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Debates in the Digita known as Humanities by Roberto Simanow Gattass 2017-03-05

Aurature at the End(s Literature by John Cayley 2017-02-05

Not a case of words: and Multimateriality i Screen by Élika Ortega

2017-01-01

Processing Words, o Inscriptions Written w by Manuel Portela 2016-11-06

Old Questions from by Jen Phillis 2016-09-04

Relational Ecology a Pharmakon by Bernard Stiegler 2016-03-18

Hyper and Deep Atte by Katherine Hayles 2016-03-18

Pasts and Futures by Rob Wittig 2015-11-01

Towards Minor Litera Literature and the Ar by Illya Szilak 2015-08-02

Beginning with "The when translating cer digital language art by John Cayley 2015-03-01

View all essays in thi

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writing (post)feminism		electropoetics	internet nation		end construction	
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fictions present						

#### Debates in the Digital Humanities formerly known as Humanities Computing by Roberto Simanowski and Luciana

Gattass 2017-03-05

In a review that addresses (and exposes) the founding myth of the "digital humanities" (DH), formerly known as "humanities computing," Roberto Simanowski and Luciana Gattass measure just how much the 99 articles collected by Mathew Gold and Lauren Klein have overturned "academic life as we know it."

Soon it'll be ten years since William Pannpacker, official blogger for the Chronicle of Higher Education and commentator of the 2009 Modern Language Association's annual convention famously proclaimed the Digital Humanities "the next big thing." The last decade saw many gatherings, many articles written with DH in mind, many tweets - because the "big thing" also constitutes itself via small texts – and various collections of essays defining what DH is and what it is not. Notable among these is Matthew K. Gold's 2012 Debates in the Digital *Humanities* whose second installment appeared in 2016. Both volumes, with 49 and 50 contributions respectively, gather discussions on how "in a moment of crisis, the digital humanities contributes to the sustenance of academic life as we know it, even as (and perhaps because) it upends academic life as we know it" (Gold, IXf.). They wonder how wide the "big tent" of DH should be, how much theory DH needs and how much of a homo faber digital humanists ought to be, whether their penchant for Twitter trivializes DH's professional discourse, whether the link to corporations compromises its academic nature, how the more "technical" and "positivist" work of DHers should count towards tenure and promotion, and to what extent the whole thing is nothing more than computer scientists' attempt to take over the humanities.

Though the last notion may sound like a conspiracy theory, the founding myth of "the 'digital humanities' (DH), also known as 'humanities computing' " (Kirschenbaum, 3) fully justifies it. According to the famous anecdote (that is relayed by Kathleen Fitzpatrick and shared several times in the book) about its origins, the term DH was initially offered as a marketing ploy since "A Companion to Humanities Computing," that Susan Schreibman, Ray Siemens, and John Unsworth edited with Blackwell Publishing in 2004 just didn't sound appealing enough, and neither did the alternative: "A Companion to Digitized Humanities." The results are well known: adjective and noun traded places, computing in the name of the humanities became humanities done with computers; the use of computers in the work of librarians and linguists eventually became the new thing that now seems to fall victim to its own success: Everybody wants to be in that club.

That is why nobody knows how to define the DH: or rather, too

many people have their own particular version, each more or less backed up lexically, historically, or conceptually. The merit of Gold's book is to present the various perspectives on what DH is and diverse examples of its praxis and problems in/for research, pedagogy and academic politics. It is an honorable undertaking, an indispensable and revealing book. Rather than commenting on the results on a contribution by contribution basis, we find it more productive to underline some central issues of the DH that the two installments address and answer.

#### **Digital Marxist Victorianists**

The most democratic and anarchistic way of taking part in a movement is by joining it. Participate in the "Day of DH" on April 8th and you are in. At a bare minimum your description of your April 8th is added to the "picture of what it is that DH scholars actually do" (Parry, 429). Never mind the fact that you are more likely to come across less entries by scholars than by undergraduates advertising their YouTube-show or asking for help with an assignment. This only demonstrates the inclusive, embracing, and expansive nature of this movement – and may already point to a problem addressed in the second installment of the collection, where Ted Underwood questions the ideals "openness" and "connection" and prefers to see the academic community as Gesellschaft, "guided mostly by individual aims, restrained and organized by formal institutions," rather than as a Gemeinschaft, "bound together by personal contact among members and by shared values" (2016, 520). There can be "too much connection," Underwood warns, and worries that social networks - he thinks especially of Twitter - might lure "humanists into attempting a more cohesive, coercive kind of Gemeinschaft than academic social networks can (or should) sustain" (2016, 521).

