London, The
MIT Press, 2005;
Nicholas Thoburn,
'Communist Objects
and the Values of
Printed Matter',
Social Text 28, 2
(2010): 1-30.

17. Gilles Deleuze and Félix Guattari, What Is Philosophy? G. Burchell and H. Tomlinson (trans), London, Verso, 1994, pp167-8, pp176-7.

resumed struggle.17

important *pressure* of piles of newspapers stocked in the exhibition halls as takeaway artifacts (really monumental), or used as a wallpaper for installations. We love these qualities, and the way they organise a routine communication inside the group: 'Hi there! Do you have newspapers to distribute at the rally tomorrow? How many? Should we post a new batch?' At a more subjective level, I love to get the freshly printed newspaper in my hands; yes, it is a drug, particularly in my case, when all the processes of production come through my hands - first the idea, then editorial communication, lay-out, graphics, finance, and then print.

PRINT/ONLINE

NT On this theme, I want to ask Pauline if you can comment on the place of printed paper in the history and future of *Mute*? I have in mind your experiments with paper stock, the way paper interfaces with digital publishing platforms (or fails to), the pleasures, pains, and constraints of producing a printed product in the digital environment.

PvMB All this talk of newspapers is making me very nostalgic. It was the first print format that we experimented with, and I agree it's one of the most powerful - both in terms of the historical resonances it can provoke, and in terms of what you can practically do with it (which includes distributing editorial to many people for quite low costs, being experimental with lay-out, type, images; and yes, working through this 'third object', with all that that might imply). The Scottish free-circulation newspaper, *Variant*, is testimony to this, having hung onto the format much more doggedly than *Mute* did, and continuing to go strong, in spite of all the difficult conditions for production that all of us face. There again, where *Variant* has shown the potential power and longevity of freely distributed critical content (which they also archive fully on the web), the rise and rise of free newspapers - wherein editorial functions as nothing more than a hook for advertising, targeted at different 'segments' of the market – shouldn't be forgotten either, since this might represent the dominant function this media form presently holds.

I shouldn't take too much time talking about the specifics here, but the shelf-display-and-sale model of distribution which *Mute* chose for its printed matter - on the eve of the assault this suffered from free online editorial - landed us in some kind of Catch-22 which, nearly two decades later, we still can't quite figure the exit to. Important coordinates here are: the costs involved in developing high quality editorial (research, commissioning, layout, proofing, printing; but also the maintenance of an organisation with - apart from staff - reliable systems for admin, finance, legal, a constitutional apparatus); the low returns you get on 'specialist' editorial via shelf-sales (particularly if you can't afford sustained Marketing/Distribution, and the offline distribution infrastructure itself starts to crumble under the weight of

18. Since this conversation took place, *Variant* has lost its Creative Scotland funding and has (temporarily, one hopes) suspended publication. See http://www.variant.org.uk/publication

online behemoths like Amazon); and then finally the lure to publish online, borne of promises of a global audience and the transcendence of a lot of those difficulties.

Mute's original newspaper format constituted an art-like gesture: it encapsulated many things we wanted to speak about, but in 'mute', visual, encoded form - epitomised by the flesh tones of the FT-style newspaper, which insisted on the corporeal substrate of the digital revolution, as well as its intimate relationship to speculation and investment finance (a condition, we sought to infer, that it shared with all prior communications and infrastructural revolutions). Thereafter, our experiments with paper were an engagement with the 'Catch-22' described above, whose negative effects we nevertheless perceived as mere obstacles to be negotiated, as we continued hopefully, stubbornly, to project a global community of readers we might connect with and solidarities we might forge - as everyone does, I guess.

We didn't want to change our editorial to suit the market, so instead focused on the small degrees of freedom and change afforded to us by its carrier, i.e. the varying magazine formats at our disposal (quarterly/biannual, small/large, full colour/mono, lush/ziney). In retrospect, we may have overplayed the part played by desire in reading and purchasing habits (in the sense that we thought we could sway potential purchasers to support *Mute* by plying them with ever more 'appealing' objects). Be that as it may, it did push us to mine this liminal zone between paper and pixel that Sean evokes so well - particularly, I'd say, in the late '90s/early 2000s, when questions over the relationship between the 'real' and 'virtual' raged to nigh obsessional levels, and magazines' visual languages also grappled with their representation, or integration.

Where we stand now, things are supposed to have stabilised somewhat. The medial and conceptual hyper experimentation triggered by projected 'digital futures' has notionally died down, as mature social media and digital publishing platforms are incorporated into our everyday lives, and the behaviours associated with them normalised (the finger flicks associated with the mobile or tablet touch screen, for example). Somewhere along the line you asked about ePublishing. Well, things are very much up in the air on this front currently, as independent publishers test the parameters and possibilities of ePublishing while struggling to maintain commercial sustainability. Indeed, I think the independent ePublishing situation, exciting though it undoubtedly is, actually proves that this whole narrative of normalisation and integration is a complete fiction; that, if there is any kind of 'monument' under collective construction right now, it is one built under the sign of panic and distraction.

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CULTURAL STUDIES IN ITS MIRROR PHASE

Ben Highmore

Catherine Driscoll, *Modernist Cultural Studies*, Gainesville, University Press of Florida, 2010, 292pp; paperback £26.95

Lawrence Grossberg, Cultural Studies in the Future Tense, Durham and London, Duke University Press, 2010, 356pp; paperback £16.99

Paul Smith (ed), *The Renewal of Cultural Studies*, Philadelphia, Temple University Press, 2011, 266pp; paperback £19.99

Graeme Turner, What's become of Cultural Studies?, London, Sage, 2012, 180pp; paperback £23.99

In the first pages of What's Become of Cultural Studies? Graeme Turner retells an apocryphal story: at a large cultural studies conference in Birmingham (it was the third Crossroads in Cultural Studies conference in 2000) one of 'the founding fathers of cultural studies' - my guess is that this is supposed to be Stuart Hall - is looking through the large book of abstracts. Turning to a colleague he mournfully asks: 'is this what we've become?' Of course you don't have to attend a cultural studies conference to get a sense of alienation crawling into your bones when reading through conference packs; that's the nature of the sprawling beast that is the 'international association conference'. Cultural studies, though, was meant to be different: this is the ambition many still cling to; and the petard that many are hoist by. The tale that Turner recounts sounds like a midlife crisis, where youthful promises and hopes are returned as a series of compromises, mis-directions and paths all-too-easilytrodden. Looking hard into the mirror of middle-age the difference that was or is cultural studies begins to look all too much like something familiar, something that no longer makes much of a difference. The four books under review here can be taken as symptoms of cultural studies' middle-age 'mirrorphase'. Yet if the male midlife-crisis familiar from TV dramas classically results in psychic meltdowns, 'inappropriate' liaisons and a spendthrift approach to fast cars, then here, as might be expected, we find a more moderate response to frustrated dreams and unrealised ambition - irritation and indignation but also mature reflection.

What are the differences that were meant to make the difference for cultural studies? Cultural studies was famously meant to be 'a project', and it was going to be a project that was in the business of producing 'really useful' knowledge. To gloss this somewhat; it wasn't going to be another discipline, but an ill-discipline driven by the urgencies of its analytic tasks rather than

1. For an account of cultural studies in the 1980s as sclerotic convention and cookie-cutter production see Meaghan Morris, 'Banality in Cultural Studies', in Patricia Mellencamp (ed), The Logics of Television: Essays in Cultural Criticism, Bloomington and Indianapolis, Indiana University Press, 1990, pp14-

by a set of sclerotic conventions that produced cookie-cutter objects of knowledge. Similarly, the job at hand was never going to be scholarship-forscholarship's-sake, but knowledge that could face the test of social reality and find some purchase there. At its most damning the mirror held up to cultural studies shows an unwitting complicity with academic managerialism, whereby 'really useful knowledge' is repackaged as 'impact factors' for an audit culture that wants to quantify the usefulness of knowledge in terms of 'well-being' indicators, and ultimately in the currency of hard cash. The anti-disciplinarity of cultural studies is returned in the guise of a permission slip for ruthless university administrators to reconfigure schools and departments according to the assumed demands (always deemed 'necessities') of real estate, of staff pruning, and of student enrolment (the endless chasing of new markets and new 'useful' subjects - which includes anything that a character from CSI might call a job).

