Violins in the Subway
Scarcity Correlations, Evaluative Cultures, and Disciplinary Authority in the Digital Humanities

Abstract

Despite the proliferation of digital humanities projects, varying greatly in form and media, there remain anxieties about the evaluation of digital work. Digital humanists find, time and time again, that they are expected to perform twice the labour of traditional scholars; once for the work itself and once again for its evaluation. At the same time, traditional humanists often experience a sensation of threat from the digital arena, believing that it is easy to gain employment, grants, and tenure if one is a digital humanist.

In this chapter, I ask how we can understand a double logic in which digital-humanities work is at once so powerful as to crowd out the traditional humanists while at the same time so poorly understood as to need supplementation by traditional publication. Classifying the existing mechanisms of evaluation into a three-fold typology of 1.) a desired scarcity correlation; 2.) a set of media-specific denoting frames; and 3.) a set of disciplinary understandings, I show how and why DH remains radical in its work yet traditional in its outputs.

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Note on this text

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In January 2007, in a busy metro station in Washington DC, a violinist began to play. Of the 1,097 people who walked by this violinist, twenty-seven contributed a dollar or so and seven stopped to listen. At the end of the three-quarter-hour session playing Bach, the violinist had amassed $32.17. Only one of the thousand or so passers-by recognised the busker as the world-famous virtuoso Joshua Bell who had, a mere three nights before, played the same repertoire at Boston's Symphony Hall with good tickets going for $100 each. The violin on which Bell performed in the subway was worth $3.5m.[1]

Although $30 per hour was not a bad rate of remuneration in the economic climate of 2007, the clearer point that emerges from the Bell experiment – a stunt fronted by *The Washington Post* – is that we are not very good, as a species, at identifying quality without frames of reference. As the found objects of the readymade Modernist period taught us of art: context is everything. What, though, if the same phenomena applied to scholarship? How good are we at independently judging research work, devoid of its enframing apparatus? Can we judge the music (the research) outside of the concert hall (the journal or press)?

In the digital humanities (DH), this crux of evaluation has been entirely evident for some time.[2] Digital historians undertaking graduate study, for instance, report the threats that they receive: "you will never gain a PhD doing this work".[3] Those working in digital literary studies are advised to publish traditional works alongside their digital projects, effectively doubling the labour required of their analogous analogue cohort.[4] The very promise of performed new media seems to re-stoke debates around print/scholarly fixity and the evaluation of ephemeral objects.[5] Essentially, time and time again, those working in the digital humanities are told that their work will not count. At the same time, traditional scholars often perceive the digital humanities as a "hot topic" in which it is easy to gain academic employment and tenure, leading to their fear of being crowded out. Certainly, as far back as 2011 the director of the National Endowment for the Humanities's office of the digital humanities, Brett Bobley, joked of a fear that DH was a

1 Gene Weingarten, 'Pearls Before Breakfast: Can One of the Nation's Great Musicians Cut through the Fog of a D.C. Rush Hour? Let's Find Out.', *The Washington Post*, 23 September 2014 <https://www.washingtonpost.com/lifestyle/magazine/pearls-before-breakfast-can-one-of-the-nations-great-musicians-cut-through-the-fog-of-a-dc-rush-hour-lets-find-out/2014/09/23/8a6d46da-4331-11e4-b47c-f5889e061e5f_story.html> [accessed 21 March 2017].

2 See Susan Schreibman, Laura Mandell, and Stephen Olsen, 'Introduction', *Profession*, 2011.1 (2011), 123–201 <https://doi.org/10.1632/prof.2011.2011.1.123> and the associated special issue for just one example.

3 The speaker here asked to remain unattributed, except to note that it was spoken by a woman of incredible fire and credulity.

4 Sydni Dunn, 'Digital Humanists: If You Want Tenure, Do Double the Work', *Vitae, the Online Career Hub for Higher Ed*, 2014 <https://chroniclevitae.com/news/249-digital-humanists-if-you-want-tenure-do-double-the-work> [accessed 21 March 2017].

5 Helen J. Burgess and Jeanne Hamming, 'New Media in the Academy: Labor and the Production of Knowledge in Scholarly Multimedia', 5.3 (2011) <http://www.digitalhumanities.org/dhq/vol/5/3/000102/000102.html> [accessed 24 March 2017]; see also Adrian Johns, *The Nature of the Book* (Illinois: The University of Chicago Press, 1998) <http://www.press.uchicago.edu/ucp/books/book/chicago/N/bo3645773.html> [accessed 30 March 2014] as a famous reply to Elizabeth Eisenstein.