The issue of membership is entangled with that of definition; the broader this, the bigger that. According to Dave Parry the most frequently used words in the contributions to DH-day 2011 were "research, design, project, data, text ... and tool(s)" (430). Parry's conclusion to his empirical study – "digital humanities is largely, or primarily, about using computing technologies as tools to do traditional humanities-based research" – is in line with the syntactical structure that the term "digital" attributes to the "humanities" (432). However, when the "digital" is compared with other adjectives as in "feminist humanism" or "Marxist humanities scholarship" things get complicated: Is "digital" the replacement for "feminist"? Could there also be feminist humanities with digital tools? Are all branches and approaches in the humanities digital now?

When Parry states that there is no "nondigital humanities," since no humanist can work (read, write, communicate) without the digital – "Almost all scholars at this point use computers rather than typewriters and use e-mail to converse with colleagues dispersed around the globe." (432) – one may want to refute with Kathleen Fitzpatrick's remark that not "every medievalist with a website" is a DHer (14). To be sure, Parry is well aware of this and aims, as his subsequent arguments make clear, higher than it may appear. To him, neither is there no nondigital humanities, because digital media have an effect on all forms of human life: "The digital changes what it means to be human and by extension what it means to study the humanities." (436) Against this background, the scholar applying a text mining program to read Jane Austen's *Pride and Prejudice* or Hume's *Treatise of Human Nature* may be even

less of a DHer than one pondering in front of her class about the social implications of Facebook's "culture of transparency."

Parry himself hints at this notion when he favors "humanitiesbased research into the digital" over digitally enhanced humanities research and regrets that "the dominant type of DH [using digital media as tools] privileges the old [subjects] at the expense of the new [turning digital media into a medium of study]" (434). DH, Parry concludes, "can be something more than text analysis done more quickly" (434). However, the question is not how "scholarship that counts word occurrence in Jane Austen's texts" can also take into account the cultural implications of digital media. Rather, it is who does if Victorianists are busy with their objects from the past?

#### DH and New Media Studies

Even though the history and the grammar of the term Digital Humanities points to humanities done *with* digital media, the study *of* digital media is not left out of the equation. Parry calls it the "media studies version of the digital humanities" (434). In his essay "What Is Digital Humanities and What's It Doing in English Departments?" Kirschenbaum lists as one of the reasons why English departments are good places for the DH "the openness of English departments to cultural studies, where computer and other objects of digital material culture become the centerpiece of analysis" and refers to *Doing Cultural Studies: the Story of the Sony Walkman* by Paul du Gay and others (9).

Those who are on Parry's and Kirschenbaum's side may wonder how to read the position of the Office of the Digital Humanities for the National Endowment for the Humanities represented in the collection by a short interview with its director Brett Bobley. While Bobley uses DH as an "umbrella term" which, aside from tool development, data mining, preservation, and visualization, also includes "media studies" and the "study of the impact of technology on numerous fields" (61), his reassurance that "digital scholarship doesn't have to mean nontraditional," i.e. "you can tackle 'traditional' humanities topics and questions while still using the latest digital tools" (64) may raise eyebrows. Revealing as well is the example Bobley provides of how technology has changed cultural interaction.

Bobley refers to how digital media have altered the ways in which we experience music – in terms of access (overcoming the regional borders), production and distribution (everyone can produce and distribute their own music), and consumption (digital files allow you to carry your entire library with you) and adds: "Now let's look at these three areas again (Access, Production, and Consumption) but in the context of humanities scholarship. What do humanists do?" (62). Humanists, the answer goes, digitize material to make it accessible everywhere via the Web, they make their own work available online to the entire world, they read on the Web, on laptops, and mobile devices. There would be nothing wrong with this account were it not for the fact that here scholars, rather than studying the new technology, mimic it; they do not discuss the cultural implications of the changes listed, they carry out these changes themselves.

Of course, the study of digital media itself is still somewhat part of the list of what constitutes the DH but, as the short interview reveals, it is certainly not at the center. This may be due to the fact that Bobley himself is "not a scholar" but a "government grant maker and technologist" who looks for projects that "demonstrate how technology can be brought to bear on a humanities problem" rather than address the problems technology may bring to humanity (64; 65). The deeper reasons for the social implications of digital technologies not receiving due attention, some say, may be political and psychological, and have to do with the difference between affirmative media use and the trouble of cultural criticism.