Such a view of cultural studies, which is sketched in the early pages of Turner's book, could well lead to a melancholic defeatism. Yet Turner is quick to shrug off such a mood and to turn his hand to the task of equipping cultural studies for the future - even if much of what he has to say casts the actuality of cultural studies (as it is practised in Australia, the United Kingdom and North America) in a fairly gloomy light. Turner does not hold back when it comes to diagnosing the problems that he sees facing cultural studies. Recognising that much of the perceived 'coolness' of cultural studies (for students and others) has been lost to programmes in the creative industries or new media, Turner offers an excoriating account of these 'new kids on the block'. Cultural studies, in refashioning itself in the guise of 'creative industries', for instance, not only cedes institutional space to projects with dubious political intentions but also relinquishes the assumed heritage of cultural studies to instrumental and affirmative ends. But the intellectual arguments that Turner might have in relation to this 'new cultural populism' propagated by 'convergence culture', new media and the creative industries is followed through with an audit of their institutional practices:

The academic flimsiness of the creative industries and new media programmes I examined for this chapter proved to be quite shocking, in fact. I had not realised how little ground there was for the claiming of a cultural studies heritage, until I began searching the undergraduate programmes for evidence of that heritage. I found very little; indeed, in some cases, I found very little to suggest that these programmes bore allegiance to any academic tradition (pp176-7).

Ow. But if Turner is tough on new media and creative industries teaching he can be just as caustic in characterising what he sees passing for teaching within cultural studies programmes. The image he conjures of 'cultural studies 101', where students new to higher education and to cultural studies are made to

read great slabs of uncut theory, often couched in impenetrable prose, and then made to 'apply' it to the instructor's favourite bit of cult TV, is cutting. What is less clear is where this teaching actually occurs. Turner warns that it might be specific to Australia but that it would be recognisable elsewhere too. It is recognisable of course, but perhaps in the same way that dragons are: we know what they look like (in our myths and nightmares) but never where precisely to find them. He is less pessimistic about the possibilities for forms of cross-cultural dialogue and indigenised forms of cultural studies. Here his main example is centred on the journal *Inter-Asia Cultural Studies* where, as Meaghan Morris puts it, there is 'the ambition of thinking *from* (rather than merely 'about') Inter-Asian localities'. Such a journal, now twelve years old, is not content to just extend the purview of cultural studies (adding new objects and contexts): instead it seeks to re-imagine cultural studies with Asia as method rather than as object.

At its heart the argument that underpins What's Become of Cultural Studies? is aimed at 'actually existing cultural studies' (in its various locales) and polemically disparages claims made for cultural studies' ill-disciplined status. For Turner cultural studies behaves exactly like a discipline but without reaping any of the intellectual and pedagogic benefits of being a discipline. So it has a raft of journals, a host of national and international associations, a canon of authors that simply must be referenced, and a strong sense of boundedness in terms of approach and appropriate objects. What it doesn't have is an agreed method and set of scholarly values that can be taught, used to make judgements about rigour, and argued over and critiqued. Early cultural studies practitioners benefitted from training in subjects such as literary criticism (the majority) or sociology and anthropology (the minority). This is to acknowledge that there are always disciplines within any interdisciplinarity and that they often provide the basis from which to approach the world and to approach other disciplines. To claim cultural studies as an anti-discipline is to rob generations of students of just such anchorage. For Turner, then, cultural studies suffers from too much poaching and not enough farming.

To establish a set of interpretative methods and scholarly procedures for cultural studies would be profoundly useful - pedagogically, intellectually, as well as contributing to its institutional recognition. The question of what those methods would be and how they would be taught is to open up the proverbial can of worms that Turner does his best to keep shut. His very hesitant account of how he used the Open University's (under Stuart Hall's leadership) 'circuits of culture' approach is to my mind inadequate, not least because it already establishes the sorts of enquiries that could usefully be pursued.⁴ It is, to be fair, a reasonably expansive approach, but it might find it hard to deal with investigations concerned with environmental fear and security anxieties, for instance. More valuable, to my cast of mind, would be some form of meta-methodological training of the sort that historians designate by the term 'source criticism'. Here, though, we would need to direct it away

2. Meaghan Morris, 'Inter-Asian Banality and Education', Inter-Asia Cultural Studies, 11, 2, (2010):

4. See, for instance, Paul du Gay et al, Doing Cultural Studies: The Sony Walkman Story, London, Sage, 1996 - which now also 'suffers' from being based around an outmoded piece of technology.

^{3.} Kuan-Hsing Chen, Asia as Method: Toward Deimperialization, Durham, Duke University Press, 2010.

from its positivistic leanings and aim it towards the evaluation of sources that cultural studies scholars (as well as historians of a more culturalist hue) have often found most compelling. The question then would be what does source criticism look like when it is directed at 'the real world of theology and horses' (to quote Grossberg, quoting Richard Hoggart, quoting W.H. Auden)? To equip students and researchers with the ability to explain the epistemological value and character of what is often taken to be unreliable evidence (whether this is Reality TV or accounts of dreams) and to show what sort of explanatory fields it could serve as evidence for, would go, I think, some way to grounding cultural studies as a discipline without prescriptively determining its future direction.

If Turner's book is a short, sharp, shock, so to say, then Grossberg's book is a much slower, denser read that works to provide an exacting and ambitious disciplinary framework for contemporary cultural studies. Anyone who knows Grossberg's work will not be surprised by the evangelical tone that it often assumes: he is a cultural studies fundamentalist - a keeper of the keys - and his book benefits from this sense of total identification with the 'project' of cultural studies. But alongside his unswerving faith there is a rigorous generosity that is constantly inviting the reader to think along with him. Thus the dense theoretical clarifications are not done in the name of intellectual pyrotechnics but in terms of a ground-clearing to make cultural studies more productive and ambitious. For Grossberg the sense that cultural studies is a 'project' is not a matter of anti-disciplinarity, nor is it a matter of identification. I'd always shied away from repeating the mantra that cultural studies is a project (it always smacked of 'in' groups and 'out' groups, of demanding too much belonging), but here Grossberg offers a much more useable set of meanings to associate with the word project: simply that cultural studies work is ongoing, necessarily provisional, and is always going to be unfinished labour.

In a liberating move Grossberg insists that cultural studies is precisely not to be confused with the study of culture: 'too often, people have mistakenly assumed that cultural studies is about culture, while its real concern is always contexts and conjunctures' (p169). Culture is not the end for cultural studies analyses but the means: the end is always (for Grossberg) the clarification of the conjuncture. In this he clearly follows Stuart Hall's (who is Grossberg's mentor and muse) insistence that cultural studies is conjunctural studies. Conjuncturalism' for Grossberg is a description of change, articulation, and contradiction; it describes a mobile multiplicity, the unity of which is always temporary and fractured [...] [it] looks to the changing configuration of forces that occasionally seek and sometimes arrive at a balance, or temporary settlement' (p41). The sense of invoking 'the' conjuncture, as a political and cultural horizon, might be less apposite than recognising that multiple conjunctures (with different temporalities) might exist alongside one another and that while they exist out there in the world, they are also,

5. For a recent conjunctural study see Stuart Hall
'The Neo-Liberal Revolution', Cultural Studies, 25, 6, (2011): 705-728; for an older one see Stuart Hall, The Hard Road to Renewal: Thatcherism and the Crisis of the Left, London, Verso, 1988.

importantly, the analytic product of cultural studies. This aspect becomes more important as Grossberg wants to support the deimperialising impetus of recent scholarly projects (such as *Inter-Asia Cultural Studies*): to do this means recognising that Euro-modernity constitutes a limited field, that often coincides, conflicts, connects and disconnects with other modernities. This sense of how conjunctures in the plural might be researched and analysed is something that needs to be pursued further.

In one of the most exciting chapters of *Cultural Studies in the Future Tense*, Grossberg encourages cultural studies scholars to take up economics. But this isn't the usual move to remind us that political economy is important, and it isn't the usual interdisciplinarity that wants to adjust the disciplinary mix by adding a little bit more economic materialism. Grossberg's relentless ambition is at its most vivid here: he doesn't want cultural studies practitioners just to read a few books on economics (though he does admit that this might be a good place to start) but to go beyond the endless modelling that preoccupies much of academic economics ('economies are too important to be left to economists' p168). This is the other side of interdisciplinarity: the desire to critically extend the disciplinary fields that you're interacting with. If interdisciplinarity can often feel like 'blagging it' in several places at once, Grossberg's demand is to reach a level of critical competence in the discipline to be able to convincingly intervene within it. The result might mean making common cause with radical heterodox economics scholars and activists.

