## The Digital Humanities and National Security

Ι

In formulating what I want to suggest here about the digital humanities and national security, I will draw on two sources, both of which are entertainingly speculative and essayistic, but also erudite histories of the imagination of language in Western intellectual history. One is Umberto Eco's *The Search for the Perfect Language in European Culture* (1993), the other, Pieter Verburg's *Language and Its Functions: A Historico-Critical Study of Views Concerning the Functions of Language* (1952).

Eco suggests two factors that, as he sees it, made the biblical story of the Tower of Babel an object of intensified interest in medieval Europe from the fifth century onward and especially after the eleventh century. One was the gradual emergence of vernacular literatures; the other was the encroachment of Arab and then Turkic Islam. (In fact, though this is hardly an original thesis, Eco suggests that the idea of "Europe" itself emerged only at this time.)

Eco also suggests that we imagine a methodological bifurcation in the intellectual culture of late medieval missionary Christianity, a bifurcation presenting two quite distinct responses to the Babel story and

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the post-Roman allegory of "Europe" that it may have come to suggest. The thirteenth century, Eco noted, has left us the writings of the Franciscan friar Roger Bacon, who as Eco puts it "foresaw that contact with the infidels (not merely Arabs, but also Tartars) would require studying foreign languages [...] in order to convert them" (52). But, Eco continued, the thirteenth century has also left us the writings of another Franciscan, Ramon Llull, a Majorcan who composed his works initially in Arabic and Catalan, then went on to formulate, in his *Ars Magna* of 1305, what Eco calls "a system for a perfect language with which to convert the infidels [...] articulated at the level of expression in a universal mathematics of combination" (53).

I suggest that we reconsider some of the most important debates in u.s.-based literary and cultural studies during the last two decades and imagine them as genealogically sprung from this bifurcation in responses to linguistic diversity during the formation of the idea of Europe. That schism is still very much with us, I would suggest, and what we might call its disciplinary (or perhaps merely institutional) memory is one key to understanding what is really at stake in debates *around*, rather than merely in debates *within*, the digital humanities.

Over the last twenty years or so, responding to world-historical transitions like those of 1989–91 and 2001, the discipline of comparative literature has reexamined some of its key concepts (world, comparison, translation) as well as what is probably the most distinctive aspect of its method, acquired professional multilingualism. The contact zone between philology as a practice of literary study and area studies as a militarized social science has always been a hot zone for such introspection, and many of us have had heated debates indeed about the ethics of a professional emphasis on language acquisition, among other ethnological practices, that could certainly be traced back at least partly to the missionary imagination of someone like Roger Bacon.

It is only more recently, I would argue, that a nominally newer formation based more exclusively in departments of English studies has represented us with the different intellectual legacy of Bacon's contemporary Ramon Llull, and with its own intellectual and ethical challenges. That formation is the digital humanities, understood as what I would call, adapting a phrase from David Golumbia, a *culture of computation*—and grasped in its emergence after 2001 alongside a surge of U.S. national security legislation and institution building.

Verburg's *Language and Its Functions* is valuable for its intricate narratives of dramatic conflict between two distinct intellectual formations

of modern secularization. The first is the historical humanism that gave us philology as a precursor of what we know today as literary studies. The second is the rationalism whose ideological and practically applied forms, in what we sometimes call technoscience, still very much constitutes humanism's other culture, even-or especially-today. Bacon's philological multilingualism and Llull's combinatorial unilingualism both traveled within the historical humanism that Verburg divides into three stages: emergence in Italy from 1300 onward, with Leonardo Bruni and Lorenzo Valla and, north of the Alps, in Erasmus, Vives, and Ramus; a "second humanism" of Lessing, Herder, Goethe, Schiller, and Humboldt, among others; and a third, possibly final or nascent posthumanism of Nietzsche and his contemporaries. Verburg's narratives trace the evolving conflict of humanism with medieval scholasticism, then with the "axiomatic rationalism" of the seventeenth century, then with the "proto-positivistic neo-rationalism" of the late eighteenth and early nineteenth centuries (255, 587). In all three of its historical stages, Verburg suggests, humanism was a more or less practically language-oriented or "lingual" movement, not infrequently pitting rhetoric and literary composition against logic and mathematics, as well as philosophy (192-93). Often, he also implies, humanism was a polemicism, invested less in the successful reconciliations of such antipodes of intellectual expression than in their productively extended tension.

We can turn to the work of Edward W. Said for a sense of how the rationalist and antirationalist strains of the secular humanism embodied in nineteenth-century philology both rendered service to the European imperial project.<sup>1</sup> And we can turn to the historian of cryptology David Kahn for the story of how philology was integrated into a nascent u.s. security state, during the First World War, through the service of literary scholars who applied simple, crudely mechanized statistical methods to text (see Codebreakers and Reader). One genealogy of literary and linguistic computing in the United States—a genealogy no digital humanities enthusiast vet seems eager to claim-might begin with the work of the so-called Baconians of the mid-nineteenth to early twentieth centuries, whose devotion to deciphering Francis Bacon's ostensibly enciphered authorship of the works of Shakespeare led them to apply letter- and word-based relative frequency analysis in the study of literary style.<sup>2</sup> Before the First World War, the cipher wheel machines of Orville Ward Owen, which collated manuscript pages to align common words or phrases, were being used in Baconian research sponsored by "Colonel" George Fabyan's Riverbank Laboratories, an institutional ancestor of today's conservative and libertarian think tanks. When war began, it was the director of Riverbank's Baconian cipher research, Elizabeth Wells Gallup, who reorganized its operations for cryptanalytic service to the U.S. State Department and War Department, making Riverbank effectively a "godparent to the NSA [National Security Agency]" (Rosenheim 144).