"secret plan to replace human scholars with robots".[6]

Whence this conflicting sentiment? How can we understand a double logic in which digital-humanities work is at once so powerful as to crowd out the traditional humanists while at the same time so poorly understood as to need supplementation by traditional publication? How can it be seen as both a sure-fire path to tenure but also a "risky thing", as Kathleen Fitzpatrick and Mark Sample put it, to conduct digital labour in the humanities?[7] Further, in this chapter I also ask whether there is something about the broader climate at the moment in academia that fears the collapse of traditional gatekeeping mechanisms. This is linked to longer trends in the digital availability of scholarship and scientific publication but also to the ways in which the abundance of the digital space allows for the publication of a wider range of artefacts. For, while it is possible for scholars to publish diverse types of digital artefacts and for these to be of a high-quality, to understand the challenges of awarding credit in the contemporary age requires an understanding of labour shortage for evaluation and the necessity of frames in the evaluation of research work.

Judging Excellence and Academic Hiring/Tenure

In order to understand the broader contexts of the academy within which DH evaluation takes place, we must ask a few further questions: Just how bad are we at judging whether academic work is excellent? What about within niche sub-fields? Can we tell whether work closely related to our own is any good?

Actually, as with the commuters ignoring Joshua Bell on the subway, the answers are: we are very bad at judging excellence, even within niche sub-fields closely related to our own. As I have noted elsewhere, alongside many others, researchers are extremely poor at judging quality even within their own fields.[8] This works both in terms of false negatives and false positives. For instance, in the former category, Campanario, Gans, and Shepherd examined instances of Nobel-prize winning work being rejected from top journals.[9] Campanario and others also note that there are many originally rejected papers that go on to be among the most highly cited in their fields.[10] This is unsurprising, since most

6 Steve Kolowich, 'The Promise of Digital Humanities', *Inside Higher Ed*, 2011 <https://www.insidehighered.com/news/2011/09/28/national_endowment_for_the_humanities_celebrates_digital_humanities_projects> [accessed 21 March 2017].

7 Kathleen Fitzpatrick, 'Do "the Risky Thing" in Digital Humanities', *The Chronicle of Higher Education*, 2011 <http://www.chronicle.com/article/Do-the-Risky-Thing-in/129132/> [accessed 21 March 2017]; Mark Sample, 'Tenure as a Risk-Taking Venture', *Journal of Digital Humanities*, 1.4 (2012) <http://journalofdigitalhumanities.org/1-4/tenure-as-a-risk-taking-venture-by-mark-sample/> [accessed 24 March 2017].

8 Samuel Moore and others, 'Excellence R Us: University Research and the Fetishisation of Excellence', *Palgrave Communications*, 3 (2017) <https://doi.org/10.1057/palcomms.2016.105>; Adam Eyre-Walker and Nina Stoletzki, 'The Assessment of Science: The Relative Merits of Post-Publication Review, the Impact Factor, and the Number of Citations', *PLoS Biol*, 11.10 (2013), e1001675 <https://doi.org/10.1371/journal.pbio.1001675>.

9 Juan Miguel Campanario, 'Rejecting and Resisting Nobel Class Discoveries: Accounts by Nobel Laureates', *Scientometrics*, 81.2 (2009), 549–65 <https://doi.org/10.1007/s11192-008-2141-5>; Joshua S. Gans and George B. Shepherd, 'How Are the Mighty Fallen: Rejected Classic Articles by Leading Economists', *The Journal of Economic Perspectives*, 8.1 (1994), 165–179.

10 Juan Miguel Campanario, 'Consolation for the Scientist: Sometimes It Is Hard to Publish Papers That Are Later Highly-Cited', *Social Studies of Science*, 23.2 (1993), 342–62; Juan Miguel Campanario, 'Have Referees Rejected

rejected manuscripts are eventually published elsewhere.[11] Even more worryingly, though, there are also instances of false positives. In 1982, Peters and Ceci re-submitted disguised papers to journals that had already accepted the same works for publication. They found that only 8% were detected as plagiarised but that 90% were rejected on methodological and other grounds, by journals in which the material had already appeared.[12] It is unclear precisely how these studies translate to the humanities disciplines but it would not be a radical hypothesis to suggest that there may be analogies.