While *Cultural Studies in the Future Tense* can feel, at times, that it lacks purchase in the world (it is, after all, primarily an exercise in what sometimes gets called 'theory building') it is remorselessly aimed at an engagement with where and what people actually are. Thus his discussion of affect, a theoretical field which can be bafflingly abstract, is addressed to what could be called the suturing of the social into lived experience. For Grossberg affect 'defines the way any relation is lived, the way any value is "attached" to the real. It is the multiplicity of ways in which people are anchored into their lives, the ways they belong at certain places and along certain trajectories' (p194). And it is here that the cultural acts as the conduit and condition of attachment, and the reason for the importance of the cultural in cultural studies.

There are clear continuities between Lawrence Grossberg's book and Driscoll's approach in *Modernist Cultural Studies*: both want to productively extend and destabilise the relationship between modernity, modernism and cultural studies. If Grossberg's book is a series of theoretical elaborations whereby the 'problem space' (his term) of modernity is pluralised outwards in what could be thought of as a general process of provincializing all territories and epochs such that a full range of modernities could gain clarity through their relational connections and disconnections, then Driscoll's book works to pluralise modernity 'from the inside' - so to say. Modernism (with a capital M) is, for *Modernist Cultural Studies*, a historical formation that exists in anthologies, curricula, and critical arguments; but 'modernism' as

a much more heterogeneous assortment of responses, feelings, description, prescriptions, and analyses (an assortment that could also include canonical works of Modernism) is unfinished and talks to us as the history of 'our' present (and the references to cultural forms in China and Japan suggest that this is at least a working hypothesis).

For anyone who has felt cultural studies' actuality to amount to a heavily policed embargo on anything that might be deemed elite culture or high art (apart from, of course, shelves and shelves of the sort of 'high' theory that can make *Ulysses* read like easily accessible prose), this is a breath of fresh air. But lest you see this as an encouragement to return to 'lit-crit' business-as-usual, be warned, this is a highly ambitious and reflexive book. Its 'argument is less a plea for (slightly) more established disciplines to take cultural studies seriously than it is a plea for contemporary humanities and social sciences, including cultural studies, to take modernism seriously' (p2). Partly this plea is pursued by showing how modernism (in the expanded and inclusive sense) is involved in exactly the same work that cultural studies is (telling productive stories of how we exist in the modern world), and partly by including cultural studies and other human sciences (modern anthropology and popular sexology, for instance) as modernist cultural forms. It is, however, hard to think of this book within the usual terms of scholarly argument. Driscoll's book doesn't so much argue as lay out a curriculum and set of research projects. As such the chapters are often detailed sketches for what could easily be a series of book length studies. It is at root cultural studies as historical enquiry: but it is neither a form of cultural history that seeks its evidence in literature and film, nor is it a form of social history that attempts to contextualise literature. There is a restless relational impetus here that makes it hard to distinguish objectsrequiring-analysis from objects-that-can-be-used-to-explain. And this is for me what makes Driscoll's book so pleasurable: there isn't the usual design of figure and ground, object and context; in what is itself a modernist form (for instance in the all-over painting) Driscoll gives us nothing but ground, nothing but figure.

The chapters are constellations of disparate material that offer vivid and disquieting images of modernity. In a chapter that is bookended with a discussion of Martin Heidegger's 'The Age of the World Picture' we are shown World's Fairs and Disney, we encounter Malinowski and Boas, and read science fiction literature. In a chapter on modern love we meet the ingénue as a social figure, remember *Lady Chatterley's Lover*, discuss Freud and Marie Stopes, and stop off for a moment at *Playboy* and the pulp magazine *Thrilling Love*. At times this is itself thrilling at other times slightly vertiginous. Where it works best is in bringing to the surface social figures that only emerge through such digressive work because they are only traced within the margins of culture: 'the shopgirl is everyday modernism. I have no canonical, institutional, or historical access to her of the kind that would

allow me to write the thousandth book on Joyce or Woolf, except between the lines of some other text - she is someone a commentary passes by (p106).

The method is clearly indebted to Walter Benjamin's Arcades Project; indeed one way of characterising Modernist Cultural Studies would be to see it as an attempt to extend Benjamin's arcades work into the twentieth century, but also to marshal it into a more manageable project. Driscoll quotes Benjamin's early understanding of the arcades as presenting surreal juxtapositions that offer a form of a cultural rebus: 'A world of secret affinities: palm tree and feather duster, hair dryer and Venus de Milo, prosthesis and letter-writing manual come together after a long separation. The odalisque lies in wait next to the inkwell, priestesses raise aloft ashtrays like patens' (p109). Of course the arcades present the (window) shopper with these cultural puzzles in the name of the commodity form. As a methodology it is appropriate to ask, though, on what grounds do some items get included and others excluded when writing cultural studies. And here again is where it is worth reading Driscoll in conjunction with Grossberg: it is conjunctural and contextual enquiry that directs the method. It is thereby not the cultural items in themselves that is the object of study; rather the cultural becomes the way of getting a line on the conjunctural. And it is this that connects 'modernism' and cultural studies as a conjunctural enquiry into an amalgam of feelings, manners, practices, sentiments; ways of being that we can call modernist. The conjunctural here is that complex admix of ways of loving, ways of being an adolescent, ways of holding your body, that are gendered, multiple, conflictual and alive today. And the reason for a cultural approach to the conjuncture is precisely because here we can glimpse the traces of the way that cultural forms anchor these feelings, these ways of being, in those dense documents and practices that invoke the cultural. By grasping the modernist conjuncture as a deep condition of gendering affect, Driscoll's book is profoundly, productively and constitutionally feminist in orientation.

If these books don't satisfy your craving for cultural studies' positioning then look no further than *The Renewal of Cultural Studies*, an anthology of position 'papers' edited by Paul Smith. Each of the twenty five essays is short enough to read over breakfast and I imagine them being used by academics as early morning callisthenic exercises or performance enhancement supplements: you can use them to sharpen your sense of your own position (through agreements and disagreements); to find new ones; or simply to relish the arguments that matter to others. I can do little more, here, than to give you something of a flavour of one or two of them.

I was immediately drawn to one essay by Eric Cazdyn, called 'Toward a Vulgar Cultural Studies' hoping to find a more sweary, impolite form of cultural studies. Of course it was no such thing: rather it was a nuanced response to what the author takes to be the new 'vulgar capitalism' - a form of capitalism that has given up on the business of winning hearts and minds, and can instead parade brazenly in front of us all as the

'only show in town'. From the disciplinary field of Asian studies within the North American academy (the University of Toronto) Cazdyn asks how cultural studies could analyse the recent exponential rise in the use of antidepressants in Japan. What sort of 'vulgar cultural studies' could examine the interests of the pharmaceutical industry (where money and death are instrumentally configured) within a context such as modern Japan which could be approached as either exceptional (seen stereotypically as allergic to supposedly 'shameful' conditions like depression) or general (a culture within the relational sphere of global capitalism)?

Other essays pursue a more personal tonality, offering examples of what cultural studies self-fashioning looked like in Turkey during the 1970s or how difficult it has been at times to be a feminist and to identify with cultural studies. Political economy, Marxism, ethnography, pedagogy, media studies, and aesthetics are all polemically and productively explored in these little essays. At times it is clear that there are a range of commitments amongst the authors to cultural studies' actuality. On a very basic level very few of the writers work in departments or schools that are named cultural studies; instead institutional affiliations signal departments of English, Women's Studies, Global Affairs, Media and Communication, Political Science, Anthropology, Art and Public Policy, Sociology, and so on. On another level there is a degree of uncertainty and ambivalence about identifying wholeheartedly with cultural studies. The book ends with a lively conversation between Paul Smith and Andrew Ross. Ross is Professor of Social and Cultural Analysis at New York University and has practised a compelling form of activist cultural enquiry around labour conditions, political ecology, and most recently the occupy movement. In the conversation here there is a sense that for Ross the future of cultural studies is more or less a nonissue: more urgent is the form of analysis that can be performed within the academy for the benefit of social activism. For Ross it is both important that the kind of work that is done in the academy could only be done there (or why else stay there) and that while it should connect with activism it is not determined by the immediate temporality of activism: 'The goal is not to be in sync, because you are moving at different speeds, but to be subject to the same gravitational pull as the activists' (p246). This sense that cultural studies (or social and cultural analysis) might find variable rhythms in its connections to social reality is I think crucial and echoes with the sense of multiplying the notions of conjuncture and modernity.

