

**THE DIGITAL HUMANITIES BEYOND
COMPUTING: A POSTSCRIPT**

Gary Hall

The digital humanities can be broadly understood as embracing all those scholarly activities in the humanities that involve writing about digital media and technology, and being engaged in processes of digital media production, practice and analysis. Such activities may include developing new media theory, creating interactive electronic archives and literature, building online databases and wikis, producing virtual art galleries and museums, or exploring how various technologies reshape teaching and research.¹ Yet this field or, better, constellation of fields, is neither unified nor self-identical: it is comprised of a wide range of often conflicting attitudes, approaches and practices that are being negotiated and employed in a variety of different contexts.

Our interest in this special issue of *Culture Machine*, however, is not so much with the ongoing debate as to the ontology of the digital humanities and how they are to be defined and understood. It is rather with an aspect of this emergent movement that appears to be becoming increasingly dominant--so much so that for some it is rapidly coming to stand in for, or be equated with, the digital humanities in general. This is the so-called 'computational turn' in the humanities.² The later term has been adopted to refer to the process whereby techniques and methodologies drawn from computer science and related fields--interactive information visualisation, statistical data analysis, science imaging, image processing, network analysis, data management, manipulation and mining—are being increasingly used to produce new ways of approaching and understanding texts in the humanities. Indeed, thanks to enhancements to computer processing power and its affordability over the last few years, coupled with the sheer amount of cultural material now available in digital form, number-crunching software is being applied to millions of humanities texts in this way.

Before going any further I should make it clear that it is not our intention here to equate this computational turn with the digital humanities per se. Even if the latter is sometimes known as Humanities Computing--or as a transition between the so-called 'traditional humanities' and Humanities Computing (Meeks, 2010) -- we should not be imposing an equivalence between what is coming to be called the digital humanities on the one hand, and this computational turn in the humanities on the other. In fact, far from equating the digital humanities with the computational turn, we would want to insist on the importance of maintaining a difference between them, certainly if we are to develop a rigorous understanding of what the humanities can become in an era of digital media technology.

To date (and it is of course still relatively early days), the traffic in this computational turn has been rather unidirectional. As the phrase suggests, it has primarily involved exploring what direct practical uses computer science can be put to in the humanities, in terms of performing computations on sets and flows of data that are often so large that, to cite the Digging into Data Challenge, 'they can be processed only using computing resources and computational methods' (Office of Digital Humanities at the National Endowment for the Humanities). The concern in the main has been with either digitising humanities texts and artifacts which were 'born analogue'--putting all of Chopin's first editions online, say--or gathering together 'born digital' humanities texts and artifacts--videos, websites, games, photography, sound recordings, 3D data—and then taking complex and often extremely large-scale data analysis techniques from computing science and related fields, and applying them to these humanities texts and artifacts; to this big data, as it's sometimes known.

Yet just as interesting as what computer science has to offer the humanities is the question of what the humanities--in both their digital and 'traditional' guises (assuming they can be distinguished in this way, which is by no means certain)--have to offer computer science; and, beyond that, what the humanities themselves can bring to the understanding of computing and the shaping of the digital. Do the humanities *really* need to draw quite so heavily on computer science to develop a sense of their identity and role in an era of digital media technology? Along with a computational turn in the humanities, might we not also benefit from more of a humanities turn in our understanding of the computational and the digital?

To be sure, one of the interesting things about computer science is that, as Mark Poster pointed out some time ago, it was the first case where ‘a scientific field was established that focuses on a machine’, rather than on an aspect of nature or culture, as was the case with the physical, life and social sciences. More interesting still is the way Poster was able to demonstrate that the relation to this machine in computer science is actually one of misrecognition, with the computer occupying ‘the position of the imaginary’ and being ‘inscribed with transcendent status’ (1990: 147). It is a misidentification on the part of computer science that has significant implications for any response we might make to the computational turn. It suggests computer science is not all that well equipped to understand itself and its own founding object, let alone help the humanities with *their* relation to computing and the digital.

In fact, counter-intuitive though it may seem, if what we are seeking is an appreciation of what the humanities can become in an era of digital media technology and ‘data-driven scholarship’ (Fitzpatrick, forthcoming), would we not be better advised looking elsewhere for assistance, other than primarily to computing science and engineering, science and technology, or even science in general? I almost hesitate to say this in the present political climate, when government, research council and private funding in the UK is primarily focused on what is called ‘the STEM subjects’ (science, technology, engineering and mathematics)—although it is important to do so for precisely this reason—but would we not be better off turning to the writers, poets, historians, literary critics, theorists and philosophers of the humanities right from the start?³

This is why this issue of *Culture Machine* has been concerned with investigating something that may initially appear to be a paradox: to what extent is it possible to envisage digital humanities that go beyond the disciplinary objects, affiliations, assumptions and methodological practices of computing and computer science?