#### Neoliberalization of Higher Education

"The dark side of the digital humanities" is how Richard Grusin, who organized the eponymous panel at the MLA convention 2013, and others have referred to the unspoken, understated, or under-theorized economic and political issues behind the DH. Grusin assumes a correlation between the emergence of the DH and the neoliberalization and corporatization of higher education. To him the focus on "making things" rather than undertaking cultural criticism can be explained by the "neoliberal insistence that the value of higher education must be understood instrumentally in economic terms"; the problem is that university administrators and state legislators see as the role of higher education "to train students for jobs not to read literature or study culture" (2016, 499).

In the same critical spirit, and as a result of the same MLApanel, Rita Raley claims that, against "our current mercantile knowledge regime," that the DH must not focus on "administrative and public demands to make knowledge useful," and should jolt out "of the cycle of innovating for the next grant cycle" so as to develop a measured skepticism towards the affordances of digital media "that might serve as a buffer against the irrational exuberance that too-often characterizes the framing of our projects, initiatives, and entrepreneurial efforts." (2016, 506f.) Among the constraints Raley implicitly invokes are the terms of use the university signs when accepting the IT services of Microsoft, Google and Co, and the protocols that govern its everyday use of digital media.

Raley refers to Alan Liu's 2011 MLA paper "Where is Cultural Criticism in the Digital Humanities," which underlines the need to address digital media as a subject of critical discussion. In its revised and expanded form for the first installment of the Debates in the Digital Humanities, Liu writes: "While digital humanists develop tools, data, and metadata critically [...] rarely do they extend their critique to the full register of society, economics, politics, or culture. How the digital humanities advances, channels, or resists today's great postindustrial, neoliberal, corporate, and global flows of information-cumcapital is thus a question rarely heard in the digital humanities associations, conferences, journals, and projects with which I am familiar." (491) As important as it may be to critique resources, methods of mining and means of visualization, it is hardly enough: "To be an equal partner-rather than, again, just a servant-at the table, digital humanists will need to show that thinking critically about metadata, for instance, scales into thinking critically about the power, finance, and other governance protocols of the world." (495)

DHers could even assume a leadership position in the humanities themselves, if only they incorporated cultural criticism and deployed their innovative ways of communication to fulfill the role of new "public intellectual[s]" (496). To this end, Liu recommends that digital humanities "enter into fuller dialogue with the adjacent fields of new media studies and media archaeology so as to extend reflection on core instrumental technologies in cultural and historical directions." (501) Liu sides with Grusin's rejection of the "invidious distinction between making things and merely critiquing them" and with the latter's objection to Cathy Davidson's ranking of *making* over critiquing. In a tweet-response to Tara McPherson, quoted by Grusin, Davidson writes: "Critique hard. New idea much harder. Making stuff work really, really hard!" (2016, 499)

Of note is the fact that the mission statement of the initiative 4Humanities that Liu helped cofound in November 2010 reads: "the digital humanities community [...] woke up to its special potential and responsibility to assist humanities advocacy." (490) As Liu now remarks, the past tense "woke" was counterfactual, a "tactical lie in the service of hope" (491). That Liu's contribution to the first installment is a new wake-up call might help explain the editor's decision to place it at the end of the book: a call that may remain unheeded, not (only) because of the 'neoliberal counterrevolution,' but (also) because of the burden of postmodern enlightenment.

#### **End of Narratives**

In his contribution to the collection Liu refers to his 2004 study Laws of Cool: Knowledge Work and the Culture of *Information*, which posits that those who are uneasy with the new world order of "knowledge work" express their "paradoxical conformance and resistance to that order through the subtle ethos of 'cool.'" He adds: "Digital humanists are not even cool" (492). Since Liu defines the ethos of cool as "an ethos of information that is against information, the uselessness of useful information, the use of information to abuse information" (184), one may wonder how cool in Liu's sense "public intellectuals" can be - given that the register of the informational "cool" is skepticism, relativism, and irony, rather than the self-assured conviction of knowing right from wrong that "public intellectuals" so often display. But regardless of how much DHers aspire to the role of "public intellectuals," they are not un-cool because they refrain from subverting neoliberal knowledge, but because they don't renounce the pursuit of objective, reliable knowledge.