The health of cultural studies will continue to be measured by academic programmes, refereed journals and conferences, but perhaps as importantly it should also be measured by the willingness (or unwillingness) of those who are doing important work 'elsewhere' to identify as cultural studies. Does current work on public feeling connected to queer studies or critical race studies think of itself as cultural studies? What are the spaces of identification that could allow work to be imagined as performance studies

and cultural studies, with critical anthropology and cultural studies? Can you practice philosophy and cultural studies or has the 'desire' of cultural studies migrated into a panoply of disciplines now 'cultured' (cultural geography, cultural sociology, and so on)? In its middle age and in its mirror phase cultural studies is having to cope with a success that has meant that it is already everywhere else.

OF BIRDS AND HANDS

Wendy Wheeler

Tom Tyler, Ciferae: A Bestiary in Five Fingers, (Posthumanities series no 19) Minneapolis, University of Minnesota Press, 2012, 376pp; £22.50 paperback, £67.50 hardback

Tom Tyler's Ciferae: A Bestiary in Five Fingers is playful philosophy with a serious purpose. One imagines from his book's pragmaticist arguments that Tyler would dispute that there is any other meaningful kind. It joins that now rapidly growing field of animal studies which is a part of thinking beyond the human-centred which Cary Wolfe's Posthumanities series for the University of Minnesota Press has done so much to support. In hanging his bestiary from five fingers, Tyler means to release both our arguments and our nonhuman animal others from enslavement (from 'mancipium, literally "taken by hand" to the emancipation of 'manumissus, "released from the hand" (p264)) to the anthropocentric view which makes man the measure of all things. That the human animal's measure is both extraordinary and a source of much pain must form a later part of the argument upon which animal studies (and posthumanism generally) has embarked.

Tyler's book is a meditation on anthropomorphism, realist universalism, nominalism (i.e. human fictive categories) and pragmatism. Many have argued that our dexterous human hand is intimately tied to our dexterous human mind: a pragmatic and evolutionary version of mind as doing and becoming which Tyler's arguments will broadly support; as with anyone taking ecology, evolution and our biological confraternity with other species seriously, Tyler is out to argue against the nominalist idea that reality is an unknowable thing in itself which is clothed in human fictions.

The book is hung from the human hand, and from the (as some will know) vexed question of whether or not nonhuman animals have something sufficiently like it. Noting Protagoras's opposition to realism (i.e. the truth of mind-independent universal categories) and his claim that 'Man is the measure of all things' (p2), Tyler opens with the semiotics of indexes, the pointing of first fingers, and the cipher status of animals in philosophical texts. Derived from the Sanskrit sunya (meaning 'empty'), ciphers are (empty) placeholders for 'nothing' and then, eventually, secret codes for what must not be spoken directly. As Tyler notes, 'Although all manner of entities are fair game for cipherous appropriation, philosophers have been especially keen on animals' (p23). Ciferae are thus both 'meaningless' placeholders - mathematical zeros, cifers - and also wild animal (ferae) codes which philosophers think to domesticate in the service of their arguments, but which, Tyler will argue, may run riot with uncontrollable meanings: 'This wild side

endures in even the most domesticated beasts, and we will find that whenever we meet a cipher, there is every chance that all the careful work undertaken for their master has already begun to come undone. These animals are not content to remain mere ciphers and demand to be treated otherwise' (p29).

Although Anglophone cultures (especially the scientific and worldly bits) are generally inclined to believe that the word 'metaphor' always has a silent 'only', 'just' or 'mere' before it, Tyler wants us to take both the word and its ramifications seriously. Of course, this means engaging with that arch nominalist finger-poker Friedrich Nietzsche and all his marching armies of metaphors, metonyms and anthropomorphisms. There is a long history, going back to F.W. Schelling at least, of understanding metaphor not as illusion, but as world-disclosing. Although Jakob von Uexküll, who might have served as an interesting counterpoint to Nietzsche here, doesn't appear in the index, Tyler understands that animals have worlds, and reminds us that Nietzsche thought so too. One imagines that Nietzsche's apparent nominalism must have been intended as something of a cattle-prod for hapless human animals overwhelmed by false humility: egotism out of its depth, as Hugh Kingsmill once said. Why, after all, if animals have access to worlds (good enough for them to survive, reproduce and thus evolve - Boltzmann's evolutionary pragmatism is invoked here contra Kant and idealism - see particularly chapter 4: Digito Minimo) why should human animals be so denied? Indeed, the truth of evolution biological and cultural is something which Nietzsche himself of course acknowledged (pp106-7). Thus chapter 2 ('Laugh Loudly and Flip Them the Bird') closes with the observation that 'there is no inherent anthropocentric bias to the component properties of epistemological realism' (p108). Against the remorseless and deeply problematic anthropocentrism of human constructivist relativism, this a welcome advance aided by the march of the animals.

Chapter 3 ('Medico Testiculi Arietini - On the Ring Finger a Ram's Testicles') grabs the ramifications of relativism (a bit of a balls up) ever more firmly. A discussion of Kant's dogged descriptions of the 'digestive system of our mind' (p115), as Karl Popper put it, reminds us of how much this idealism has in fact influenced the very limited realism of modern science. As Tyler writes, 'Kant has no doubt that there is something that is the ground for phenomena, but about that something we can know absolutely nothing' (p118). Or, as science puts it, all we have are data and models. In other words, and despite the common misconception that modern science is a fervent realism, even modern scientific 'realism' remains strongly infected by nominalism. Kant's own model is a labouring mechanism of computation. It is extremely unlikely that this is what either human or nonhuman animals do when they think (or arrive at 'judgments' as Kant puts it - as though immediate cognition, once past infancy, is a kind of ratcheting journey). Woe betide the survival of any animal with that kind of clunking cognitive mechanism at work between 'intuition' and 'understanding'; the fell Cartesian doctrine casts a long

computational shadow on the modern mind. Neither human nor animal mind and thinking are overly governed by the rules of logic - or not at least logic in the narrow sense in which it is too often understood in the Western philosophical tradition as self-conscious human calculation. As Tyler notes, Foucault called this anthropomorphism of mind and world 'transcendental narcissism' (p125). Thus onwards to Ferdinand de Saussure and Benjamin Whorf. Again, the absence of von Uexküll (and, after him, Thomas Sebeok), who argued that all organisms live in *signifying* worlds, although only humans have *language*, remains a puzzling omission.

This is a cogently argued and beautifully produced (and illustrated) argument for why the persistent invocation of animals in philosophy is significant, and for why animal knowing (as Nietzsche recognized) drives a cart and horses through anthropocentricism. It was his understanding that language (and culture) is evolutionary which led Nietzsche to the charge of linguistic relativism. Both Nietzsche, and Rorty after him, think that knowing simply is activity in the world; that's semiosis, but not reducible simply to language. Tyler rightly rejects relativism, and thinks (despite more than one mention of Peirce who was both semiotician and advocate of truth as emergent revelation over time) that realism is necessarily one-dimensional rather than (as Peirce himself thought) processual. Tyler thus comes down on the side of Jamesian pragmatism (inherited, slightly distorted, from Peirce: knowledge is doing; truth is lived rather than simply said). In fact, his own deeply interesting discussion of truth invoking the legend of the sphinx (part woman, part bird and part animal) tells us that there is more than one answer to the riddle: truth is (to put it in Peircean fashion) what will be revealed at the end of our processes of philosophical and scientific enquiry.

The observation that animals beyond only the human kind have semiotic lives and live in what are, to them, meaningful worlds, and that semiosis and meaning are universal truths beyond anthropocentric and relativist claims, should help to move both philosophy and its more earthly spawnings (in science and political economy especially) beyond the moral imbecilities which modernity has given birth to. These include, of course, our utilitarian attitude to animals, as well as to other human beings. Universalism in the hands of nominalists does, indeed, lead to totalizing catastrophe, but semiotic universalism and realism as such, as evolutionary ontology and epistemology, need not do so. That, like all other animals, we can get in touch with truths about our world - even where those truths are cultural extensions of antecedent natural patterns and forms of growth - is one of the benefits of animals studies when properly and thoroughly pursued. It is so pursued in Tom Tyler's timely *Ciferae* of wild animals running riot through supposedly settled questions.