At the same time, it is not our intention to recommend simply taking the ‘traditional’ humanities and directly applying them and their questions to the computational and digital domains.⁴ It is important to recognise that the humanities are not without blind spots and elements of misrecognition of their own. Let us take the very concept of the human itself—on which the idea of the humanities is of course based.⁵ For all the humanities’ radical interrogation of this concept over the last one hundred or so years, not least in relation to media and technology, the mode of production of research in the

humanities remains tied to that of the individualised, proprietorial, liberal humanist author.

What is more, this description of how ideas, theories and concepts are created in the humanities is as applicable to the latest generation of technology-conscious theorists to emerge--Kittler, Latour, Negri, Stiegler--as it was to the 'golden generation' of theorists such as Barthes, Foucault, Lyotard and Lacan. Even though some of the former may be more inclined to write nowadays using a computer keyboard and screen than a fountain pen or typewriter, their way of creating, developing and disseminating theory and theoretical concepts remains much the same. This is the case with respect to the initial production of their texts and their materiality--the focus on print-on-paper books and articles, or at the very least papercentric texts, written by lone scholars in a study or office. But it is also the case with regard to the attribution of their texts to individualised human beings, whose identities are unified and self-present enough for them to be able to claim the legal right to be identified as their authors, and to claim these texts as their property. It thus becomes apparent that, at least in the way their work is created, composed, published and disseminated, these theorists--for all their avowed anti-humanism--appear to have hardly any more interest in thinking outside the box of singular authorship than do the American courts.⁶

To provide a specific example, in his 2009 book *The Soul at Work*, Franco 'Bifo' Berardi shows how, for Italian Compositionist Workerism:

the science of social transformation is much closer to the chemistry of gases than to the mechanics of sociology. There are no compact forces, unitary subjects that promote unequivocal wills. In fact there is no will..

There is no subject opposing other subjects. But the transversal flows of imagination, technology, desire....

... the historical process is not a homogenous field where homogeneous subjectivities are opposed, or where clearly identifiable projects would be conflicting. It is rather a heterogenous becoming where different segments are active: technologic automation, panic psychosis,

international financial circuits and identitarian or competitive obsessions. These heterogeneous elements neither sum up nor oppose each other: they enter concatenating relations that Guattari called 'machinic arrangements' (*agencements*). (Berardi, 2009: 120)

Bifo proceeds to combine Workerist theories with the schizoanalysis of Deleuze and Guattari to develop a concept of the subject as a violent imposition on a chaotic world made up on a flow of molecules: 'A person's being is the temporary fixation of a relational becoming in which people define themselves, for a moment or for their entire life, always playing with an imponderable matter' (Berardi, 2009: 121). Yet the question remains: to what extent is this theory of the subject actually being enacted by Bifo 'himself' with regard to his own identity, role, work, business and practice as an author? If, following Deleuze and Guattari, the concept of the author is what Bifo thinks of as a blockage, a clot, a hardening, how is he providing an unblockage of this role? Far from being a fluid or gas-like assemblage of unstable traces, does his text--in this case his print-on-paper book, *The Soul at Work*--not very much endeavour to remain the original property of a stable, centered, individualized, bourgeois, liberal, humanist, male subject in its methods of creation, composition, publication and dissemination, for all the opportunities that are provided by the digital medium especially to perform the idea of the human and author otherwise?

In this respect it is tempting to position the Bifo of *The Soul at Work* in a relation of contrast to the Deleuze and Guattari of *A Thousand Plateaus*. One can think in particular of the beginning of *A Thousand Plateaus*, where the latter write:

The two of us wrote *Anti-Oedipus* together. Since each of us was several, there was already quite a crowd. Here we have made use of everything that came within range, what was closest as well as farthest away. We have assigned clever pseudonyms to prevent recognition. Why have we kept our own names? Out of habit, purely out of habit. To make ourselves unrecognizable in turn. To render imperceptible, not ourselves, but what makes us act, feel, and think. Also because it's nice to talk like everybody else... To reach the point where one no longer says I, but the point where it

is no longer of any importance whether one says I. We are no longer ourselves. Each will know his own. We have been aided, inspired, multiplied.