It is the shock of self-mutilation that postmodern theories elicited in the humanities, it is the "perceived lack of credibility, if not obsolescence, of their metanarratives of legitimation" that now compels certain parts of the humanities "[to] turn toward the science" as Gary Hall suggests in his contribution to the first installment (134). This turn, Hall insinuates, is an attempt by humanists "to increase their connection to society and to instrumentality and functionality" (134). The fundament for this new connection, the mode of this "outreach" is building, not destruction, as Cathy Davidson and David Theo Goldberg famously point out in their 2004 paper Engaging the Humanities: "What part of our inability to command attention is rooted in humanists' touting of critique rather than contribution as the primary outcome of their work (i.e. not the production of new knowledge but the questioning of the modes of that production)? Is it not time we critique the mantra of critique?" (45).

Such advice runs the risk of betraying the heritage of the humanities. And it does so in two ways: first, by abstaining from

the cultural critique towards digital that Liu, Raley, Grusin and others ardently demand, and secondly, by forgetting the fundamental vocation of the humanities, namely that of creating a rhetoric of resistance not (only or primarily) towards institutions but (also and moreover) toward meaning and Truth, as German philosopher Odo Marquard explains in his 1986 essay On the inevitability of the humanities. To Marquard the characteristic - and mission - of the humanities is to irritate the business of understanding, to counterbalance the notion of reliable and objective knowledge in the natural sciences. The political importance of such a deconstructive endeavor becomes clear, as Marquard holds, with respect to confessional civil wars, which he terms 'hermeneutic civil wars': People kill one another over the right interpretation of a book. What may sound surprising and foreign today was well-known in the 1980s as the "ethical turn" in narrative theory and moral philosophy – as in when, for example, J. Hillis Miller in his programmatic 1986 book The Ethics of Reading praised deconstruction for undermining the desire for totality and closure and for exposing the rigidity and partiality of any (moral) perspective.

It is this "nihilistic vocation" of the humanities to "reveal the world as a conflict of interpretations" to speak with Italian philosopher Gianni Vattimo (40) that is at stake when the humanities go digital. According to Johanna Drucker, "disambiguation [...] was the price of entry" (88); as she states elsewhere: "we went through decades of deconstruction and post-structuralism and seem to have forgotten all of the lessons we learned as we (humanists) rush to uncritical engagement with methods from other fields" (63). These methods "have been absorbed from disciplines whose epistemological foundation and fundamental values are at odds with, or even hostile to, the humanities" (85f.) Drucker's response is not a withdrawal from the DH but the call to bring the values and meaning-making strategies of the humanities into other realms of experience and knowledge, as she and her co-authors do in the 2012 book Digital\_Humanities. This means incorporating the "probabilistic rather than deterministic, performative rather than declarative" methods of humanities into protocols for information visualization, data mining, geospatial representation, and other research instruments (86). In the second installment of the collection such perspective is most vividly echoed in Timothy Burke`s caveat to readers not to "view human experience and human subjectivity as a managerial problem," holding that "every humanistic work or analysis should produce an excess of perspectives, a variety of interpretations [...] dance away from pinning culture to the social, to the functional, to the concrete" (515 and 517).

As for the issue of cultural critique, the other aspect of the humanities' heritage which DH risks betraying, it is understandable that humanists who discussed the effects of digital media on the human situation even before "humanities computing" turned "digital humanities" (such as Grusin, Raley, and Liu) should now be critical of humanists who apply digital media without reference to such considerations. And it is refreshing to see that in the second installment those calls for cultural critique are taken up in papers such as Domenico Fiormonte's *Toward a Cultural Critique of Digital Humanities* which reminds us, with McLuhan's teacher and colleague Harold Innis, of the bias of communication and illustrates it with respect to the "cultural and political problem of software and platform (e.g., social networks) almost exclusively produced in the Anglo-American environment" (2016, 441).