THE TRANSFERENCE IN CULTURE

Molly Anne Rothenberg

James Penney, *The Structures of Love: Art and Politics Beyond the Transference*, Albany, NY, SUNY Press, 2012, 246 pp; \$24.95 paperback

James Penney belongs to the valiant band of theorists who reach out to their cultural studies colleagues to explain why certain of their cherished assumptions derived from Derrida, Foucault, Butler, and Deleuze, among others, demand interrogation and to show how psychoanalytic theory, properly understood, would benefit them. (Disclosure: one of Penney's essays was included in a volume I co-edited with Dennis Foster and Slavoj Zizek on perversion and the social relation [Duke 2003]). He successfully challenges a formidable array of contemporary prejudices that are virtual pieties in the liberal humanities, such as 'appeals to the universal are inherently unethical'; 'subjects are functions of ideological interpellation and occupy multiple subject positions'; 'the political imperative of the humanities is to analyze how the victim of a power relation is denied a voice'. By articulating his theory in accessible terms and applying it to works in philosophy, postcolonial theory, cinema, and painting, Penney makes one of the strongest cases I've seen for the significance of psychoanalysis in work that aspires to ethical and political value. Students of cultural studies, especially those interested in the political and ethical implications of their work, would be well advised to take note.

At its most fundamental, Penney's work demonstrates that (contrary to current dogma) psychoanalysis is a theory of sociality. We become subjects when we become aware that the love we demand issues from an Other who is inaccessible and unknowable. The demand for love is the same as a demand to know what I mean to the Other: in this relationship, I locate the knowledge of the truth of my essential being outside of myself. To the extent that I share certain beliefs about the way to attract the love of the Other (what makes me significant to the Other/others), I feel myself to belong to a recognizable social world, despite the fact that each lure I deploy is both a genuine effort to make the Other declare my true value and a way of avoiding the realization either that I am not worthy of love or that the Other does not exist as such. This transferential relation (transferential because the demand addressed to the Other is transferred to particular human beings who serve as stand-ins) makes me a subject, although it occasions much uneasiness and has to be managed, most notably by imagining that the Other makes a demand upon me to be a certain way in order to receive love. Crucially, it is impossible for any subject to remain a subject without submitting to the transference: the social relation, despite and because of its asymmetricality, is essential to subjectivity.

Penney devotes his first chapter to edifying his readers about this relationship both in ordinary language and in more technical terminology derived through analysis of works by Freud and Lacan. He points out that

the subject issues in the transference its demand for identity, for meaning ... which the subject experiences as a demand *from the Other* with which it might potentially comply. Our humanity for Lacan is defined by a radical uncertainty about what society expects from us, what role it wants us to play, what identity it expects us to assume. We respond to this uncertainty with a demand for a path to follow, an ideal to uphold ... Inevitably, however, the Other has to respond with a failure/refusal... The social resists all our demands that it provide an unambiguous and just law to which our desire might unconditionally submit. We are never fully satisfied that we have succeeded in conforming to society's opaque expectations, that we have met the elusive criteria for the Other's love (pp8-9).

In fact, the subject experiences that opacity not as evidence of the Other's inherent inability to offer up the subject's meaning (for the subject is thoroughly invested in locating its own meaning in the Other) but rather as the spur to create an unconscious fantasy of how best to provoke the Other into disclosing that meaning. This is the universal dimension of human subjectivity, while the particular ways in which any given individual's fantasy structures the transferential relation can be discerned through a psychoanalytic process. Penney argues that 'we can remain faithful to the work of singular artists and thinkers who take up the challenge of moving beyond the ego's claims to social recognition, and therefore beyond the treasonous ambivalences and compromises that arise when we fail to pursue desire beyond the limits policed by fear and anxiety,' that is, by interpreting the transferences through the 'traces of a sort of psychical work' in these texts (pxi). These artists and thinkers have come to understand that subjectivity is structured by the transference: Penney interprets their work not to expose the transferential fantasies of the particular creator (a symptomatic reading) but to show how each interrogates the general condition of subjectivity in order to try to go beyond the transference (a transferential reading).

Psychoanalysis, of course, provides a method for an individual to traverse the fundamental fantasy. Penney's readings show us what is at stake for Plato, Frantz Fanon, Jean Genet, Chantal Akerman, and Lucian Freud in their explorations of this beyond, their attempts to provide another route for their readers and viewers to go beyond the transference. In the process, Penney demonstrates a path for cultural studies that is attuned to historical and cultural specificity as a *consequence* of attending to the universality of the transference as the linchpin of the social relation.

His exposition of the transference does justice to the complexity of its defensive structure, so that when he applies it to philosophy, postcolonial studies, film studies, and painting, he is able to make genuine theoretical and methodological contributions in each field while deepening his readers' understanding of psychoanalytic theory. He repeatedly confronts and exposes *idées reçues* that have gone unchallenged, finding gold in texts that others have thoughtlessly discarded or scorned. At the same time, Penney scrupulously addresses ambiguous, difficult, and problematic moments in the texts of all of the thinkers he discusses, including Lacan and Freud, engaging other scholars' work - especially those with whom he disagrees - accurately and fairly. Penney is an enlightening guide who generates real excitement about his discoveries and a generous teacher who wants to ensure that his readers come away with a clear understanding of how to use the tools he is putting at their disposal.

Readers will benefit from Penney's rigorous yet accessible exposition of the transference in the first chapter. Penney re-visits the ambiguities of Freud's discussion of the transference to clarify the social nature of subjectivity in contrast to 'empirical and cognitive psychologisms' as well as the liberal humanist presuppositions undergirding cultural studies today, what Penney refers to as 'sociological reductionisms' (p19). In the course of this discussion, Penney takes up the standard arguments charging Freud with androcentrism, heterosexism, and bourgeois ideological biases not in order to refute them per se but rather to show, in a series of linked readings, how the places in Freud's texts that warrant these charges disclose the structure of the transference as a double and paradoxical representation, 'an edifying but troublingly inaccessible ideal and a degraded partial object that must remain outside at all costs', each of which corresponds to a different idea of love (p34). It is this structure, implicit in Freud's work and exposed in Lacan's, that provides the promise of a new basis for politically relevant work in cultural studies.

Penney turns to Lacan to explore the implications of this double representation for the analytic outcome and for ethico-political action in the social sphere, creating a tour de force exposition of Lacanian theory and its potential applications. Two notably difficult parts of Lacan's teachings are clarified and put to work here - the graph of desire (*Seminar XVI*) and the lesson on optics (*Four Fundamental Concepts*). Laying out the dynamic relationship among the ideal ego, ego ideal, and *objet a*, Penney convincingly argues for a shift from symptomatic to transferential interpretation in cultural studies. This theoretical framework serves as a much-needed critique of faulty assumptions about identification circulating in cultural studies today, a framework that bears real fruit in the five interpretive chapters that follow.

The second chapter reflects upon *The Symposium* as a theory of the transference. Penney makes good use of Martha Nussbaum's interpretation,

which he considers in large part to recast in ordinary language what Lacan finds in this text. At the same time, Penney goes beyond her interpretation to uncover a triadic 'structure of love' that she misses. One virtue of this chapter is that it clearly exemplifies the framework Penney has laid out in Chapter One, so that the reader can appreciate the analytic power that comes from distinguishing between the ego ideal and the imaginary version of *objet a* in the defiles of desire. The challenge of negotiating three complex texts sometimes leads to momentary confusions of reference, but on the whole Penney does an excellent job of keeping things straight.