Neither Riverbank's Baconianism nor its more generally conservative political orientation proved insuperable obstacles to collaboration with liberal Stratfordian academics like John Matthews Manly, chair of the Department of English at the University of Chicago and 1920 president of the Modern Language Association. Henry Veggian has argued that Manly was drawn to Riverbank by the "literary-formalist allure" of cryptology (Veggian 75) as a mathematizable and mechanizable science of constraint and by the opportunity it presented for a broadly technocratic reform of academic literary studies, not unlike the one we are being asked to perform today. The platform formulated by Manly as president of the Modern Language Association might therefore sound quite familiar. Explicitly, it rejected the scholarly individualism of "unorganized," "casual, scrappy, scattering" research, recommending the simultaneously more specialized and more collaborative pursuit of "large, unified achievements," a solid record of which would be needed to secure "financial support for some important undertaking" for which "the Association" could take credit (Manly xlviixlix). Explicitly, it endorsed the discovery-or invention-of new problems through linked institutional and methodological reform: "[T]here is little doubt," Manly opined, "that if we once begin to consider the possibilities of properly organized coöperation, we shall soon find plenty of problems" (xlix). Explicitly, in the name of such scalable reorganization, it called for the MLA to establish a "permanent administration" granted "real control of policies," a "body of greater permanence" than that marked by the "useless and purely ornamental" offices of an annually rotating president and vice-president (lviii). Just as explicitly, in the name of such scalable reorganization, Manly's proposal emphasized practical productive philological activity-textual criticism, the study of prosody, surveys of linguistic usage-and enjoined literary scholars to persuade the public of the practical utility of their work. Implicitly, in the name of such scholarly organization, it subordinated interpretive and normative critical discourse and debate to scholarly aggregation and documentation. And implicitly, it submerged the critical function of the intellectual in the interest of the security state: three years after Nicholas Murray Butler and the trustees of Columbia University suspended academic freedom and dismissed Henry Wadsworth Longfellow Dana and James McKeen Cattell from their faculty positions for seditious

antimilitarism, Manly had nothing to say about the uproar that now figures so prominently in the history of arguments for academic tenure. Indeed, there is nothing in Manly's 1920 presidential address to the MLA, titled "New Bottles," or in *New Methods for the Study of Literature*, a volume published in 1927 by Manly's Chicago colleague and collaborator Edith Rickert, that would seem out of place in the discourse of the digital humanities of 2013, which is only the latest formation to proclaim, as Manly proclaimed in his preface to Rickert's book, "the sign and the cause of a new era in the study of literature" (Manly and Rickert xii).

## Π

The legacy of the integration of Riverbank Baconianism into First World War military intelligence, and of the institutional reformism it inspired in academic literary studies, might be traced into the postwar era that saw the beginnings of work in so-called humanities computing. It might be traced all the way to the antiwar and other social movements of the 1960s. Those movements redirected such reformism *against* the militaryindustrial-academic complex with which it had been aligned and toward the authentic, if temporary, collapse of a cultural logic of computation, in David Golumbia's sense of that phrase (*Cultural*), along with the symbolic collapse of the social order.<sup>3</sup> The story of the estrangement of academe from the ideas, practices, and institutions of U.S. national security, during that period, has been told by Robin W. Winks.

Shortly after u.s. entry into the Second World War, Winks reminds us, the Research and Analysis branch of the Office of Strategic Services (oss), a wartime predecessor of the CIA, began contracting research to newly formed institutes at Stanford University, the University of California at Berkeley, the University of Denver, and Columbia, Princeton, and Yale. "No one at the universities," Winks observes, "appears to have protested these ties, and university presidents and professors awarded contracts and consultantships, at times going well beyond supplying or analysis of information, as when Cal Tech manufactured rockets for the Army" (79). Norman Holmes Pearson, a Hawthorne scholar who had received his doctoral degree from Yale and joined the Yale faculty in 1941 as instructor in English,

> plunged into helping Charles S. Walker in his role as Yale's "Secretary of War," writing a series of letters to thirteen universities [. . .] to find out what English departments were doing to

assist in the war effort. He received notably useful replies from [George F.] Reynolds [of the University of Colorado], and also from the three other state institutions to which he wrote (Indiana, Iowa, Rutgers), while some universities—Harvard, notably—gave him a waffly response. (Later Pearson was to observe that state universities, having to account to non-scholarly—and sometimes scholarly—taxpayers, knew a lot more about making quick decisions than private institutions would ever know.) [. . .] English departments weren't doing much, Pearson found, for the history, political science, and economics departments had moved out first; Yale was the exception, thanks to Dean DeVane. (255)

