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Manifesto for the New Humanities: A Review of Digital_Humanities

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Manifesto for the New Humanities: A Review of Digital_Humanities

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Overview

This is an exhilarating time for the digital humanities. ⁴² There's an infectious energy driving the development of new tools and new types of research, and a passion for collaboration and reaching across disciplinary boundaries. Digital humanities centers are multiplying at institutions around the world, digital projects are making their way into classrooms, and dedicated funding bodies, like the NEH Office of Digital Humanities, are lending their support to innovative work. Underlying this momentum, however, there's also a sense of urgency. The digital humanities is, as yet, only partially constituted as a field, and strives for greater recognition within the larger academic ecosystem. This energy and this urgency are both evident throughout *Digital_Humanities*, a concise volume that aims to serve as a manifesto for the movement.

⁴² The phrase "digital humanities," admits of some interesting variations in usage, being rendered singular or plural, sometimes with the definite article, and sometimes without. This is in part an extension of usage variation in "the humanities," but it also likely reflects something about the field's incomplete coherence in its current stage of development. For an analysis of the significance of this variation on the status of the digital humanities as a field, see Liu (2012).

As is typical of revolutionary documents, the way *Digital_Humanities* operates is a bit paradoxical. On the one hand it wants to capture the radically open and category-defying nature of the digital humanities, to illustrate its power to upset the academic apple cart. On the other hand, it also has to provide a coherent picture of what the digital humanities is, to give the field a center, and boundaries, and an articulated structure. It therefore seeks to stabilize even as it destabilizes. The book is as much an inaugural text as a revolutionary one, setting up the digital humanities as the paradigmatically interdisciplinary discipline. It's also a tolerably good introduction to the field, providing a framework for understanding the diverse array of existing digital humanities projects, the emerging formal and methodological norms, and the way disciplinary and institutional relationships are being reconfigured. My main criticism of the book is that in its zeal to usher in the age of the digital humanities, it leaves aside certain important aspects of the humanities as such, resulting in a somewhat lopsided advertisement of the movement's importance.

Like so many of the projects it sets out to describe, *Digital_Humanities* is a collaboration. Its five co-authors claim equal responsibility for the conception and realization of the text. Three of them—Johanna Drucker, Peter Lunenfeld and Todd Presner, are affiliated with the Center for Digital Humanities at UCLA, and are professors of Bibliographic Studies, Design Media Arts, and Germanic Languages and Comparative Literature, respectively. Anne Burdick chairs the Media Design Practices department at Art Center College of Design in Pasadena, CA, and Jeffrey Schnapp serves in a number of roles at Harvard: as Professor of Romance Languages, as an instructor in the Graduate School of Design, as faculty codirector of the Berkman Center for Internet and Society, and as the faculty director of metaLAB (at) Harvard.

Appropriately for a book about the transformative potential of new media, the authors' vision for the digital humanities is expressed as much in the form of the book as it is in the text itself. As they sloganize in Chapter 3, "authorship is design and design is authorship" (83). To this end the book employs a number of graphical innovations, shifting with each chapter, which are clearly inspired by various features of hypertext and web design. In one chapter climactic sentences are set apart in boxes, while in another section headings are surrounded by word clouds of related terms. It's very much the kind of book MIT Press specializes in: stylish and playful, and self-consciously designed. More to the point, though, it reflects the view common among digital humanists that content can be usefully explored through experimentation with form.

This strategy is successful to a degree, but it's sometimes a handicap as well. Sections of text are often quite brief, perhaps in order to mimic the familiar format of blog entries. This is sufficient for introducing concepts or presenting brief arguments, but it prevents the possibility of developing ideas at length. In one chapter, the text is continuously interrupted by snippets of large, bold,

all-caps type, creating a highly fragmented reading experience. By transposing features of online reading into book form, the authors unwittingly highlight one of the frustrations of digital media, that it tends toward interruption and distraction. Indeed, it is a key challenge for the digital humanities as a whole to show that its medium enriches our understanding of its subject matter rather than throwing it into confusion.

The book consists of four fairly unconventional chapters, plus a preface and an afterword. In place of a bibliography, the authors include two pages of "reference networks." Although it's a nuisance that the book contains neither an index nor any in-text citations, the reference networks do serve as a useful gateway to some of the major hubs in the digital humanities web space, prompting readers to set out and explore key organizations, technologies, and forums for publication and discussion.

Summary and Commentary

The first chapter, "Humanities to Digital Humanities," situates the digital humanities historically with respect to the humanities tradition, as well as to technological and cultural transformations more generally. The authors first relate the gradual emergence of the humanities from a less sharply defined humanism during the late medieval and renaissance periods, and their refinement as a result of the enlargement and specialization of European universities. They go on to describe the much more rapid transformation, beginning in the 1940s but really taking wing in the 1980s, of the objects of humanistic inquiry from print to digital, and the development of increasingly sophisticated techniques for analyzing and manipulating those objects. The authors' claim is that "the migration into digital media is a process analogous to the flowering of Renaissance and post-Renaissance print culture" (6).