However, despite the evidence from the above studies, most academics are usually unwilling to admit that they are unable to determine quality. Were they to do so, the entire peer-review mechanism would have been dismantled by now.[13] Instead, there is another factor present in understanding the instruments through which quality is assessed in the academy: a shortage of evaluative labour. With up to four-hundred applicants for a single academic job, hiring panels often resort to proxy measures to evaluate quality.[14] In other words, there is insufficient labour on search committees to read and evaluate the research work of four-hundred candidates, despite the fact that hiring to permanent/tenured positions represents a potential investment of several million dollars over a career. While the final shortlist of candidates may have their work read, others are often eliminated by recourse to press/journal name or nebulous citation measures such as the Impact Factor.[15] This is clearly poor academic practice that doesn't allow for a discrepancy between the container and its contents, which has led to declarations such as the San Francisco Declaration on Research Assessment (DORA), disavowing such techniques.[16] For it is certainly the case, for instance, that top university presses can publish bad books but also that low-ranking journals can contain gems. In theory, academics are free to to submit their work where they wish but this is severely constrained by this mechanism of proxy evaluation that concentrates material rewards upon specific publication brands.

Some of the Most-Cited Articles of All Times?', *Journal of the American Society for Information Science*, 47.4 (1996), 302–10 <https://doi.org/10.1002/(SICI)1097-4571(199604)47:4<302::AID-ASI6>3.0.CO;2-0>; Juan Miguel Campanario and Erika Acedo, 'Rejecting Highly Cited Papers: The Views of Scientists Who Encounter Resistance to Their Discoveries from Other Scientists', *Journal of the American Society for Information Science and Technology*, 58.5 (2007), 734–43 <https://doi.org/10.1002/asi.20556>; Kyle Siler, Kirby Lee, and Lisa Bero, 'Measuring the Effectiveness of Scientific Gatekeeping', *Proceedings of the National Academy of Sciences*, 112.2 (2015), 360–65 <https://doi.org/10.1073/pnas.1418218112>.

11 See Moore and others.

12 Douglas P. Peters and Stephen J. Ceci, 'Peer-Review Practices of Psychological Journals: The Fate of Published Articles, Submitted Again', *Behavioral and Brain Sciences*, 5.2 (1982), 187–95 <https://doi.org/10.1017/S0140525X00011183>.

13 Despite my criticisms here, it is certainly the case that peer review may spot errors. Experts are able to question matters of fact and interpretation. They are just not good at judging the *value* and/or *worth* of work in the present.

14 See Martin Paul Eve, *Open Access and the Humanities: Contexts, Controversies and the Future* (Cambridge: Cambridge University Press, 2014), chap. 2 <http://dx.doi.org/10.1017/CBO9781316161012>.

15 Björn Brembs, Katherine Button, and Marcus Munafò, 'Deep Impact: Unintended Consequences of Journal Rank', *Frontiers in Human Neuroscience*, 7 (2013), 291 <https://doi.org/10.3389/fnhum.2013.00291>.

16 *San Francisco Declaration on Research Assessment: Putting Science into the Assessment of Research* (San Francisco) <http://www.ascb.org/files/SFDeclarationFINAL.pdf> [accessed 18 February 2016].

This mechanism of proxy evaluation can "work" for hiring panels because publication brand correlates with scarcity, as do the applicant-to-position ratios in universities. That is to say, for example, that if it is believed that having two books with top university presses is probably achievable by around one in four-hundred candidates, then the proxy works perfectly for the above hypothetical hiring scenario. In this way, publication and evaluation through scarce proxy measures act as a symbolic economy. The currency of this economy is research artefacts, which can be traded, through hiring, promotion, and tenure panels, into a real-world material economy (jobs, pay, benefits, healthcare, pensions) for the select few.

The essence of this evaluative culture is one that uses a frame of publication to judge the quality of research, usually problematically centred around a presumed single/individual author.[17] It is the same type of frame that uses the concert hall to judge the violinist and that lacks discriminatory power when that same violinist appears in the subway. While it may be true, as Kathleen Fitzpatrick suggests, that "we must be willing to engage in the act of judgment ourselves", we must also acknowledge the difficulties we face in undertaking such acts.[18] Importantly, though, this culture is also one that confers value upon specific *media*. University presses, for instance, publish books and journals. When "university presses" are, then, the way in which hiring, promotion, and tenure panels make their decisions, there is an implicit underlying constraint of the valid forms that may be framed for evaluation through such proxy measures. There is further the matter of the continued *belief* in the efficacy of peer review, despite evidence to the contrary and perhaps due to the lack of a viable filtering alternative, which is linked to a reinforcement of existing media types. For instance, if the labour of peer review is itself a type of service practice on which academics are assessed, the motivation to review for a high-profile press – whose brand will once again help with career advancement – is stronger than the motivation to review for radical/new publishers. This, though, then reinforces the types of media that those traditional press entities publish since peer-review must be attached to particular objects and media types. In other words, there is a strong circularity of incentives for both authorship and peer-reviewing practices that severely constrict change in the type of media through which academics are assessed.