Pearson, Winks reminds us, was trained by the oss in 1945 and sent to London to staff a new oss branch, x-2, and to serve as a liaison between x-2 and u.s. staff at Bletchley Park, working alongside other Yale English faculty like Frederick W. "Ted" Hilles, who supervised work in Bletchley's Hut  $_{3}$  (262–63, 275). After the war, Pearson returned to Yale as an assistant professor of English, providing the CIA with suggestions for university-based intelligence training and recruitment and going on to serve as an impresario of the postwar interdisciplinary formation that would come to be known as u.s. American studies ( $_{316-17}$ ).<sup>4</sup>

Initially diverse in distribution of both scholarly discipline and ideological orientation, Research and Analysis had gradually come to be dominated by two disciplines, history and economics, and its political mass shifted from "broadly liberal in keeping with academia in general and the New Deal more specifically" to "the center and then the right as a potential threat from the Soviet Union was increasingly perceived" (Winks 82). "[B]y 1948–1949," Winks noted, "CIA personnel came from seventy-seven different colleges and universities. There was, as yet, no public talk about 'invisible government,' no thought that the professor who acted as a contact point might be engaged in a conflict of interest. The urgencies of the wartime campus simply extended, with hardly the hiatus of 1946, into the cold war and, at most universities, through the war in Korea, not to be questioned until the early 1960s" (55).

In explaining why "academe and the intelligence community had, by the late 1960s in much of the country, by the mid-1970s in nearly all, put so much distance between themselves," Winks points to academics who "generally wanted nothing to do with what was perceived as an unethical subgovernment" and to intelligence analysts "angered at having been rejected by the subculture of which they had thought they were a part" (441). It was the actions of the u.s. executive branch and intelligence services in Vietnam, above all, that suggested to academics that "[t]he definitions of the role of intelligence seemed [...] to have so changed as to make it difficult for them to understand precisely where integrity lay" (441). What happened, Winks suggests, was that academics, no longer able to accept the priorities of the security state, came to reconsider and reformulate the mediation of research opportunity by both practical and ethical judgment: "[A]cademics had discovered that they were not quite as close in thought to the process of intelligence as they had once believed [...] [T]here was the observable fact that the CIA, and the executive branch, tended to blame failures on the lack of sufficient intelligence. Academics tended to think that it was not faulty intelligence but political judgment that was producing disaster, and many believed that simply throwing more research at the problem would not solve it" (448–49).<sup>5</sup>

We can certainly observe that since the 1980s, much of the disaffection between academe and intelligence agencies that Winks describes as following from the difficult 1960s-1970s has gradually worn away, with the National Security Education Act of 1991 creating the National Security Education Program, National Security Education Board, and National Security Education Trust Fund both marking and enacting a change in relations. Taking u.s. academic anthropology as an example, we might well say that in the years since the security crisis of 2001 (with a boost from the economic crisis of 2007-8, as well), a great deal of that disaffection has been aggressively reversed-or at least that the opportunities that obtained until the academic humanities and social sciences sealed themselves off in an isolationist "ivory tower," in the late 1960s, have regained their appeal (McFate 28). It would not be unreasonable to suppose that such change in the relations of academe with security and intelligence agencies is itself one of the conditions of emergence for ostensibly new formations even, or perhaps especially, in the humanities. Combining the pre-1945 histories provided us by Kahn and Veggian with the wartime and postwar history provided by Winks, we see that until the 1960s, intimacy between U.S. academe and U.S. security and military intelligence agencies was the rule, not the exception-not even in, but *especially* in, literary studies. This insight provides context for recent calls for a new "public" humanities, as much as for a "digital" humanities, along with the castigations of ivory tower isolation that so often support such acts of edupreneurship.6

## III

In proposing that the digital humanities maintains a *latent* relation to national security, I draw on two senses of that term. One is the sense used in communications engineering and human-computer interface or interaction design, where it denotes a measure of systemic temporal delay (for example, the network latency we must often accept when using low-cost or no-cost voip [Voice over Internet Protocol] telephony). The other, of course, is the sense familiar to Freudian psychoanalytic thought, associated with the psychic processes of condensation (*Verdichtung*) and displacement (*Verschiebung*) in "dream-work" (*Traumarbeit*). Both are useful here: the one for marking digital humanities enthusiasts' rather uncomplicated belatedness, even straightforward reluctance, when it comes to historicizing their own projects; the other in helping us to imagine the digital humanities itself as a kind of translative *Traumarbeit*.

I write here of the digital humanities in its well-documented and rarely very vigorously disputed association with the massively scaled quantitative corpus research we call *computational analytics* or even *culturomics*. It is an association that digital humanities enthusiasts tend to accept as legitimate, albeit sometimes with relatively mild cautions and qualifications.<sup>7</sup> The all too convenient plasticity of definitions of the digital humanities, especially in its self-presentation to different kinds of external constituencies, has been remarked by Golumbia (see "Building," "Definitions," and "Digital"). For that reason, I will not attempt here to produce a definition of the digital humanities that will satisfy all (or even any) of its defenders.