Once they have placed the digital humanities within this historical narrative, the authors take some time to emphasize the importance of design to the burgeoning field. They argue that once a work is no longer a simple text, but an object that can be manipulated and analyzed by a variety of digital means, or even a complex assemblage of text and multi-media, the work's design must be regarded as part and parcel of the work itself. The design of works as subtle and singular as these determine the user's freedom in interacting with them. In a later chapter the authors will go so far as to suggest that digital humanities projects should be evaluated on the criterion of whether they present "an argument that is bound up with and a function of the materiality and medium in which the argument is presented" (90). Some amount of reflexive self-consciousness with regard to design and function, it would seem, is important to a digital humanities project's integrity.

Since design is not typically a skill in which humanities scholars receive explicit training, its significance points toward a new reality for the humanities under the digital rubric: collaboration. As the basic end-product of research becomes the project rather than the book or article, it becomes much less likely that any single contributor will possess the full complement of skills necessary to realize a given work. Not only designers but also software developers, GIS specialists, archivists, and project managers, in addition to any number of other specialists, are often called for. While the authors don't discount the possibility that "the field of digital humanities may see the emergence of polymaths who can "do it all": who can research, write, shoot, edit, code, model, design, network, and dialog with users" (15), projects thus far have been characterized by broad and varied collaboration. And in fact this new collaborative spirit is seen as a major advantage of the digital humanities over traditional modes of scholarship. Single-authorship has tended to be the rule in the humanities much more so than in the sciences, and this arrangement has sometimes led to fragmentation and a defensive attitude among scholars, rather than to an ethos of cooperation and a sense of shared goals. Some degree of competition is of course important in order to maintain high standards of quality, but the introduction of team-based research into the humanities, especially in projects that require a range of disciplinary and professional expertise, promises to temper the humanities' traditionally individualistic culture. As anyone who has attended a digital humanities conference (or "unconference") can attest, the field is imbued with a contagious spirit of mutual acceptance and support. This is surely due in part to the presence of software developers committed to the ideal of open source, wherein code is freely shared, added to, and improved upon, by a community of programmers, rendering the notion of authorship fuzzy, and less to be insisted upon. It's also likely a result of the perceived need for solidarity in a discipline still striving for critical mass in some of its local arms. 43

Another key feature of the digital humanities is their "generative" character, that "process is favored over product" (22). Digital humanities projects should embrace the "psychology of failure" (22): if they fail, their failure is instructive in designing subsequent versions. This is one way the humanities in their digital form are adopting methods from the sciences and engineering—by introducing experimentation and evidence-based research design. It's also what prompts the authors to recommend that we seize a rare moment of opportunity to restore the humanities to relevance within the undergraduate curriculum. The digital humanities are an ideal vehicle for this because of their ability to reconnect facets of the academic and educational process that have become alienated from one another. They can reunify the disparate and individually siloed humanities disciplines through their "emphasis on making,

⁴³ For a commentary on this phenomenon, see Scheinfeldt (2012).

connecting, interpreting, and collaborating" (24). They can also bring some unity to the two main functions of the academic scholar—research and teaching—by allowing them to bring their research into the classroom where students can engage with and even contribute to it. Finally, they can bring the content of humanities coursework into better communication with contemporary culture by making use of media that are continuous with, and indeed nearly definitive of that culture.

The authors in no way suggest that print should be banished from the humanities classroom, but they do recommend a shift in pedagogy away from "humanities texts," and back toward the "humanist spirit" (25). They don't give much attention either, though, to the rationale for keeping print around, and they leave themselves open to the interpretation that focused attention to texts and text-based work is of little benefit to students. While getting students to engage with the process of digital scholarship will likely grow in importance in coming years, there remain important competences that working with printed texts in the traditional way is uniquely suited to developing. As David Weinberger points out, "the physical nature of books ... enables and encourages long-form thought" (2012: 99). So too does old-fashioned writing with pen and paper help students to canal disorganized thoughts into coherent, linear arguments. Even as the authors suggest that "the 8-page essay and the 25-page research paper will have to make room for the game design, the multi-player narrative, the video mash-up, the online exhibit and other new forms and formats" (24), we should urge the continuation of the former alongside the latter, since they promote skills that remain essential for the development of critical thinking and the expression of complex ideas.

The second chapter, "Emerging Methods and Genres," is the heart of the book as an introductory text, providing a taxonomy of digital humanities projects, along with a series of case studies illustrating how the tools and techniques described can be recombined and tailored to the needs of a given project. This taxonomy demonstrates the remarkable diversity of current digital humanities projects, from text and corpora analysis to GIS mapping and visualization, to new forms of exhibition of collections and archives, and interactive, even crowd-sourced, community scholarship.

The vocabulary introduced in this section is especially interesting. What we get is a set of keywords for the nascent culture of digital scholarship. "Distributed knowledge production," for instance, refers to the fact that project collaborators are dispersed not only in time and space (one professor may work with another one at a different university, or with a group of undergraduate assistants who cycle out every year), but also in their professional backgrounds and institutional roles—they might be faculty, librarians, software developers, interns, consultants, etc. The term is obvious enough, but significant as an expression of a new norm for scholarly activity. I'll discuss just a

few of the most important key terms. Note, however, that this nomenclature is not universally accepted in the digital humanities.