Illuminating as this chapter is, the most important contributions to cultural studies appear in the subsequent four chapters. Because Penney is so careful to present his arguments in detail, with all of their warrants, it is impossible to summarize his achievements in each. Let me take the third chapter on Fanon as an example, even though I can only offer a preview. Penney brings together the two parts of Fanon's work that contemporary scholarship bifurcates into '(nominally) psychoanalytic and avowedly poststructuralist approaches' (p95) to show that 'the Fanonian intellectual is neither bi- or multicultural nor hybridized, as the mainstream of postcolonial theory would have us believe' (p93). Making use of the Badiouan concept of the event, Penney argues that Fanon's work constitutes a 'singularity' that gives voice to a radical revolutionary subject which dominant critical idioms fail to cognize (p94). By demonstrating that the psychoanalytic dimension of Fanon's thought is not where his critics locate it (Fanon has no real understanding of Lacan but relies on ego psychology and existentialism), Penney calls Bhabha and other critics to task, while offering through a transferential reading a more profound way of understanding Fanon's project in all its radicalism.

Penney shows that Fanon is trying to understand what gets in the way of the colonized subject's engagement with revolutionary desire and that the transferential framework allows us to grasp Fanon's analysis. He addresses himself to Fanon's famous Manicheanism, especially as it emerges in the response to Fodeba's poem at the conclusion to *The Wretched of the Earth*, making the following cogent observations that criticize the insufficiently theorized identificatory assumptions made by contemporary postcolonial studies:

The bleak outcome of Fodeba's narrative in all its devastating outrage, symbolism, and typicality finally breaks the colonized's unconscious fascination with the prestige of colonial culture, putting a decisive end to the demand for cultural recognition that motivates the lofty projects of postcoloniality: the nostalgic rediscovery of long-lost African kingdoms or the folkloric recuperation of authentic indigenous cultural practices, for instance. The colonized finally abandons the project to establish a cultural identity acknowledged by the European colonial Other, a project

that can only function as a politically inhibitory fetish. When Fanon writes that every colonized person will recognize themselves in Fodeba's poem, he isn't evoking the kind of recognition on which assertions of cultural identity depend. Recognition in this instance rests instead on the identification of the self with the colonized subject as he appears as an object in colonial fantasy; as precisely, the evil, immoral, primitive subhuman refuse that can be expediently discarded as a casualty of colonial progress or development. The transferential demand to be seen as one wants to be seen through the legitimizing eyes of the colonial master is now replaced by a confrontation with the brutal real of colonialism's death-bearing and ambivalent fascination with racialized alterity. Fanon mercilessly elucidates the seemingly paradoxical logic by which the political radicalization of the colonized occurs precisely through his internalization of the pathological, racializing images of colonialism itself. Unlike the consoling identitarian fantasies of postcoloniality, this wrenching subjective destitution holds within itself the power to wrest the colonized from his unconscious colonial dependency. The concrete suffering that it unveils persuades this subject to run the risk of a rebellion addressed not to the colonial authorities in all their idealized prestige and authority, but rather to her destitute peers among the wretched of the earth (pp115-16).

Penney explains that Fanon's radicality takes shape when he realizes that the response to the racist rhetoric of the colonizer ought not to incite the colonized subject to try to prove it *wrong*. Counterintuitive as it may seem, the colonizer's representation of the colonized potential destructiveness *inhibits* politicization. Instead, the colonized must realize that in their abjectness they 'cannot form the basis of a desirable, socially sanctioned identity' which means, very positively, that 'there is no sociologically defined limit - ethnic, tribal, religious, sexual - on the possibilities for affiliation with the cause' (p119). That is, their identification with the object of colonial degradation - an object so degraded that it is emptied of all significance - is precisely what enables them to achieve a 'generic' universality united against colonialism (p119).

Identifying with the 'evil' abject representation of themselves by the colonizer can dissolve particular identities (black, Asian, pidgin-speaking, Muslim, coloured, etc.): this is the key to establishing a voice of subalternity that 'bears no necessary relation to any social constituency ... The Fanonian anticolonial intellectual does not *speak for* the masses' (p121). In this application of Badiou with Lacan (which, by the way, is not exactly the Lacan Badiou himself deploys), Penney makes his case for an 'anti-identitarian socialist universalism against the dominant vectors of differentiating particularization that are mobilized in liberal multiculturalist discourses, which hide a secret complicity with the neo-colonial logic of capital under

the obfuscating cloak of antiracist tolerance and respect for alterity' (p126).

Subsequent chapters reveal erudite engagements with pre-eminent scholars in cultural studies to explore the radical potential within the work of Genet (on Palestine) and Lucian Freud, as well as film director Chantal Akerman. Penney deftly locates the theoretical problems plaguing these scholarly approaches and convincingly makes his case that transferential readings not only rectify those problems but expose the political and ethical value of the artists' work. For example, in a discussion that should have substantial impact on media studies, he re-visits Christian Metz's The Imaginary Signifier, now largely regarded as a-historical and decorporealized; Metz has been discarded in favour of a theory that assumes that 'spectatorship is more or less fully technologically determined and therefore varies experientially with the specific sort of audio-visual apparatus with which the spectator is engaged' (p163). Such phenomenological approaches are taken to be correctives to Metz. While Penney agrees with Metz's critics that the mirror-stage approach is naïve and not particularly helpful, he nonetheless points out that Metz is not working at the level of the experience, but rather theorizing a form of cinematic 'unpleasure' that works against identificatory processes in the cinema. Here Penney's theoretical framework is put to work weaving Metz, Lacan, and Freud together to elaborate an account of a primary identification with an apparatus as crucial to perception itself: 'This is to say, against the discourse of technologicism, that the phenomenal world is already a screen that separates us from desire's realization' (p169). Technological mediation per se is not the key to understanding the subjectivity effects of the cinema. Attributing to Metz the Kantian assumption that 'some function outside of experience must be presupposed in order to explain why my experience as a sensate subject can become intelligible as a unit, as a totality of interrelated impressions which reflect the particularity of my own personal engagement with the world,' Penney elaborates the way in which the apparatus serves this overarching function in cinema, 'a mechanism of defence against unconscious desire' (pp177, 180).

Taking on David Bordwell and Laura Mulvey, among others, he contends that Metz's insight allows us to see that cinema need not function as a means of Althusserian interpellation but rather as a means of 'authentic subjectivation,' that is, as forcing an encounter with the externality of the function that makes the subject's sense of self cohere. This encounter 'destroys the pleasurable amorous synergy by means of which we aspire to see ourselves, from the outside as it were, as both master of and participant in the cinematic diegesis ... the unpleasure occasioned by the failure of interpellation in spectatorship is a condition of possibility for what Freud calls the satisfaction of object libido' with the consequence that the spectator is precipitated out of his fantasy identifications and narcissistic sense of mastering space and time into the here and now of actual embodiment

that cannot, however, be psychically mapped (p180). Penney's transferential reading of Akerman's film shows how this failure of spectatorship can be staged and generated, which means that the filmgoer has the opportunity to undergo an experience beyond the transference.

The analyses of Genet's work on Palestine and Lucian Freud's approach to painting are also original and fascinating. The title of the book, unfortunately, does nothing to indicate the significance of its offerings: Penney would have been better served by something more provocative, such as 'Why Cultural Studies Needs the Transference.' The weaknesses of this text - occasional lapses in clear antecedents, a terrible index that often fails to include the names of authors referenced in footnotes, the occasional overreliance on his audience's knowledge of specific theories and debates, and some too-lengthy exposition of Freud's work - are outweighed by the value of the powerful analytic tool Penney has developed for cultural analysis in an ethical and political key.

STILL ANTHROPOCENTRIC

Louise Westling

Anne Emmanuelle Berger and Marta Segarra (eds), *Demenageries: Thinking* (of) Animals after Derrida, Amsterdam and New York, Rodopi, 2011, 267pp; £49.00

Jacques Derrida's *The Animal That Therefore I Am* has become the touchstone for anyone working in critical animal studies. Although, as Demenageries editors Anne Emmanuelle Berger and Marta Segarra point out, Derrida was concerned with animals in many earlier works, his posthumously published book is a culminating interrogation of the long humanist tradition exalting homo sapiens above all other forms of life. This is a timely critique, because, as Berger and Segarra assert in their introductory essay, humanism seems to have exhausted itself at the same time that ecological disaster threatens life on the planet (p3). Derrida sought to deconstruct traditional ideas of human/animal relations and open the way for fresh thinking about the place of animals in the biosphere, about human animality, about animal thinking and human logos. He explained that such a re-examination is necessary because our relations with other animals have reached an unprecedented transformation in the past two hundred years that has turned traditional forms of hunting, fishing, and domestication upside down. Advances in biological, zoological, ethological, and genetic knowledge and the industrialization of food production are causing a holocaust in the stockyards of the developed world, and genetic engineering threatens the very sources of life and species.1

Demenageries is a welcome effort to take up Derrida's challenges; however, editors Berger and Segarra have chosen to focus their collection, not on real animals and the major ontological and biological questions Derrida raises in his characteristically playful but deeply serious manner, but instead on how animals stimulate the human imaginary in texts: 'it is ultimately the basic correlation between subjectivity, self-reflexivity and human language that needs to be rethought and reformulated' (p5).