Finally, it is also necessary to pay attention to disciplinarity as a constraining factor in the evaluative cultures of university hiring. Disciplinary segregation is, as Samuel Weber has charted it, a way of amplifying authority through delineation of a sub-field over which one may preside. In other words: "[i]n order for the authority of the professional to

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17 See Bethany Nowviskie, 'Where Credit Is Due: Preconditions for the Evaluation of Collaborative Digital Scholarship', *Profession*, 2011.1 (2011), 169–81 <https://doi.org/10.1632/prof.2011.2011.1.169>; and Bethany Nowviskie, 'Evaluating Collaborative Digital Scholarship (Or, Where Credit Is Due)', *Journal of Digital Humanities*, 1.4 (2012) <http://journalofdigitalhumanities.org/1-4/evaluating-collaborative-digital-scholarship-by-bethany-nowviskie/> [accessed 24 March 2017] for more on the challenges of adapting peer review for collaborative evaluation.

18 Kathleen Fitzpatrick, 'Peer Review, Judgment, and Reading', *Profession*, 2011, 196–201 (p. 201) <https://doi.org/10.1632/prof.2011.2011.1.196>.

be recognized as autonomous, the 'field' of his 'competence' had to be defined as essentially self-contained […] In general, the professional sought to isolate in order to control" and "[t]he university, as it developed in the latter half of the nineteenth century, became the institutional expression and articulation of the culture of professionalism".[19] But, as the old advice for graduate students used to run in the UK, while English programmes churned out competent critical theorists, there were no critical theory departments; one had to be a literature scholar. Even within the realm of the digital humanities, though, this urge towards bounding and containment in the name of intellectual authority is a vocal debate.[20] That said, it is frequently recognised that the digital humanities is an interdisciplinary space, even when it is difficult to define this term.[21] So, while citing an unpopular figure in digital humanities circles, it remains true that "being interdisciplinary is so very hard to do".[22] Indeed, the tendency of interdisciplinary methods to rest upon a dominant home discipline, while legitimating themselves as being "interdisciplinary" through reference to an exotic other discipline, is omnipresent. But the sites of authority through evaluation in universities are primarily grouped around traditional disciplinary categories that can feel threatened by digital incursions.

The Diverse Media Ecology of Digital Humanities

There are, in the taxonomy that I have sketched above, three conjoined and self-reinforcing elements of the academic evaluative cultures around research:

1. a desired scarcity correlation between the research artefact and the position;
2. a frame for evaluation that denotes scarcity, that is media specific, and that saves evaluative and reviewer labour;
3. a set of disciplinary norms and agreements about which frames (in point 2) best denote comparable scarcity (in point 1).

The digital humanities, or in some cases just the digital, pose threats to a number of these evaluative cultures.

To begin to unpick this, consider that digital dissemination in general is causing problems for the scarcity correlation. In previous eras, the scarcity correlation was obtained through material print scarcity. That is, before digital dissemination was possible, a limited page budget with comparatively high printing costs per page came together to

19 Samuel Weber, *Institution and Interpretation*, Cultural Memory in the Present (Stanford: Stanford University Press, 2001), pp. 27–33.

20 Lisa Spiro, '"This Is Why We Fight": Defining the Values of the Digital Humanities', in *Debates in the Digital Humanities*, ed. by Matthew K. Gold (Minnesota: University of Minnesota Press, 2012), pp. 16–35 <http://dhdebates.gc.cuny.edu/debates/text/13>.

21 See Julie Thompson Klein, *Interdisciplining Digital Humanities: Boundary Work in an Emerging Field* (Ann Arbor: University of Michigan Press, 2014), chap. 1 <http://dx.doi.org/10.3998/dh.12869322.0001.001>.