A book has neither object nor subject; it is made of variously formed matters, and very different dates and speeds. To attribute the book to a subject is to overlook this working of matters, and the exteriority of their relations. It is to fabricate a beneficent God to explain geological movements. (Deleuze & Guattari, 1988: 3)

Yet while *A Thousand Plateaus* may, in its experimental form and content, as well as its mode of creation and composition, undermine the notion that there exists a centred, unified subject or subjects behind the writing of this book, communicating with the reader, could it not be said that this notion is simultaneously reinforced in its mode of publication and dissemination, and focus on the print-on-paper text?⁷ And, in fact, *Ethereal Shadows*, Bifo's co-authored book with Marco Jacquemet and Gianfranco Vitali, offers something of a contrast to *A Thousand Plateaus* and Bifo's own *The Soul At Work* in this regard, at least in terms of dissemination (Berardi et al, 2009). *Ethereal Shadows* is explicitly published under an anti-copyright basis which makes it clear that 'this book may be freely pirated and quoted for non-commercial purposes'.

Such blind spots and areas of misrecognition occur not just in relation to ideas of the subject, the author or the text, however. Similar questions can be raised regarding the implications and possibilities of the digital for many of the humanities' other central or founding concepts, too: the scholar, writing, the book, the work, the discipline, the university.

In the end, then, we are left with a question that initially appears to be something of a *double* paradox: not just to what extent is it possible for the emerging digital humanities to go beyond the disciplinary objects, affiliations, assumptions and methodological practices of computing science and engineering, science and technology, or even science in general; but to what extent is it possible for the emerging digital humanities to go beyond the human-ities too?

Endnotes

¹ For a range of different definitions of the digital humanities, see *Tapor* (2010). Other definitions are offered in Meeks (2010). For an overview of the field, see Forster (2010), Smith (2009) and Svensson (2010). For a history of the digital humanities, see Berry (2011; and this issue).

² See, for example, the call for papers for ‘The Computational Turn’ workshop at Swansea University, March 9, 2010: <http://www.thecomputationalturn.com/>.

³ A longer and more developed version of the above analysis of the digital humanities and the computational turn entitled ‘On the Limits of Openness: Cultural Analytics and the Computational Turn in the Digital Humanities’, is currently under review with *Theory, Culture and Society*.

⁴ In saying this, we am aware we are rather going against the grain of those definitions of the digital humanities which, to borrow the words of Kathleen Fitzpatrick, position it as ‘a nexus of fields within which scholars use computing technologies to investigate the kinds of questions that are traditional to the humanities, or, as is more true of my own work, who ask traditional kinds of humanities-oriented questions about computing technologies’ (2010). See also Drucker (2011).

⁵ As Samuel Weber puts it:

To speak of the *humanities*, then, is to imply a model of unity based on a certain idea of the *human*, whether as opposed to the *divine* (medieval, scholastic humanism) or to the non-human animal world....

The unity of the *university* remains profoundly bound up with the notion of a universally valid essence of the Human... As the Cartesian institution par excellence, the modern university conceives of itself as a place where universally – “globally” valid knowledge is discovered, conserved and transmitted. (Weber, 2000)

6

The overwhelming evidence from IP law suggests that American courts have little interest in thinking outside the box of singular authorship. They will not recognize the potentially legitimate IP claims of participants in the kind of collective creative work that is the norm in the culture, IT, and other knowledge-intensive industries, and they have even less interest in hearing the argument that the true source of most creative works is the public domain itself. Instead, judges are increasingly fixed on assigning monopoly rights (and lots of them) to single, indivisible authors, who are more than likely to be corporate entities. As several scholars have observed, the courts have invested more and more exclusive rights and privileges in the category of proprietary authorship at a time when [according to Ross here, at least] cultural critics have been doing exactly the opposite – dissolving the Romantic mystique that supports such notions about the extraordinary rights of creative geniuses. The state has obliged the courts' interpretation by passing punitive legislation to protect these privileges. (Ross, 2009: 167)

⁷ Some have even argued that this is true of the content of the book:

A Thousand Plateaus advances our understanding of the political by its nonlinear understanding of just such a social world but it grounds its analysis on a suspect notion of freedom as the flux of desire. Against the schizoid pullulations of the unconscious, the human/computer interface becomes and 'enslavement.' But the authority for this judgement proceeds from the privilege accorded to desire in the first place. Deleuze and Guattari retreat to the position of theorist/legislator proclaiming the truth of desire against the degradation of 'the machinic assemblage', a retreat that returns them to the modern position which they sought at the outset

to undermine. The hermeneutic of desire closes their work against its claims of multiple, non-centered authorship. They become once again the 'subject' that promotes the cause of desire, a unitary subject whose illocutionary force constrains the reader even in the book's anti-authoritarian organization. (Poster, 1990: 136-137)

So once again we are faced with the question, who judges desire (see Hall *et al.*, 2010)?