In the production of knowledge in universities in the United States, as much as in the security and military intelligence agencies, the period since 2001 has been marked by a rapid expansion and dissemination of hardware- and software-based means of data collection, storage, and processing, especially text processing and visual data processing or "visualization." This rapid expansion was facilitated by a new intensity of modularization in military hardware, consumer computing devices, and what we now call social media.<sup>8</sup> All of this yielded new masses and massivenesses of specifically cultural data that, we are told by intelligence analysts and digital humanists alike, conceal "surprising" knowledge that in turn demands labor- and other means-intensive analysis and requires support through the ongoing construction of software tools for assistive automation.<sup>9</sup>

The history of the English-language phrase "digital humanities" is often obscured by appeal to a vaguer methodological history that locates its roots in what was once called *humanities computing*, or even in philological practices predating both the digital as such and the contemporary history of electronically automated computing.<sup>10</sup> Fortunately, in that context, the historically specific and topical emergence of the English-language phrase "digital humanities" has been well and clearly documented in artifacts and formats freely available to anyone who consults them with genuine curiosity.11 Of the tech entrepreneur Tim O'Reilly's various "linguistic interventions," which include the English-language phrases "open source" and "Web 2.0," Evgeny Morozov observes that while O'Reilly presented them as readings and metaphoric condensations of already legible developments, such interventions are better understood as artifacts of what O'Reilly also calls "meme engineering": constructions intended for discursive transmission, formulated with definite, if not necessarily specific, effects in mind (Morozov). The failure of digital humanities enthusiasts to embrace the most fundamental stance of the historicizing *philology* they enjoy claiming for legitimation is constantly on parade in the profoundly wearving struggleclearly wearying to a great many of those enthusiasts themselves-to provide the digital humanities with a typologically adequate descriptive definition. That this struggle shows no signs of abating, even in the face of so many overt declarations of weariness, suggests nothing less than a structural aversion to historicizing the discourse of the digital humanities itself.

There are those who see more good than bad in all of this, even as they warn of the consequences of failing to address the challenges of neophilia and the sources of the critique the digital humanities has faced and will continue to face in its name.<sup>12</sup> But Morozov is one of a very few contemporary thinkers (including Wendy Hui Kyong Chun, Tara McPherson, and Golumbia)<sup>13</sup> who have begun publicly disentangling the left- and right-wing political projects that fused in what Richard Barbrook and Andy Cameron have called "the Californian ideology," a cyberlibertarianism from which the digital humanities, if it is to thrive in the long term, will be hard-pressed to disassociate itself. This is a long-deferred conversation, just getting under way, and the fact is that in a period defined by violent struggle between institutional and anti-institutional power, manifest in terrorism, war, and the curtailment of civil liberties in the name of security, the digital humanities has displayed almost no specifically political interest in the world outside the university and too little explicit interest of any kind in the broader interinstitutional politics of the world within the university in

its imbrication with the institutions of security and military intelligence.<sup>14</sup> That ought to leave us wondering.

## IV

Here are some of the facts provided by Dana Priest and William M. Arkin's reporting for the Washington Post in July 2010 under the titles "A Hidden World, Growing beyond Control," "National Security Inc.," and "The Secrets Next Door."15 By the end of 2001, 24 new intelligence organizations had been created, including the Office of Homeland Security and the Foreign Terrorist Asset Tracking Task Force, with 37 more being added in 2002, 36 more in 2003, 26 in 2004, 31 in 2005, 32 in 2006, and 20 or more in each of 2007, 2008, and 2009, for a total of 246 new intelligence organizations created from 2001 to 2009. Between September 2001 and 2010, thirty-three new building complexes providing seventeen million square feet of space had been constructed in the Washington, DC, area for intelligence work. The staff of the Defense Intelligence Agency had doubled, from 7,500 employees in 2001 to 16,500 in 2010; the budget of the National Security Agency (NSA) had been doubled; and the number of FBI Joint Terrorism Task Forces had tripled, from 35 to 106. And this doesn't include projects that were only recently completed or still in the planning stage in 2010: the Department of Homeland Security headquarters in Washington, the NSA data processing center in Salt Lake City, the u.s. Central Command's new headquarters, intelligence, and special operations complexes in Tampa, and the Joint Use Intelligence Analysis Facility in Charlottesville. All this growth, Priest and Arkin note pointedly, "began almost as soon as the Sept. 11 attacks ended"; it "has required more people, and those people have required more administrative and logistic support" ("Hidden").