Other contributions to the second installment, such as Alien *Reading* by Jeffrey M. Binder, point out the "ideological assumptions that underlie the quantification of language" and demand "thinking of text-mining programs as objects of cultural criticism" (2016, 202). Such claims to reveal assumptions behind interfaces, search engines and digital tools correct the proposal to eventually neglect the tool, as Stephen Ramsay once suggested: "algorithmic criticism looks forward not to the widespread acknowledgement of its utility but to the day when 'algorithmic criticism' seems as odd a term as 'library based criticism." For by then we will have understood computer based criticism to be what it has always been: human-based criticism with computers" (81). While such proposal displays modesty toward the term one has coined oneself, and while it may be appropriate to the extent that computer-free criticism and interpretation are as much "deformance" and re-reading of a text as "computationally enacted textual transformations" (2011, 38 and XI), it may send the wrong message regarding the bias of our communication tools – a message that resurfaces when Pannpacker states that "it won't be long until the digital humanities are, quite simply, 'the humanities' " (233). There is a crucial difference between a library offering a specific collection of texts and an algorithm offering a specific reading of (those) texts. The algorithm as a medium does not equal the library, nor does it substitute it, but complements it and establishes (by stepping between the given text and the reader) a very different pre-condition of criticism which aptly is and always should be identified as algorithmic.

# From Underdog to Golden Retriever and beyond

The abstinence from critique turns digital humanists into the "golden retrievers of the academy," Tom Scheinfeld notes, with no clear signs of self-deprecation, in his contribution Why Digital Humanities Is 'Nice' (59). The reasons are not simply that collaboration forces people to get along or even the fact that DH is still "young, small, vulnerable, and requiring of solidarity" (59). To become a "nice" DHer, it already helps to be concerned with method rather than theory, "because methodological debates are often more easily resolved than theoretical ones," namely on practical grounds instead of ideological ones (59). The shift "away from thinking big thoughts to forging new tools, methods, materials, techniques," as Scheinfeldt describes the position of DHers in his contribution Sunset for Ideology, Sunrise for Methodology? (125), goes a long way towards earning that grant, at least in the eyes of the mighty administrators who list access, production, and consumption as the three pillars of DH.

In order to "become 'dangerous' again" David Greetham suggests "textuits should embrace hermeneutics rather than science," i.e. they should not reduce their work to the production of textual resources or statistics (439). The turn to robust, credible, and declarative results, the desire for "textual scholarship" to be "a 'science,' with demonstrable proofs," Greetham aptly points out, "only feeds the suspicions of some humanities scholars that bibliographical and textual research belongs in current humanities departments only as a 'service' activity, not full integrated in or related to the loftier philosophical aspirations of postformalist humanities" (439). The problem is not quantitative analysis, as Greetham underlines with a nod to the *Annales School*, whose important contribution to historiography (the focus on social rather than political themes) was partially based on quantitative methods (448) – which, incidentally, is also why in the first installment Liu deems the Annales movement an early adaptor of "distant reading and quantitative methods" (503). The problem occurs if numbers, patterns, and correlations revealed by algorithms are not subjected to interpretation and debate. As Ramsay claims as early as 2003: algorithmic criticism must not be conceived in the "service of a heightened critical objectivity," it must aim at inspiration rather than confirmation, it should seek "not to constrain meaning, but to guarantee its multiplicity" (167). In other words, digital tools are supposed to allow humanists to ask new questions rather than to answer old ones definitively.

Greetham's recommendation that DHers become "dangerous" again, by embracing hermeneutics and theory can be construed as a response to what we called above the second betrayal of the heritage of the humanities. An answer to the first betrayal (the lack of cultural critique) would be sharing your insights on and criticisms of new media with the wider public. Such sharing may also be called "outreach" or "community commitment." But it should not be limited to the aspect of *building*, to which Davidson and Goldberg seem partial, and which is well illustrated by a collaborative project involving students, faculty, and academic computing staff such as SmartChoice at Trinity College in Hartford, which "empowers parents to navigate and compare their growing number of public school options in metropolitan Hartford" (Dougherty). Though SmartChoice is a useful tool in the hands of the public and may indeed make "a powerful argument for the value of liberal education and digital humanities" (Alexander/Davis, 382), it does not contribute to a more profound understanding of current political, social, and cultural issues nor does it forge critical citizenship beyond the 'critical' decision about 'what is best for my kids.'