22 Stanley Fish, 'Being Interdisciplinary Is so Very Hard to Do', *Profession*, 1989, 15–22 <https://doi.org/10.2307/25595433>.

enforce a condition of scarcity. The digital environment changes this. In the world of the digital the vast majority of costs are shunted into the cost to first copy, which is still far from negligible in the academic publishing space (labour functions and estates costs include: typesetting, copyediting, proofreading, platform maintenance, digital preservation, identifier assignment, report generation, accountancy, legal, property, and equipment). By decreasing unit cost and also by moving different forms of labour onto authors, as Matthew Kirschenbaum has recently noted, the print scarcity that previously underpinned the scarcity correlation for quality begins to collapse.[23] As journal articles and books – the previous media of print scarcity – become digital in their production, their scarcity function, which was always an economic function, is degraded. This is a little like the dropping of the gold standard as a way to measure the value of currency. Except, in the case of academic hiring, the belief in the value of the artefact, decoupled from any non-imagined scarcity, does not seem sufficient to continue.[24] In this way, at the heart of the digital's possibilities of infinite near-zero-cost dissemination lies an antithesis to the scarcity that has been used as a hiring proxy until now.

The practices of those working specifically in some forms of the digital humanities, though, pose a set of additional challenges for not only the scarcity correlation but also for the frames of evaluation. In common with other scientific disciplines, the rise of the need to disseminate diverse forms of quantitative and qualitative data, software/code, and interactive artefacts within DH breaks the conditions of scarcity in a very particular way. For it is not precisely that such artefacts – the “project as basic unit” as Burdick *et al.* put it – are not scarce.[25] Whether it is the Digital Library of the Caribbean or the Манускрипт project of Udmurt State University and Izhevsk State Technical University that is under discussion, these projects are often unique; the ultimate form of scarcity. The same could be said, of course, of conventional academic books and articles which are supposed to be unique in their original contributions to knowledge. Yet, books and journal articles are treated as comparable media-units of currency, while data, code, and interactive exhibits, in their uniqueness, are usually treated as though incomparable.

This supposition of (in)comparability is predicated on the belief of the uniform, or otherwise, nature of peer review tied to media form. Although the gatekeeping process of peer review is usually kept hidden due to concerns about anonymity and the freedom to speak truth to power, the furore around *PLOS ONE*'s lessened threshold of evaluation for publication demonstrates this anxiety. In the *PLOS ONE* model, work is appraised on its technical soundness, rather than on its novelty, originality, or significance. This mode of peer review is designed to encourage

23 Matthew G. Kirschenbaum, *Track Changes: A Literary History of Word Processing* (Cambridge, MA: The Belknap Press of Harvard University Press, 2016), chap. 3.

24 There are some challenges with the divide that I am here drawing between a digital abundance and a material scarcity. Since labour is itself scarce and tied to material economic scarcity and since there is labour in publishing, there remains a real non-imagined scarcity even in the digital. For more on this, see Martin Paul Eve, ‘Scarcity and Abundance’, in *The Bloomsbury Handbook of Electronic Literature*, ed. by Joseph Tabbi (London: Bloomsbury, 2017) forthcoming.

25 Anne Burdick and others, *Digital Humanities* (Cambridge, MA: MIT Press, 2012), pp. 124–25.

replication studies and the publication of negative results; aspects that are also of interest to many data-driven sub-fields in DH, such as stylometry and sentiment analysis. However, as noble as its scientific purposes may be, *PLOS ONE*'s altered review model causes substantial problems for hiring and evaluative proxies. How should the name *PLOS ONE* be viewed alongside *Nature* or *Science*? In deliberately lowering its scarcity threshold in the name of good science, *PLOS ONE* asked the academic community to examine its own processes for evaluation. In making itself unique as a megajournal with this threshold, the brand of the journal was altered. Yes, *PLOS ONE* was itself scarce as the only entity of its type, but the quality threshold was not determined as comparable with other outlets and so the scarcity function was eroded. The unit of currency became non-exchangeable.

A similar problem stands in one-off DH projects. Uniquely scarce, of course, these artefacts contribute to a diverse media ecology of the digital humanities. Yet, their very uniqueness, while being scarce, is *non comparable*. That is, because they are one-offs, developing standards for comparability is a disproportionate activity in terms of labour time that does not fulfil the second characteristic that I outlined above. In other words, to evaluate the artefact, *as itself*, rather than through a proxy of presumed-uniform review, has no labour-saving function. This is why such unframed projects begin to cause anxiety among those who have come to rely on the proxies that they believe denote comparable scarcity.