References

(2010) 'How Do You Define Humanities Computing/Digital Humanities?', *Tapor*, [http://tapor.ualberta.ca/taporwiki/index.php/How do you define Humanities Computing / Digital Humanities%3F](http://tapor.ualberta.ca/taporwiki/index.php/How_do_you_define_Humanities_Computing_Digital_Humanities%3F).

Berardi, 'Bifo' F. (2009) *The Soul at Work: From Alienation to Autonomy*. Los Angeles: Semiotext(e).

Berardi, 'Bifo' F., Jacquemet, M. & Vitali, G. (2009) *Ethereal Shadows: Communications and Power in Contemporary Italy*. Autonomedia: Brooklyn, New York.

Berry, D. M. (2011) 'Digital Humanities: First, Second and Third Wave', *StunLaw: A Critical Review of Politics, Arts and Technology*, January 14. <http://stunlaw.blogspot.com/2011/01/digital-humanities-first-second-and.html>

Deleuze G. & Guattari, F. (1988) *A Thousand Plateaus: Capitalism and Schizophrenia*. London: Athlone.

Drucker, J. (2010) 'Humanistic Approaches to the Graphical Expression of Interpretation', *MIT World*, May 20. <http://mitworld.mit.edu/video/796>

Drucker, J. (2011), response to Matthew Kirschenbaum, 'The (DH) Stars Come Out in LA', *Matthew Kirschenbaum*, January 14. <http://mkirschenbaum.wordpress.com/2011/01/13/the-dh-stars-come-out-in-la-2/#div-comment-52>

Fitzpatrick, K. (2010) 'Reporting from the Digital Humanities 2010 Conference', *Chronicle of Higher Education*, July 13:

<http://chronicle.com/blogPost/Reporting-from-the-Digital/25473/>

Fitzpatrick, K. (forthcoming) 'Database-driven Scholarship', *Planned Obsolescence: Publishing, Technology, and the Future of the Academy*. New York: New York University Press. See also: <http://mediacommons.futureofthebook.org/mcpress/plannedobsolescence>.

Forster, C. (2010) 'I'm Chris. Where Am I Wrong?', *HASTAC*, September 8: <http://www.hastac.org/blogs/cforster/im-chris-where-am-i-wrong>.

Hall, G., Birchall, C. & Woodbridge, P. (2010) 'Deleuze's "Postscript on the Societies of Control"', *Culture Machine* 11. <http://www.culturemachine.net/index.php/cm/article/view/384/407>

Meeks, E. (2010) 'The Digital Humanities as Imagined Community', *Digital Humanities Specialist*, September 14: <https://dhs.stanford.edu/the-digital-humanities-as/the-digital-humanities-as-imagined-community/>.

Office of Digital Humanities at the National Endowment for the Humanities, 'Announcing the Digging Into Data Challenge', Digging Into Data Challenge. <http://www.diggingintodata.org/>

Poster, M. (1990) *The Mode of Information: Poststructuralism and Social Context*. Cambridge: Polity.

Ross, A. (2009) 'The Copyfights Over Intellectual Property', *Nice Work If You Can Get It: Life and Labor in Precarious Times*. New York and London: New York University Press.

Smith, K. (2009) '[Q&A With Brett Bobley, Director of the NEH's Office of the Digital Humanities](http://www.hastac.org/node/1934)', *HASTAC*, February 1: <http://www.hastac.org/node/1934>

Svensson P. (2010) 'The Landscape of Digital Humanities', *Digital Humanities Quarterly*, vol. 4 no. 1 (Summer):
<http://digitalhumanities.org/dhq/vol/4/1/000080/000080.html>

Weber, S. (2000) 'The Future of the Humanities: Experimenting',
Culture Machine 2:
<http://www.culturemachine.net/index.php/cm/article/view/311/296>