The importance of projects aimed at such critical citizenship becomes clear if one considers the neologisms digital media generate to indicate their impact on society: multitasking, hyper reading, power browsing, filter bubble, ambient intimacy, ambient attention, sharing culture, self-tracking, dataveillence, algorithmic regulation, FOMO (fear of missing out), etc. To address these issues DHers may (alongside students and the general public) develop projects that explore what insights seemingly banal data on social media provide into a user's personality; investigate the logic of the algorithms that, at Google, Facebook and elsewhere, determine what information is fed back to users; illustrate the epistemic effect of digital media when knowledge is crowdsourced vs. derived from experts, or attained via search engines rather than by the 'arduous' effort of reading books. In an age when computer technologies have such "life-altering effects as extreme as, or even more extreme than, some drugs" that some academics call for the FDA and FCC to enforce democratic regulation and protections against the domination of communication by private enterprise and corporate interests, it is time that the humanities turn public and help generate a media literacy that aims at more than the effective, technically accurate and frictionless use of media.

### **Understanding Algorithms**

Among the subjects most debated in the first installment were issues such as what the DH is and what it is not, how much programming DHers need to know, how digital works which are vividly discussed by peers but do not end up in refereed publications can be appropriately credited towards tenure, to what extent "building" (a website, a Gephi visualization, a tool such as SmartChoice) should be seen as a scholarly activity (i.e. whether coding constitutes theorizing). It does not come as a surprise that many issues couldn't be solved or that their solutions only raised further questions. Take, for example, the role of coding, to some as much a scholarly act as writing, which in itself is not only the activity of presenting thoughts on the subject at hand, but rather the act in which "thinking occur[s] in the first place," as Ramsey and Rockwell point out (82). Their conclusion from this proposition seems very clear at first glance: "If the quality of the interventions that occur as a result of building are as interesting as those that are typically established through writing, then that activity is, for all intents and purposes, scholarship." (83) What, the inevitable follow up question would read, defines "interesting" in the context of "building" and to what extent would it be the result of the builder's work? Are constellations and insights revealed by the use of off the shelf apps for data mapping and visualization as interesting as theories and theses created through the careful narrating of data?

This and other questions are taken up in the second installment, which proposes for example a "peer review system for tools" (Swafford, 2016, 557) or prioritizes the knowledge of "what an algorithm does" over "how it does it" and draws attention to the understanding of "the transformations" or "reconfigurations that an algorithm might effect" (Schmidt 2016, 546 and 547). As "people design algorithms in order to automatically perform a given transformation," Benjamin M. Schmidt argues, "a transformation expresses a coherent goal that can be understood independently of the algorithm that produces it" (ibid., 547). An example is "sortedness," a result of algorithmic operation and at the same time a general property one is able to understand even if one does not understand the underlying operations: "It would be ludicrous to suggest humanists need to understand an algorithm like quicksort to use a sorted list. But we do need to understand sortedness itself in order to make use of the distinctive properties of a sorted list." (Ibid.)

In contrast, other contributions exemplify how it is important to know what the algorithms do in order to come to the correct conclusions. Dennis Tenen imagines astronomers using a faulty telescope that reveals extraordinarystar constellations: "To use such tools well, we must, in some real sense, understand them better than the tool maker," Tenen states and adds: "The best kind of tools are therefore the ones that we make ourselves." (2016, 84) This is, as Tenen continues, especially important if tools such as Python's Natural Language Toolkit contain an "unsupervised method" (i.e. without any assumptions at the outset) of finding groups of similar documents within a large collection and if algorithms operate "nondeterministic," i.e. perform differently each time (ibid. 84f.).

A very inspiring contribution is David L. Hoover's article "Argument, Evidence, and the Limits of Digital Literary Studies" which offers detailed and useful insights into the perils of word counting. Referring to a discussion of gendered discourses of the three female and three male characters in Virginia Woolf's *The Waves* Hoover argues that the counting of words can produce very different results depending on which algorithm one deploys, where the counting starts and what it includes. While, for example, it seems plausible to treat a word with a genitive apostrophe or a subsequent dash equally to its versions in nominative and non-hyphenated forms (though not all programs do), things become more complicated if a male character attributes words to his imaginary girlfriend (shall it then still count as his "own" language?) and if one considers that all female character monologues are significantly shorter than those of their male counterparts. If the varying lengths are taken into account (and there are different ways of doing so), the number of exclusive mutual use of words (all three women share 14 words not used by any of the men, all three men share 90 words not used by any of the women) changes drastically (31 women-only versus 29 men-only words) and hence the division of the characters along a gender axis (in the first counting by the factor of 6.4285). Regardless of whether one thinks the characters in The Waves are divided along a gender axis or are more distinct line, Hoover's article exposes the shaky ground on which literary numerical analyses rest, concluding that "the fact that a problem is computationally tractable does not mean that a definitive or certain solution is necessarily possible" (233).