This is, in part, why we have seen the emergence of documents such as the MLA's Guidelines for Evaluating Work in Digital Humanities and Digital Media or the AHA's Guidelines for the Professional Evaluation of Digital Scholarship by Historians.[26] Yet, these guiding documents often struggle to fulfil the “needs” of hiring committees. That is, in asking for respect for medium specificity, alongside the requirement of the engagement of qualified reviewers – or, put otherwise, by asking for consideration of the “complicated factors in the world of digital scholarship needing attention”, as Sheila Cavanagh puts it – such guidelines do not alleviate the labour shortage of the search panels nor do they provide a uniform comparability mechanism for scarcity.[27] Although these go unacknowledged, since most panel members do not wish to admit that they need recourse to such proxies, the continued fetishisation of print (for its scarcity) and the desire for hidden, yet claimed, uniform/comparable media-constraining gatekeeping practices, all point to why it remains difficult for the proliferation of new digital artefacts to be easily integrated within conventional hiring

26 Modern Language Association of America, ‘Guidelines for Evaluating Work in Digital Humanities and Digital...’, *Modern Language Association*, 2012 <https://www.mla.org/About-Us/Governance/Committees/Committee-Listings/Professional-Issues/Committee-on-Information-Technology/Guidelines-for-Evaluating-Work-in-Digital-Humanities-and-Digital-Media> [accessed 23 March 2017]; American Historical Association, ‘Guidelines for the Professional Evaluation of Digital Scholarship by Historians’, *American Historical Association*, 2015 <https://www.historians.org/teaching-and-learning/digital-history-resources/evaluation-of-digital-scholarship-in-history/guidelines-for-the-professional-evaluation-of-digital-scholarship-by-historians> [accessed 24 March 2017].

27 Sheila Cavanagh, ‘Living in a Digital World: Rethinking Peer Review, Collaboration, and Open Access’, *Journal of Digital Humanities*, 1.4 (2012) <http://journalofdigitalhumanities.org/1-4/living-in-a-digital-world-by-sheila-cavanagh/> [accessed 24 March 2017].

mechanisms.[28]

Strategies for Changing Cultures: Disciplinary Segregation, Print Simulation, and Direct Economics

The diverse media ecology of DH poses a threat to the first two areas in which hiring panels/accreditation mechanisms operate: in the abundance of its artefacts the digital disrupts scarcity and in the uniqueness of its outputs it defies the comparability of proxy frames. The final area in which DH causes anxiety is in its inter-/multi-/trans-disciplinary nature. The challenge that DH creates in this final space is one of both evaluation and authority. In the first case, conventional hiring panels often struggle to evaluate *part* of a DH project; that is, the digital part. A lack of statistical knowledge among members of a search committee can also cause trouble here for certain types of DH practice. The authority challenge that is posed here is an unseating of those with insufficient digital knowledge for evaluation from their thrones. This is the same challenge that other fields, such as religious history, can face; to be hated by both theologians and historians. To have created a “discipline” usually means that one understands the evaluative requirement within that space. The practices of DH, which can intrude upon any conventional humanities discipline, are challenging to those at the top of the pyramid since they suddenly find that they are not masters of their own kingdom. The work purports to be in a subject area that is recognisable to them but they know neither how to evaluate it nor how to test the research for relative soundness. When a discipline cannot evaluate work that purports to be within its own subject area, it faces a crisis. Such crises have happened before for various disciplines with the Sokal affair and the more recent retraction in *Cogent Social Sciences* titled “The Conceptual Penis as a Social Construct”.[29] Yet this remains one reason why the digital humanities pose such a threat. Further, Max Planck once famously put it that science advances “one funeral a time”. Since disciplines are self-reinforcing spaces, though, it is not even clear that this is the case; value systems are absorbed and internalised by those who travel through the academic ranks.[30]

One of the strategies for avoiding this interdisciplinary threat has been to establish and strengthen specific DH departments. At the time of writing the most recent example of this was at King's College London where the department of Digital Humanities advertised for eight permanent, full-time posts (tenured equivalents) ranging from lecturers up to full professors. Likewise, the School of Advanced Study at the University of London is seeking a candidate to lead a new national centre for digital practice. By demarcating the space of expertise to a specifically digital domain it is possible to pursue digital practices and to hire staff members in ways that do not appear to compromise disciplinary

28 I am aware that there are other good reasons to stick to print for long-form reading but in the assessment domain, it is the scarcity that is valued.