Can such dramatic growth in the production and analysis of the knowledge needed for security and military intelligence have failed to produce structured effects within the university system—even in the humanities and even in literary studies? This is an open question, if one to which we can sensibly apply intuition. Military research performed at universities is hardly difficult to document these days: the various coordinating University Affiliated Research Centers (UARCS) operate openly as nonprofit organizations, while the website of a post-2001 Defense Advanced Research Projects Agency (DARPA) touts its "speaking honestly and directly with potential university partners"<sup>16</sup> and its Young Faculty Award, awarded since 2010 to between thirty and fifty researchers per year and supporting work in electronic engineering, robotics, applied biology and bioinformatics, quantum science, materials and manufacturing science, mathematics, neuroscience, and "computational and quantitative social, decision, and behavioral sciences," a category including software engineering, natural language processing, and social computing.<sup>17</sup> The National Security Agency and Central Intelligence Agency are no less enthusiastically public in detailing what both agencies call "student opportunities."<sup>18</sup> Where the social sciences and the humanities are concerned, after 2001 Department of State, National Security Education Program, and related initiatives like the National Virtual Translation Center, National Security Language Initiative, Critical Language Scholarship Program, and National Language Service Corps were increasingly well publicized. Efforts like the Pat Roberts Intelligence Scholars Program and the Intelligence Community Scholars Program were publicly authorized, if less enthusiastically publicized (see Dave H. Price; and David Price). Meanwhile, undisclosed CIA funding of scholarship in political science and area studies after 2001 has been revealed by at least one financial audit.19

What kinds of things do the new post-2001 intelligence organizations and their contractors do, especially in their internal Sensitive Compartmented Information Facilities, or scifs? Anthony Tether's expansion of DARPA work into the life sciences, after taking over from Frank Fernandez as director in 2001, is well known (see Shachtman). But where security and military intelligence in particular is concerned, the expansion would seem to reflect the priorities of the DARPA-led Information Awareness Office that was congressionally dismembered in 2003 without doing much to inhibit either its ambitions or their active pursuit. Information Awareness Office projects were overwhelmingly focused on textual data analysis and included projects focused on database aggregation, social network analysis, and automated evidence discovery including biometric data processing and predictive event analysis (including the famous FutureMAP or Futures Markets Applied to Prediction), with a special emphasis on text processing including advanced multilingual natural language processing.<sup>20</sup> To this we might add only the investment in applications of geographic information systems (GISS) to terrain mapping and other terrain visualization, as well as the aggregation and analysis of visual data encompassing terrain, infrastructure, telecommunications activity, and all kinds of animal and human population data.<sup>21</sup>

Can a ballyhooed turn in the humanities, especially in literary studies, that promotes a putatively novel computational textual analytics

including textual and other data "visualization" possibly be or remain isolated from the cultural-analytic and specifically textual-analytic activities of the security and military intelligence organizations that are the university's neighbors—especially when such a turn is represented as a historic opportunity made possible by historic advances in information technology? It seems unlikely. Indeed, a recent publication promoting "macroanalysis" in literary studies makes the connection entirely casually: "Nor am I original in considering the applications of technology to large textual collections. [. . .] [T]he National Security Agency is in this business as well: the NSA is reported to have been employing text-mining technologies since the Cold War, and the 'classified' ECHELON surveillance system is purported to capture all manner of electronic information, from satellite communications to email correspondences. [. . .] Similar to ECHELON is the technology developed by Palantir Technologies in Palo Alto, California" (Jockers, *Macroanalysis* 20).<sup>22</sup>

Nothing in Jockers's discussion of this genealogy suggests that it might already be, or might someday come to be seen as, a compromising one for self-identified humanists to claim for themselves. I am unaware of a single formal publication of consequence by a champion of the digital humanities, and of only a single published record of discussion in writing anywhere, that has posed the question of such affiliations as professionally or personally ethically compromising.

Contrast this virtual silence with the uproar in academic anthropology that followed University of Kansas anthropologist Felix Moos's promotion of the Pat Roberts Intelligence Scholars Program and the introduction of the Human Terrain System (HTS)'s practice of embedding social scientists in u.s. Army and Marine combat units deployed in Afghanistan and Iraq. That uproar culminated in the 2009 report of the American Anthropological Association's Commission on the Engagement of Anthropology with the u.s. Security and Intelligence Communities (CEAUSSIC) and Marshall Sahlins's resignation from the National Academy of Sciences in 2013 in protest of its election of Napoleon Chagnon and "the military research projects of the Academy" more generally (see Albro et al.; Gledhill; Golden; and Gusterson and Price). Contrast it even with the more muted discussion in academic comparative literature over the National Security Language Initiative of 2006, another reactivation of the Cold War infrastructure of area studies that offered language scholars and instructors their own road to renewed complicity in military adventurism (see Capriccioso; and Jaschik).

I personally know of no prominent digital humanist performing what I would consider significant work for a u.s. security or military intelligence agency or contractor or subcontractor, even through indirect arrangements. I admit that the very idea strikes one as faintly ridiculous for all kinds of reasons, some of them sensible.<sup>23</sup> But one need not let go of that common sense to imagine its rupture by an event of disclosure, and one would also be mistaken to believe that a project for the military service of the digital humanities has never, ever crossed anyone else's mind but my own—or that it has never crossed anyone's desk.

A brief discussion of the question "Should DHers accept military/ defense funding?," conducted during July 2011 on the "Digital Humanities Questions and Answers" question and answer forums supported by the Association for Computers and the Humanities and the ProfHacker blog of the *Chronicle of Higher Education*, was occasioned by the following prompt, here quoted in full: "Should DHers accept funding from military agencies or defense contractors? Should such funding sources be rejected on principle, or should they be evaluated on a case by case basis using criteria such as basic vs. applied research, the exact nature of the deliverables, and open vs. proprietary outcomes? Discussion welcomed" (Kirschenbaum et al.).