Several essays in the collection attempt to mimic Derrida's habitual word play as a method of exploring the many layers of connotation and complexity lurking in the language we use to consider these matters. Perhaps descending from Heidegger's lexical strategies, such tricks are often productive for Derrida but also occasionally silly and digressive. In the hands of his disciples, they can lead to self-indulgent solipsism that verges on the ridiculous. The title *Demenageries* seeks to pun on attention to, or dismantling of, animal menageries and the ordinary French verb for moving house. Leaving aside the awkward contrast of tone and situation between the two meanings, we might assume the pun suggests that the collection will move beyond Derrida

1. The Animal
That Therefore I
Am, (trans) David
Wills, New York,
Fordham University
Press, 2008, pp2426. Subsequent
references cited
in the text as The
Animal.

to fresh considerations of real animals from biological, ethical, and ethological perspectives and the resulting consequences for better understanding of ourselves and changes in our relations with other animals. In fact, few of the essays move beyond Derrida or have much interest in actual animals. In several early chapters, names of animals are gleefully teased from Derrida's writings, so that for example, the 'que donc' of Derrida's original French title (L'animal que donc je suis) becomes an allusion to the word 'donkey' in English for Marie-Dominique Garnier in 'Animal Writes: Derrida's Que Donc and Other Tails'. Never mind that the original audience was French and that the French word for that animal is 'ane'. Similarly, French words such as vers for English 'verse', rêve, and pervers become hunting-grounds for lurking worms (vers) that point back to Derrida's late essay 'Un ver à soie' about silkworms he raised as a child and all the innuendos about identity and sexuality that can be interpreted in the tiny form of this creature. Most of Demenageries is concerned with texual matters, particularly in Derrida's writings, that the animal question can lead us to trace and decipher.

Before looking more directly at the range of essays in *Demenageries*, it will be useful to remind ourselves of Derrida's main emphases in the complex texture of *The Animal That Therefore I Am*. Revisiting Montaigne's famous question from 'The Apology for Raymond Sebond' about whether when he played with his cat, 'who knows if I am not a pastime to her more than she is to me?' Derrida expands the question into a Freudian primal scene in which his little female cat gazes at his naked body. Who are we under the gaze of a cat? A whole world of alternative subjectivities opens up, as Derrida revisits the question of human identity in the midst of all the animals with whom we share our being.

Characteristically, Derrida uses puns to expose the complex associations of human animality with his title L'animal que donc je suis. In French the verb suis for 'I am' is spelled and pronounced in the same way as the verb 'I follow', allowing him to throw human relations with animals into a profound aporia. 'For I no longer know who, therefore, I am (following) or who it is I am chasing, who is following me or hunting me. Who comes before and who is after whom?' (The Animal, p10). In following up these questions, he deconstructs the Genesis accounts of human/animal relations, questions whether the animal can respond to us, calls for a new ethics in our relations with animals, and insists on attention to the multiplicity of animal kinds and individuals and thus for the abandonment of the monolithic term 'the animal'. He criticizes Heidegger, Lacan, and Levinas, among others, for never considering the possibility of being looked at by the animal they observe and write about, or indeed integrating ethological or primatological knowledge into their thinking. He fails to take this latter step himself, but he clearly opens the way for a necessary turn to the steadily proliferating scientific information about actual animals. His final challenge at the end of the book is a call for 'a radical reinterpretation of what is living' that pluralizes and varies the Heideggerian 'as such', and re-evaluates ontological difference (The Animal, p160).

2. The Complete Essays of Montaigne, Donald Frame (trans), Stanford, California, Stanford University Press, 1965, p 331.

Oddly, given his profound destabilization of philosophical and cultural tradition and his emphasis on the need for attention to animal science, Derrida refuses in rather overheated language to think about what he calls 'biologistic continuism'. For him, this would be like blinding oneself or sleepwalking; it would be naive and scatterbrained. Considering an evolutionary kinship between humans and other animals would be 'trop bête', he says, too beastly or stupid, and it has sinister connotations associated with the bestializing of human groups in war and genocide. Thus he perpetuates Heidegger's insistence on an abyssal rupture between our species and all other animals (*The Animal*, pp29-31).

Even though most of the essays in *Demenageries* are focused on textual puzzles and human psychological states, many include fruitful commentary on Derrida's work and link it to other literary and cultural materials, both European and South African. The collection offers useful information for readers interested in the international reception of Derrida's work on animals, with essays by scholars from French, Spanish, Canadian, and American universities. Adeline Rother's excellent 'Say the Ram Survived: Altering the Binding of Isaac in Jacques Derrida's "Rams" and J.M. Coetzee's Disgrace' takes up Derrida's concern with the killing of other animals for sacrificial purposes in contrast to industrial livestock production and slaughtering. Her analysis of the moral dilemma of euthanizing dogs in Coetzee's novel is especially powerful. On a related note, Rosalind Morris's 'Crowds and Powerlessness: Reading //kabbo and Canetti with Derrida in (South) Africa' places Derrida's ideas in the context of anthropological studies of South African tribal cultures and their attitudes towards animals and their sacrificial practices. Joseph Lavery considers wildness and domestication in 'Deconstruction and Petting: Untamed Animots in Derrida and Kafka'. Two essays offer readings of Derrida's essay on silkworms as extensions of concerns in The Animal That Therefore I Am: Ginette Michaud's 'On a Serpentine Note', and Claudia Simma's 'Ver(s): Toward a Spirituality of One's Own'. Michaud's discussion ends with a provocative examination of Derrida's commentary on D.H. Lawrence's poem 'The Snake', showing how he points out the facial features and behaviors of the snake in a critique of Levinas's refusal to think that animals have the kind of 'face' that calls us to ethical responsibility.

Three other essays move farther beyond Derrida's texts, applying certain of his concerns to nineteenth-century children's literature, French ethnography, and mechanical recordings of animal sounds. Anne E. Berger's 'When Sophie Loved Animals' thoughtfully reads the 'peculiar and conflicted zoophilia' of Countess de Ségur's nineteenth-century autobiographical novels for children against Derrida's thinking. She suggests that these stories of ironic sadism towards animals reflect an epistemological narrowing of the gap between animals and humans in that period that caused a violent reassertion of species borders and an increased animalization of women. Joseph Siegel's 'Tout Autre est Tout Autre' examines French ethnography's approaches to alterity in its

treatment of African cultures, connecting the effect of the gaze of Derrida's cat with the way the gaze of Africans upon white Europeans made them feel uncanny. Derrida's translator David Wills turns to the Cartesian question of animal/machine relationships in 'Meditations for the Birds', musing upon questions raised by recorded bird song about non-rationocinative utterance, repetition, and response. What does it mean if living birds respond to recordings emitted by mechanical copies of birds?