29 See Sokal, Alan, *Beyond The Hoax: Science, Philosophy and Culture* (Oxford: Oxford University Press, 2009); Lindsay, Jamie, and Peter Boyle, ‘The Conceptual Penis as a Social Construct’, *Cogent Social Sciences*, 3 (2017) <https://doi.org/10.1080/23311886.2017.1330439>

30 Pierre Azoulay, Christian Fons-Rosen, and Joshua S. Graff Zivin, *Does Science Advance One Funeral at a Time?* (Cambridge, MA: National Bureau of Economic Research, December 2015) <https://doi.org/10.3386/w21788>.

expertise and authority. On the other hand, this also leads to a potentially problematic siloization of digital expertise and the merely static reproduction of other disciplinary norms on which it is often the purpose of DH to intrude. For example: what use are authorship attribution technologies if nobody who defines themselves as a traditional literary scholar pays any attention? What are the points of spatio-temporal mapping approaches and GIS techniques if they cannot be used to inform other disciplinary cultures? From a research point of view, the banishment of DH to its own departmental area is a problematic move.

That said, DH as a departmental space makes sense from the economic perspective of teaching. Such programmes, which can often promise transferable practical skills training and general computational thinking, recruit well, although they have also come under fire for apparently selling out and instrumentalizing the humanities.[31] The general difficulty, though, is in the intellectual breadth covered by the single seemingly simple word: humanities. Some humanists have more in common with mathematics than with literary studies while others are more akin to social sciences. In the disciplinary segregation of DH, then, at the same time as providing for a broader perspective and harnessing the benefits of a wide set of views that transcend any single discipline, problems of an incoherent intellectual space can emerge. It is unclear, though, at least to me, whether computational approaches are enough to bind together such otherwise disparate fields of practice in perpetuity (although others disagree and do believe that digital methods can provide coherence). That is, for the sake of binding into a space of intellectual authority, we may see a set of changes – positive or negative – around disciplinary coherence.

A similar separation of DH is evident in the proliferation of new publishing venues for the field.[32] That many of these are still journals – the *Journal of Digital Humanities*, *Digital Humanities Quarterly*, and *Digital Scholarship in the Humanities*, as just three examples – speaks to a deep understanding among many digital humanists of the challenges of evaluative framing and media outlined above. Even though hiring panels could delegate evaluative authority to a DH community that somehow gatekept projects, by sticking to the understood media-form of the journal article, research outputs become an exchangeable currency in diverse disciplinary settings. Similarly, book chapters are a recognisable form, playing into the long history of the codex, but that are, in digital form, mostly a simulation of print. Such a simulation works well since it appears to be a simulation of the form of material scarcity that was previously inherent within print. In other words: even while the greatest costs continue to inhere in selectivity, print simulation is maintained so that the illusion of scarcity economics can be preserved within our systems of evaluation.

31 Daniel Allington, Sarah Brouillette, and David Golumbia, ‘Neoliberal Tools (and Archives): A Political History of Digital Humanities’, *Los Angeles Review of Books*, 2016 <https://lareviewofbooks.org/article/neoliberal-tools-archives-political-history-digital-humanities/> [accessed 29 May 2016].

32 Without veering too far into the ‘defining DH’ genre, see Alan Liu, ‘Is Digital Humanities a Field? — An Answer From the Point of View of Language’, *Alan Liu*, 2013 <http://liu.english.ucsb.edu/is-digital-humanities-a-field-an-answer-from-the-point-of-view-of-language/> [accessed 24 March 2017] for more on the use of the term ‘field’.

This notion of simulation of other forms that DH has had to adopt is profitable. For many scientific disciplines also feel this pain of a separation between the research outputs they produce and the work that they conduct. This is why the recent practice of data sharing has at once been such a welcomed activity but at the same time one that is contentious. Billing the sharing of data as better for replication and verification is an easy argument to make. Without it, journal articles are just descriptions of work without the underlying work itself; a print simulation of non-print activities. On the other hand, very few scientists would consider submitting a dataset as the *work itself* to any evaluation exercise.[33] The same goes for software and toolsets in the digital humanities; as Susan Schreibman and Ann M. Hanlon found, there is a “relationship to scholarship” of software in which many creators felt their work to be a scholarly activity, even while claiming more distant publication benefits.[34]

The final frame to which DH can and does resort is to bypass the symbolic economy entirely and move to hard currency: cash. For DH is a relatively successful field in the space of research grants. As Sheila Brennan addresses this, it is possible to “let the grant do the talking”; that is, at once to allow the fact that DH attracts money to be itself a criterion for evaluation but also to use the accountability and documentation practices to produce an archive of creditable narrative statements around a project.[35] Given that all systems of evaluations are economies, the cry of “show me the money” can ring loudly. Yet, this is not likely to endear DH to traditional humanists and it is not clear that DH will itself be spared the axe when the time comes.