Over what appears to have been three to four days,<sup>24</sup> eleven brief answers were submitted by six additional forum members plus the member, Matthew Kirschenbaum, who submitted the original question. Members considered whether such funding should "be rejected on principle," answering in different cases that "it's in the particulars of the project that things get messier, but a categorical refusal seems irrational"; that "rejecting defense funding on principle would be on the the [*sic*] principle [that] the u.s. military (or other funding entity) is an immoral and/or illegitimate enterprise"; that "I'm also prepared to accept some moral ambiguity, and maybe even do some negotiating"; that "*all* the devils are in the details. The broad concept of 'military funding' doesn't give us enough to argue about"; and that "forecasting evil is wretchedly hard unless one is an oracle."

One member, Bethany Nowviskie, added this:

But I thought I'd mention (lest readers see your question as purely academic) how often this has happened to me and to the project teams I've worked with—particularly on tool-building projects of various sorts, even when we assume our aims are so fundamentally humanistic that they'd be of little interest to such groups. In fact, it has happened on every single tool-building project I've been involved in. (Yes, even Juxta and Ivanhoe could have been bombing villages.) It'd be nice to think that, as people are ramping up formal grad programs in DH, a course on research ethics would be in the mix. (Kirschenbaum et al.)

Two members suggested that accepting funding from private corporations might well be equally or even more compromising than accepting funding from military agencies or defense contractors. Halfway through the discussion, Kirschenbaum confirmed, in response to an implied follow-up question posed within another member's answer, that "yes I have a reason, and in fact I think it's a question we'll be seeing a lot more of." Kirschenbaum then referred the group to "[t]he public debate over academic anthropology's participation in 'human terrain analysis,'" noting that it was "worth tracking as an example of a neighboring field coming to grips with similar issues" (Kirschenbaum et al.). Without necessarily rejecting it as mistaken, two subsequent answers from two different members appear to affirm the position that academic anthropologists were "being prescriptive" in their handling of the issue.

Soon thereafter, Kirschenbaum suggested that "at least going by the limited number of responses here (and including a couple on Twitter), it doesn't appear very contentious at all," asking the other members, "Is that all there is to it then? Do we have our DH 'answer'?" While it included an affirmation of "the consensus you just summarized," the discussion that followed also indicates that the matter had not in fact been settled. In response to a follow-up question posed in an answer by another member, "[W]hat are DH values that a military connection might threaten?," Kirschenbaum referred other members to the Pledge of Non-Participation in Counter-Insurgency issued by the Network of Concerned Anthropologists in September 2007, suggesting that "[f]or anthropologists, the predicament is that complicity in counter-insurgency operations is perceived as at odds with the field's professional commitment to trust and responsible engagement with indigenous populations." Kirschenbaum then encouraged further discussion, asking if digital humanities enthusiasts had encountered "similar cruxes in DH where our specific professional values (to the extent we can even articulate those coherently) are endangered by, say, work that relies on NLP [natural language processing] and IR [information retrieval] to yield analytics of large textual corpora."

Only one reply to this final question was submitted, after which the conversation was discontinued. That reply offered four specific "loci of difficulty" for negotiating professional values in relation to research opportunities in the digital humanities, none of them directly related to military funding.

V

Let me make two points in preface of a third about this. First, the kind of opportunity that may have prompted the question submitted to Digital Humanities Questions and Answers in July 2011 could, in theory, have come to any one of us, at any time. If the debate over "big tentism" in the digital humanities has taught us anything, it's that whether we regard it as the consequence of canny generosity or uncanny naïveté, the inability to define "digital humanities" means that anyone willing to be sufficiently cheerful in the act can don the digital humanities hat at will. The flexibility of self-identification, here, ensures that all of us—we scholars, we philologists—must both ask ourselves how we might manage such opportunities and their temptations, and admit the contingency of the position of any of our colleagues who actually do serve as our proxies in that respect.

Second, we need to recognize the effort to begin a conversation about such temptations and the documentation of that conversation in public. Unquestionably, that effort was made in good faith, even if we might say that the public evidence, at least, does not suggest it was pursued for long or with much determination, apart from the determination of the member who submitted the original question (who was responsibly dogged in encouraging continued discussion).

Third, we nonetheless need also to see the political and ethical quietism here for what it is, and to situate it in a longer history of both complacently passive and actively collaborative relations between u.s. literary scholars and the military and domestic security agencies of the state. If we *were* to recognize a past and present relationship of the ideas, the practices, and the institutions of the digital humanities to the ideas, the practices, and the institutions of u.s. national security, would there be anything unusual in such a relationship? The answer to that is, quite emphatically: no, not at all.

The real question, it seems to me, is if those acts and events of academic conscience that marked the 1960s and 1970s, as Winks narrates them, still mean anything to us today, and if we have perhaps now arrived at the point of their repetition.