Taking Alan Sokal's famous 1996 Social Text-hoax as an example of the "all-too common lack of respect for argument and evidence in literary studies" (2016, 230) Hoover stresses the need to counter the damaged public perception of literary studies via a shift to evidence-based methods. The author ends his article with a methodical dispute of Stanley Fish's blog post "Mind Your P's and B's: The Digital Humanities and Interpretation." Polemically introducing his text as a "conventional (i.e., non-digital) literary analysis that deals, as the digital humanities do, with matters of statistical frequency and pattern" (2013), Fish refers to a specific passage in Areopagitica where Milton allegedly plays with the sounds of the letters [b] and [p] in the words "Bishops" and "Presbyters." For Fish, that the phonetic level in Milton emulates the semantic - i.e. that the presbyters who once suffered from the bishop's censorship have now themselves become the censors - can be detected on naked eye. But Hoover disagrees and makes the point that despite Fish's objection to the methods of DH to first "run the numbers" before coming up with an interpretative hypothesis (ibid.), "a computational (and consistent) method of counting [p] and [b] sounds in texts is entirely compatible with Fish's method and could help him persuade us that the pattern might be intentional." (2016, 247). Such computing, Hoover adds, would have allowed Fish to see that other passages in Milton's text display similar proportions of words containing [b]s and [p]s and that texts by Milton's contemporaries contain an even higher proportion of such words, ultimately undermining Fish's assumption that Milton intentionally uses a high frequency of the two sounds to imply equivalency between bishops and presbyters (ibid.).

#### **Close/distant Reading**

Fish takes his reading of Milton's "dance of the 'b's' and 'p's' " (ibid.) as a starting point for a general discussion of the methods of computational reading in the DH as put forward, for example, in Matthew Wilkens' essay "Canons, Close Reading, and the Evolution of Method" contained in the first installment of the *Debates in the Digital Humanities*. Downplaying the traditional method of "close reading" in favor of "distant reading," Wilkens subscribes to Franco Moretti's call for the 'democratization' of literary studies by the inclusion of the extra-canonical into the analysis of human history. In contrast to close reading, "a theological exercise—very solemn treatment of very few texts taken very seriously," distant reading, Moretti holds, is exercised by algorithms and "allows you to focus on units that are much smaller or much larger than the text: devices, themes, tropes—or genres and systems" (57). Distant reading solves the problem of textual abundance and limited reading speeds by undermining the central virtue of literary studies: "what we really need is a little pact with the devil: we know how to read texts, now let's learn how *not* to read them" (ibid.).

Such innovative methodological approaches have generated neologisms such as "culturomics" which aims at the "quantitative analysis of culture," i.e. the application of "highturbo data analysis to questions in the humanities." Wilkens undertakes these "more inclusive or representative" (251) analyses with regard to American fiction from the midnineteenth century, counting the frequency with which international locations appear in these texts. That the resulting number is higher than expected seemingly indicates an "outward looking" trend in American fiction from around 1850, thus debunking the perception held thus far that these were "strongly introspective" works (252). It is precisely this conclusion that Fish questions: "Frequency is not an argument," he holds, demanding "contextual framings": "If the international place names are invoked by a narrator, it might be with the intention not of embracing a cosmopolitan, outward perspective, but of pushing it away: yes, I know that there is a great big world out there, but I am going to focus on a landscape more insular and American" (ibid.). According to Hoover, Fish "righty points out" (2016, 243) that Wilkens falls short of the task of subjecting the results to an assessment that even the pioneers of such quantitative turn have declared indispensable: "Culturomic results are a new type of evidence in the humanities. As with fossils of ancient creatures, the challenge of culturomics lies in the interpretation of this evidence" (Michel and Aiden). In the case at hand, this interpretation requires a return to close reading.

Disdain for close reading and a pact with the devil are what prompt Fish's indignation: That scholars of English, such as Wilkens, don't "actually read the books, before saying what the patterns discovered in them mean" (ibid.). But in the case at hand the accusation would appear hasty for in contrast to Fish's report, Wilkens does not dismiss close reading. In fact, he states: "We may very well still need to read some of the texts closely, but text-mining methods allow us to direct our scarce attention to those materials in which we already have reason to believe we will find relevant information." (255) However serious such calls for close reading may turn out to be, Fish is correct in his assessment that Wilkens both represents a shift away from "close reading alone" (ibid.) to other methods of analyzing text and is willing to accept the negative consequences of such shift - "we'll almost certainly become worse close readers" - as a trade-off "well worth making" (Wilkens, 256). In the end, Wilkens holds that the outcome of the trade-off- "a few more numbers in return for a bit less text" - "will almost certainly be a net positive for the field" (ibid.) because it will "result in categorically better, more broadly based, more inclusive, and finally more useful humanities scholarship" (257).