Despite the thorniness of the problem, there are a number of practical steps that Deans and heads of departments can take to address some of these evaluative challenges for the digital humanities, should they wish this area to flourish. First, hiring and search panels could contain an administrative member of staff whose job is to query exclusion criteria. Such a member could, for instance, ask why a shortlisting panel has excluded a candidate who does not have a monograph but who has a portfolio of seemingly significant digital outputs. This would also require an up-front change to institutional policies beforehand to enforce strictly an independence of media. While changing this type of policy can be difficult, the success that other universities have had in signing the aforementioned Declaration on Research Assessment gives some hope. Of course, actually implementing the rule that panels may not use journal Impact Factor or other proxies in their hiring is more than just signing a declaration. It requires modifications to practice

33 There have also been concerns raised about so-called ‘research parasites’ feeding off the data of others, although this just seems like a logical and sensible practice to me. See Dan L. Longo and Jeffrey M. Drazen, ‘Data Sharing’, *New England Journal of Medicine*, 374.3 (2016), 276–77 <https://doi.org/10.1056/NEJMe1516564>.

34 Susan Schreibman and Ann M. Hanlon, ‘Determining Value for Digital Humanities Tools: Report on a Survey of Tool Developers’, 4.2 (2010) <http://www.digitalhumanities.org/dhq/vol/4/2/000083/000083.html> [accessed 24 March 2017].

35 Sheila Brennan, ‘Let the Grant Do the Talking’, *Journal of Digital Humanities*, 1.4 (2012) <http://journalofdigitalhumanities.org/1-4/let-the-grant-do-the-talking-by-sheila-brennan/> [accessed 24 March 2017].

that intervene at the level of hiring, as per my above suggestion of a regulatory member of staff on hiring panels.

Panels should also be required to bring in digital expertise when it may be necessary. For dismissing digital publications because they cannot be evaluated by disciplinary hiring panels seems a poor way to proceed. This is not to say that traditional humanists should have no say here; the underpinning scholarship and impact of digital resources should still be at the centre of any DH work and those with subject-rooted but non-technical knowledge are well placed to evaluate this. However, having a panel member who can evaluate claimed technical competencies and merits is a necessary change if outputs are to be considered, digital alongside the more traditional. Such panel members also need to be given equal weight in decision-making processes and should not be relegated to a second tier. Although I am wary of the culture it may foster and believe that Deans should take *extreme* care in this area, sparingly using grant awards as a means of appraising technical competency could go some way here.

Institutions can also establish separate areas of DH practice. This can help to assert the authority of such a domain but will not lead to any change in culture within the traditional humanities. Should this route be pursued for reasons of appraisal, then care must be taken to ensure cross-disciplinary dialogue is possible between conventional humanists and their digital colleagues.

Finally, in this day and age, to hear still of tenure panels that demand a printed bound dossier for appraisal feels hugely conservative. It holds back those who are exploiting the potentials of the digital and asks such practitioners to do more work than conventional scholars. It becomes over-zealous in its pursuit of tradition against individual talent. To give equal footing to the digital is not to extinguish more conventional forms of scholarship. That is not what I here seek. I instead advocate for *parity*, for the opportunity for those creating digital resources to be fairly appraised alongside traditional scholarship.

All in all, I have aimed in this piece to explore the ways in which systems of peer-review and aggregation to container-level evaluation remain extremely limited, yet still used. I have also made the case that all such systems of evaluation are economic in character. I have then looked at how the digital humanities field poses a set of challenges to the three principles of academic evaluation that I have outlined. It seems to me that it is *very* difficult to change these academic contexts for evaluation; they are complex social constructs (which is not to say that they do not have definitive real-world effects), not fixable technical realities. This gives a set of rationales for why DH continues to adopt publication practices that can be brought into harmony with such demands for substitution and exchange. While Samuels and McGann write of deformance, publication practice for reasons of evaluation remain in the realm of *con*formance unless we build our own disciplinary spaces.[36] These too, over time, will solidify their evaluative cultures

36 Lisa Samuels and Jerome J. McGann, ‘Deformance and Interpretation’, *New Literary History*, 30.1 (1999), 25–56

and become unyielding to and impenetrable by new practices. In the meantime, listen for violins in the subway when next you ride.

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