Do we need to acknowledge that the territorializing violence of the world wars was *also* a deterritorialization the social effects of which presented opportunities for genuinely democratic progress in the integration of nonmale and nonwhite u.s. citizens, just for example (and among others), into one form or another of u.s. American *Öffentlichkeit* through the emergency management of labor and education as affiliative, rather than filiative, orders of humans and things? Yes, we do, and that should be part of the conversation from the start—though not, of course, by way of forgetting the wartime internment of other u.s. citizens and noncitizens, organized as it was by the very same machinery; not without acknowledging the complexities of intersectionality, in relation to structural violence, as well as the stratification of autonomism and militant anti-institutionalism in and across progressive movements, strategies, and tactics; and not as an alibi for those who, consciously or unconsciously, may have latterly turned to the digital humanities as a refuge from the discomforts of the more inclusive public sphere that the wartime expansion of labor eventually produced (see Koh and Risam).

Postcolonial studies, in adding geographic and geopolitical space to social class, race and ethnicity, and gender and sexuality as categories of analysis, may furthest advance our understanding of the complexities of intersectionality. This is not, of course, to discount the many, various, and just public contests within and over the nomenclatural, methodological, and political domains of a "postcolonial studies" itself, or to suggest that postcolonial studies has been any more immune than other progressive formations to the reproduction of structural violence in its own ranks. But the apparently widespread confusion when it comes to the question of what debates around the digital humanities are *really* about is a real liability for several constituencies, much like the confusion of left and right political programs within contemporary cyberlibertarianism. For help in making sense of these conflicts (or in making them make sense), we could do worse than to turn to the complex and frequently contradictory or antinomian political history of modern philology as Said addressed it in his work.

For reasons of both language and method, perhaps, part of that history is unavailable and even invisible to digital humanities enthusiasts based in u.s. academic departments of English, which is why such colleagues might profitably peer over the backyard fence, as it were, at the agonistic debates of the 2000s within comparative literature, some of which still continue today. It is also instructive to read the history of struggle over and around the German university circa 1800, during the great age of imperialism that produced the first of modern philology's golden ages (see Holquist 271, 278). As it was then, today the university, the very idea of the university, is once again up for grabs.<sup>25</sup> We can't think this hasn't happened before, and we can't afford to be baffled. For historicizing the emergence of the digital humanities, I suggest that we already have a model at hand, in the historicizing of modern philology that we find in postcolonial studies, beginning—if "beginning" is the right or the best word—with Said's *Orientalism* and its sources of influence and moving in different directions from there. Following the work and the example of Said, other late twentieth- and early twenty-firstcentury returns to philology have sought to salvage the secular historical humanism of modern philology by extricating it from its imbrication with the scholarly Orientalism of the European empires and its transmogrified afterlife in the applied social science of a new postwar U.S. national security state. *That* project has not proceeded—because it cannot proceed—without acknowledging and working with the historical fact of such imbrication, as a first step and subsequently in every possible way. If digital humanities enthusiasts have had no place at this table, that is only because they have chosen to forego, or even refused, one.

I thank Rita Raley and Ellen Rooney for their invitation to contribute this essay. I also thank David Golumbia and Nergis Ertürk for their comments on its first draft; Bruce Robbins and Dennis Tenen for the occasion to test a version of its argument; and Michael Holquist for continuing conversation on this topic among others.

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Notes

1 See Said, *Humanism*, *Orientalism*, and "Return."

Digital humanities enthusiasts 0 might well prefer to turn to the work of the British logician Augustus de Morgan, who in 1851 made the first proposal for the application of statistical techniques in biblical authorship attribution, or to that of the physicist Thomas Mendenhall, who in the 1880s published studies of word length and relative frequency in the works of Bacon, Marlowe, and Shakespeare. One leaves it to judgment to assess the cost of yet another patriarchist origin story, when the work of Delia Bacon is also ready to hand and, as Nancy Glazener shows,

profoundly marked by Bacon's conflict with the patriarchism of the newly professionalizing U.s. literary criticism of the midnineteenth century (Glazener 340).

- 5 Golumbia's most powerful argument, as I read it, comes in the form of a simple reminder: that our modernity is a modernity of institutions, and that computerization serves first and foremost the fundamental and constitutive modern institution of slavery.
- 4 Taking my bearings from both Kahn and Veggian, I have focused here on the service of Yale English faculty (to which one might add that of others, like Fredson Bowers

of the University of Virginia) to wartime cryptology, eliding another aspect of this history, in the more traditionally literary activities of literary scholars, or those with a literary education, who served as wartime and Cold War propagandists and fictioneers. The careers of James Jesus Angleton, David Atlee Philips, Cord Meyer, and E. Howard Hunt are exemplary in this respect. In addition to Winks, see Wilford; and Rubin. Also apposite is the career of Cleveland Cram, recruited in 1949 while a graduate student in history at Harvard.