Such assessment points to the aforementioned risk of betraying heritage of the humanities: the "ethics of reading" and the "meaning of hermeneutics," as indispensable, socially important, experiences of ambiguity and conflicting interpretations. The capacity for such experiences is indeed at risk if shift to distant reading turns us into deficient close readers, more receptive to statistics than to the "multiplicity" of meaning that Ramsay proposes.

As Ramsay repeatedly points out, the shift to computation in literary studies does not have to have such negative ramifications. Hoover may be a good case in point for he positions himself between Fish and Wilkens when he praises close reading (2016, 244) and states that the power of the computer to count, compare, collect is not simply an endorsement of " 'distant' kinds of readings of enormous collections of text." but can as well be used "to make our close readings even closer and more persuasive." (248) He does not fail to underline that not only can digital methods provide "new kinds of evidence in support of literary claims," but "also make some claims untenable" (ibid). We may add that sometimes arguments - not as absurd as in the case of Alan Sokal's hoax but somewhat far-fetched as in the case of Stanley Fish's reading of Milton - could use more evidence and should, especially if they are rationalized by lists, patterns, and frequency of words, turn to computing for that very reason.

#### **Moving On**

More than the first volume, the 2016 volume discusses practical and theoretical issues of the DH at the disciplinary level, "exploring how their digital humanities work might speak to their home disciplines or across several disciplines" (2016, XI), and presents various DH projects. DH, this is the feeling the reader gets, has moved on to base its identity on things built rather than simply on arguments exchanged. This does not mean, however, that there are no theoretical provocations and straight declarations of values, as in the Forum *Text Analysis at* Scale, which explores the historical and theoretical background of "distant reading." And of course, there is still much talk about the "devastating effect of the neoliberal university and its catastrophic legacy for the future" with special attention to the new "academic precariat" (Grusin, 2016, 497; 498) and Daniel Bell's warning against technocrats in the humanities from his 1966 essay The Intellectual and the University (Raley, 2016, 507). However, this reference to a similar text from half a century ago also puts concerns about the crisis of higher education and the neoliberal takeover of its institutions into perspective. If one rereads Thorstein Veblen's 1918 essay The Higher Learning in America one realizes that warnings about "the intrusion of business principles in the universities" that go "to weaken and retard the pursuit of learning, and therefore to defeat the ends for which a university is maintained" are even older than the presence of computers in any classroom (165).

There are, as N. Katherine Hayles notes elsewhere, "plenty of problems facing the Digital Humanities: technical (e.g., distinguishing patterns from chimeras in data analysis); cultural (e.g., defining significant problems rather than ones tailored to chasing grants); economic (being coopted by corporate funding to the extent that pedagogical and educational priorities are undercut); and ethical (e.g., power relations between professors and graduate students)" (270). However, a healthy position regarding the proposed shift from analytical methods to an experiential focus is Hayles' conclusion that "the two approaches (analytical vs. experiential) are complementary to one another rather than antagonistic" and that "the antagonism between the Traditional and Digital Humanities, understandable as it may be, [is] also misplaced" (272).

The hope is that these two approaches can not only peacefully

coexist (with all the institutional and financial support this requires) but also collaborate (Galloway, 2006; Striphas, 2015; Seyfert and Roberge; 2015). The hope is that "algorithmic criticism" meet "algorithmic culture" and explore the behavioral patterns and formulas brought about by digital media themselves: from gaming, texting and searching to classifying, filtering and sharing. One needs only consider the new ways of self-presentation on social networks (implicit rather than explicit, showing rather than describing) as well as established theories of identity construction (via autobiographical storytelling) to see how algorithmic analysis (of the hidden narratives behind all the episodic elements users post on their networks) allows the humanities to have new media as their subject and use it as their tool too. Hence, the hope is to find many of such DH projects in the next installation of Gold's, Klein's and whoever else takes up the honorable task of editorship of Debates in the Digital Humanities.

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