In spite of the clever explorations of Derrida's writings which the collection offers, Demenageries is ultimately disappointing to this reader because it represents one more example of anthropocentrism that turns aside from the urgent crisis motivating Derrida's questioning of Western traditions and habits of thought about animals. Derrida indeed opens up the animal question to multiple aporias, but what needs to come after his work is a much broader effort of thinking about actual animals and engaging the scientific studies of animals that have been proliferating in the past several decades and now offer the possibility of cross-species communication, as Donald Griffin explains in Animal Minds: Beyond Cognition to Consciousness. If we take Derrida seriously, we must attend to the work of primatologists like Frans DeWaal and Sue E. Savage-Rumbaugh, to the studies of elephant communication described by Caitlin O'Connell in The Elephant's Secret Sense, and to evolutionary biology as in the work of Lynn Margulis that reveals each human body to be its own ecosystem of microbes and viruses in symbiotic cooperation with our human cells. What becomes of Derrida's insistence on abyssal rupture in this context? Derrida condemns the monolithic term 'the animal' and insists on recognition of the multiplicity of differing animals; critical animal studies need to attend to the differences among specific animals and what they mean. How can humans know whether elephants have the 'as such' or how their abilities to perceive may be related to those of whales or bats? When Derrida asks in a theoretical sense whether 'the animal' responds to us, we ought to turn to books by gifted animal trainers like Vicki Hearne (Adam's Task: Calling Animals by Name) to find fresh answers to that question, or the work of Swiss ethologist Heine Hediger or Hungarian-American linguist Thomas Sebeok. Scholars such as Donna Haraway and Cary Wolfe are doing this. Ginette Michaud's essay 'On a Serpentine Note' explores the ways in which the silkworms raised by young Jacques seemed to gaze at him and act upon him, but finally her interest lies only in the ways the experience of watching the worms metamorphose and invisibly produce their silk filaments plays upon the developing psyche of the boy as he begins to awaken to his sexuality. We must stop obsessing about ourselves and actually pay attention to the philosophical consequences of evolution, the homologies between the bodies of homo sapiens and other animals, the communicative and sensing abilities of cetaceans, bats, elephants, migrating birds and butterflies, and return to the kinds of serious consideration of other animals as sentient agents who share our world and much of our biological lineage which we find in Montaigne and Darwin.

BOOKNOTES

Pierre Bourdieu, *Picturing Algeria*, Franz Schultheis and Christine Frisinghelli (eds), New York, Columbia University Press, 2012, 230pp; £14.50 hardback

Pierre Bourdieu (1930-2002) is recognised as one of the most influential social scientists of all time. Given his concern for such issues as class, status, taste, education, economy and politics, around which he built his theory of 'habitus' and its involvement in the production and reproduction of social patterns and systems, Bourdieu might be regarded as a sociologist's sociologist, a modern-day Emile Durkheim responsible for enhancing our understanding of the individual within the social and the social within the individual.

But as part of his writings on culture, Bourdieu has also become well known for producing some of the most original commentaries on the meaning and practice of photography, both in its everyday and sociological contexts. And in this remarkable new book we see how photography was not simply a sideline for Bourdieu, not simply incidental to his sociological and ethnological theories, but was in fact *central* to their development. Built around a collection of over 160 monochrome photographs taken by Bourdieu between 1957 and 1960 while he served as a soldier with the French army, *Picturing Algeria* is an intimate portrait of Algerian life amid the chaos and destruction of colonial struggle. The photographs are interspersed with excerpts from Bourdieu's diary notes and other writings on Algeria, as well as essays from other contributors including Craig Calhoun and Christine Frisinghelli.

If photographs represent a curious point between reality and representation, then these images are the perfect metaphors of Bourdieu's own in-between status as something of a double-agent in Algeria, working for a cold and detached colonial administration on the one hand, while connecting and sympathising with his subjects on the other. Bourdieu discusses the methodological role of the photographs as ethnological data in a candid interview with Franz Schultheis, which was conducted at the Collège de France, Paris, in June 2001. As if to corroborate Bourdieu's memories of his time in Algeria, a number of photographs are juxtaposed alongside his responses to Schultheis' questions. Some of the descriptions in Bourdieu's answers correspond with his visual illustrations of people, incidents and objects, emphasising the testimonial power of words and photographs in combination.

But perhaps the most interesting aspect of this book is its exploration of Bourdieu's theory of habitus and its application to the photographs. During the colonial war, the socio-economic basis of Algeria was being transformed by the French. In the name of 'civilisation', an agrarian society and an economy of sentimental bonds and supportive brotherly love was being rapidly dismantled and replaced by a one-dimensional, individuated capitalist system more

readily recognisable (and apparently more pleasing) to the invading Western eye. Bourdieu's photographs provide a visual record of the displacement and 'resettlement' of Algerians into newly-built villages constructed with such geometric precision that Bourdieu likens them to the settlements of 'Roman colonizers' (p73). Such changes produced irreconcilable disorientation in many Algerians who could no longer understand and master their own social milieu. During the four decades that followed, these experiences would manifest themselves in Bourdieu's theoretical writings on the tightly interwoven structures of culture and economy which are part and parcel of any social fabric.

Picturing Algeria is essential reading for anyone interested in the life and work of Bourdieu. But it will also be of interest to those concerned with ethnography, and particularly visual ethnography and its significance as a sociological method. As compositions in themselves, many of the photographs in this book are compelling and beautiful; befitting of any of the masters of the medium, they attest not only to a disappearing way of life, but also to the extraordinary talent of Bourdieu himself as perhaps the foremost sociologist of the twentieth century.

Erkan Ali

Patrizia Di Bello, Colette Wilson, Shamoon Zamir (eds), *The Photobook:* From Talbot to Ruscha and Beyond, London, IB Tauris, 2012, 288pp; £18.99 paperback

After decades of relative neglect in comparison with mainstream histories of photography (approached as either a canonised art form, or in its expanded social, documentary or scientific cultures), and other relatively underresearched fields such as the photo-exhibition or the illustrated photographic press, in the last ten years photobooks have begun to receive the attention they warrant. The Photobook is the latest in a number of recent publications to deal with the genre. It contains twelve essays generated by a series of workshops and a major conference held at Birkbeck, London, in 2009. There is much to commend in the collection, which crosses a disparate range of geographies and histories - from the medium's nineteenth century gentleman inventor Fox Talbot's 'Sun Pictures of Scotland', to the Turkish novelist Orhan Pamuk's recent memories of Istanbul. However, such a diverse spread of periods, interests and locations also confuses the kind of focus a more historically- or thematically-specific study might offer. Furthermore, like many collections with conference origins - so popular at present due to the pressures to publish brought to bear on British higher education - the chapters are far too short to offer the reader a satisfactorily in-depth treatment of the many complex subjects and objects examined.

The editors' generalised approach takes any book - and in some cases, simply any *pages*, be they in magazines, newspapers or booklets - as a suitable object for analysis. Although providing only a sketched history of the photobook's

material development, Di Bello and Zamir's introduction fails to make apparent the significant difference between the appearance of photographs in nineteenth century books and the emergence of the photobook as a specific phenomenon and material object in the fraught modern and modernist visual cultures of the 1920s and '30s. Further, this superficial overview of the genre leads to several problematic reductions. For example, the irreconcilable strategies of Bertolt Brecht are conflated with those of Ed Ruscha (p9) - an issue that might also have arisen because of the nineteenth and early twentieth century specialisms of the editors. Further, there is a lack of any strong critical positioning vis-avis the genre's political and social cultures and forms. This is particularly the case given that the political and social relationship between image and text, producer and viewer/reader in photobooks are central to any nuanced reading of them. Surely the technology and materiality of the photobook cannot but be connected to the production of different spectators across these periods? Instead, Di Bello and Zamir stress that although ethical, political and cultural issues are by no means of secondary concern, 'they are approached firstly through an analysis of aesthetic practice rather than through a methodology which privileges the social construction of visual meaning over the aesthetic' (p7). Given the fact that the photobook, arguably more than any other genre, is entirely dependent on the knotty, often dialectical aggregation of content/ form, and politics/aesthetics, it seems odd to try and separate or prioritise them thus. Paradoxically, however, the strongest essays in the collection all privilege the social construction of visual meaning. Those by Zamir, David Campany, Annabella Pollen and David Evans stand out. Zamir examines Edward S. Curtis' early twentieth century ethnographic study of the North American Indian; Campany considers Walker Evans' work for Fortune magazine in the '40s; Pollen explores mass participation and British vernacular photography of the 1980s, and Evans deals with Brecht's 1955 War Primer in the context of postwar and post-communist Berlin. In contrast, those essays which get stuck in superficial accounts of the genre's various material forms, such as Liz Well's overview of exhibition catalogues versus booklets contribute little to deepening or extending the present literature on photobooks.

The editors are at pains to stress that the collection is not intended as 'a history or a theorizing of genre', yet at the same time they claim the subject warrants 'new levels of integrated understanding beyond the more scattered studies which have come before' (p1). The non-committal agenda of the book and the brevity of the accounts contained within it arguably means it doesn't really deliver on these promises. This is a pity, as in many instances – such as Pollen's excellent reading of the commercially produced British bestseller *One Day for a Life* (1987), or Evans' fascinating foray into Heiner Müller and East German photographer Sibylle Bergemann's *A Spectre is Leaving Europe* (1990) - leave us hungry to find out more about both their contents and their forms.