- 5 See also Cram's review of the flood of memoirs and other publications that appeared in the mid-1970s exposing confidential information about CIA operations.
- 6 See McFate: "Over the past 30 years, as a result of anthropologists' individual career choices and the tendency toward reflexive self-criticism contained within the discipline itself, the discipline has become hermetically sealed within its Ivory Tower. [...] The retreat to the Ivory Tower is also a product of the deep isolationist tendencies within the discipline. Following the Vietnam War, it was fashionable among anthropologists to reject the discipline's historic ties to colonialism" (28).
- Consider the advance publicity 7 for Jean-Baptiste Michel et al.'s "Ouantitative Analysis of Culture Using Millions of Digitized Books," beginning with Patricia Cohen's article in the New York Times titled "In 500 Billion Words, New Window on Culture" (part of the Humanities 2.0 series) and continuing with coverage in the *Chronicle of Higher Education* and subsequently on various blogs. See Finn; Jockers, "Unigrams"; Michel et al.; and Nunberg. On a website called Culturomics maintained by

the Cultural Observatory at Harvard University, which provides access to Michel and Lieberman's paper along with links to related resources, a document titled "Culturomics: FAQ" explains, in answer to the question "How does this relate to 'humanities computing' and 'digital humanities'?":

Culturomics is part of what's known as "humanities computing" or the "digital humanities." Of course, the digital humanities are a very broad field, comprising a vast array of ways in which computation can help humanists. It includes such things as tools that aid in teaching, citation, and collaboration as well as digital collections of various types.

Culturomics is much more narrowly defined: its goal is to digitize and analyze data about culture on extremely large scales: all books, all newspapers, all manuscripts, etc. (Cultural Observatory)

- 8 I use the term *modularization* in the everyday sense, here, connoting both miniaturization and portability; but I also have in mind Lev Manovich's identification of modularity as a "principle" of new media, Tara McPherson's analyses of modularity and "lenticular logics," and David Golumbia's critiques of philosophical functionalism (see *Cultural*, esp. ch. 3).
- 9 In the working methods of the natural sciences and most of the social sciences, some form of automated data processing has long since been routine; this, perhaps, is one reason why, after 2001, we have seen no assertive evangelism for a "digital natural sciences," and comparatively less for a "digital social sciences" as such. That's not to say there is none of the latter: see, for example, the website of the Computational Social Science Society of the Americas (csssA).

- 10 For a representative example of such obscurantism, see Hindley.
- See, for example, Kirschenbaum, "Digital Humanities" and "What Is"; Nowviskie, "HCS" and "Humanities"; Svensson, "Humanities Computing" and "Landscape"; and Unsworth.
- 12 The work of Alan Liu, particularly in such essays as "Where Is Cultural Criticism in the Digital Humanities?" and "The State of the Digital Humanities: A Report and a Critique," is notable here.
- 15 See, in particular, Chun, "Dark Side" and Programmed Visions; Golumbia, Cultural; and McPherson.
- To meet differences' restrictions 14 on article length, I omit here a long footnote from an earlier draft comparing the frequency of occurrence of the words "terror," "Afghanistan," "Iraq," "torture," and "national security" in articles published in two digital humanities journals. Digital Humanities **Ouarterly** and **Journal** of Digital Humanities, with their frequency of occurrence in articles published in two interdisciplinary cultural studies journals, Public Culture and Social Text.
- 15 See Priest and Arkin, "Hidden World," "National," and "Secrets."
- 16 This phrasing is from the "Universities" page of the Opportunities section of the DARPA website.
- 17 See, for example, Winbladh, Ziv, and Richardson, a project supported by a Young Faculty Award in 2011. See also the workshop advertised by DARPA in February 2011 titled "Stories, Neuroscience, and Experimental Technologies (STORYNET): Analysis and Decomposition of Narratives in Security Contexts" (Sterling). I thank both David Golumbia and Michael

Holquist for this reference. At least two digital humanists with faculty appointments in university departments of English studies have recorded their participation in this workshop in their online curricula vitae. See Kirschenbaum, Curriculum Vitae; and Kraus.

- 18 See "Student Opportunities" on the CIA website and "Opportunities for You" on the NSA-CSS website.
- 19 See Sommer, who details CIA funding of research performed by Georgetown University faculty members G. John Ikenberry, Angela Stent, and Nancy Tucker. My thanks to David Golumbia for this reference.
- 20 U.S. military interest in electronic multilingual natural language processing has a history nearly as long as that of electronic computing itself. See Lennon, "Can Multilingualism" and "Machine Translation."
- 21 See GIS in the Defense and Intelligence Communities.
- 22 Palantir Technologies is, of course, the CIA-funded tech start-up that denies that its Prism data analysis product has any connection to the National Security Agency's program of the same name. See Greenfield.
- The self-affiliation with digital 23 humanities of researchers in technical fields is another matter altogether: to choose just one example, as of June 12, 2013, the Twitter profile of Shlomo Argamon of the Illinois Institute of Technology (IIT) advertises Argamon's interests as "authorship and sentiment analysis, forensic linguistics, digital humanities, computational counterterrorism" (Argamon), while a "Follow Friday" tweet posted on IIT's official Twitter account advertises Argamon thus:

"#FF @shlomoargamon #IIT faculty Computer scientst [*sic*] authorshipsentiment analysis, #forensic linguistics #counterterrorism #digitalhumanities" (see IIT).

24 Because "Digital Humanities Questions and Answers" appears to use only relative time stamps for forum posts, this judgment is based on the time stamps of Internet archive captures of the URL address content, along with the relative time stamps for forum postings included in those captures.

25 I have borrowed this phrasing from Michael Holquist.

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