"Augmented editions" are digital versions of important works that have been given new layers of digital functionality. The production of augmented editions a prominent strain in the digital humanities, and one of the earliest to develop. Editions may present extensive notes and annotations, provide a comparison of textual variants and multiple editions (imagine being able to instantly compare the A and B editions of Kant's first *Critique*), enable the coreading of the text alongside one or more commentaries, and allow the performance of a variety of textual operations such as work frequency and proximity analyses, as well as sophisticated and flexible full-text searching. Guidelines set down by the Text Encoding Initiative, a major hub in this area but no the only one, have given rise to some 150 projects since 1994. Editions can be as ornate as the ambitions of their creators demand. A popular trend at the moment is to integrate texts with multimedia so that readers can compare multiple performances of a play, or readings of a poem, consult a curated selection of commentaries on each one.

"Thick mapping" refers to the layering of geospatial data with other types of content, and the use of maps to explore relationships between these data. It might make use of historical materials from archives, locational references in a text or collection, map annotations contributed by researchers or students, or data from a wide variety of other sources. The application of GIS technology to humanities topics has opened up a rich hybrid discipline spanning not only geography and history but also literary and cultural studies. This is a particularly popular area of activity at the moment, with key centers in the Spatial Humanities project at the University of Virginia Scholar's Lab and Stanford's Spatial History Project, One of the most high-profile projects, Stanford's "Mapping the Republic of Letters," counts more than 20 contributors, has spawned a significant amount of published research, and has been integrated into several courses. Some projects anticipate carrying thick mapping back over to the real world through mobile apps that can be used to explore a text (or an archive, or a body of scholarship) while moving through the space in which it takes place, or about which it is concerned. Such projects, which the authors classify as "locative investigation," might be thought of as more data-intensive and interactive analogues of the automated museum tour.

"Humanities gaming" refers to the use of digital games that can be used in the classroom and illustrate or explore curricular material. The authors give the example of Soweto '76, a game that simulates social unrest in a post-apartheid South African town, and "deepens empathy and enlivens class discussions of race, power, and education" (51). While gaming might may not fit well with our image of rigorous scholarly activity, the authors contend that this could change as "the narrative complexity, play strategy, and game "feel" ... become

more developed, culturally significant, and even world-enriching" (52). This is one area that, while not implausible as a site for interesting research and pedagogy, will need to prove itself in order to gain acceptance by the scholarly community.

"Code, software and platform studies," are a set of related subfields: "Code studies, along with the study of software and platforms, bring humanistic close-reading practices into dialogue with computational methods" (53). The inclusion of these areas noticeably complicates the picture of the digital humanities as a field, as it implies that the digital humanities extend to the humanistic study of digital tools, as well as the pursuit of humanities scholarship by digital means. This brings us close to one definition of the digital humanities offered by Kathleen Fitzpatrick, as "a nexus of fields within which scholars use computing technologies to investigate the kinds of questions that are traditional to the humanities, or, as is more true of my own work, ask traditional kinds of humanities-oriented questions about computing technologies" (2010). This is also where the digital humanities begin to merge with media studies, as the interface (or the hermeneutic circle enclosing user and platform) becomes an object for testing, observation, and adjustment. Explorations of this kind can vary along a continuum from hard-headed R&D to a "poetics of code" (54). Experimentation and analysis in this area could lead to interfaces that improve the way we work with humanities information, as well as a deeper understanding of our own digital culture.

"Augmented reality" (itself placed under the heading of "ubiquitous scholarship") is something I'd prefer to let the authors themselves describe, since their depiction catches them in a characteristic rush of technophilia:

Augmented reality applications allow mobile devices to combine geolocation information and enhanced imagery in a layered, site-specific presentation of events and interpretations. Imagine a time-machine application that shows your neighborhood in a fast-forward sequence from Jurassic times to the present; or think of sensors in a natural environment that expose the geological and industrial processes that formed what is before your eyes; or consider simultaneous and automatic translation applications that remove linguistic barriers to signage and information in a foreign script; or imagine a "web of things," in which every physical entity—from the book in your hands to your hands themselves—is connected to and part of a deeply recursive information network (59).

In keeping with the networked nature of the digital humanities and this book, all of these terms are introduced graphically within a constellation of related ones. Hovering around "Augmented editions and Fluid Textuality," for instance, we have a cloud that includes "structured mark-up," "natural language processing," "relational rhetoric," "textual analysis," "variants and versions," and "mutability." This technique seems appropriate not simply because it

evokes current metaphors about technology (the "information space," the "coud," etc.), but because a more systematic textbook for the digital humanities is still a way's off, due to the unsettled nature of the field.

The description of these and other genres is followed by a series of case studies, each of which demonstrates several tools and techniques combined in a single project. The case studies do not describe actual projects, but ideal types that highlight how the parts of the toolkit can complement one another in a given project. They do indicate something of the planning involved in such projects, from the selection of appropriate source materials, to the best methods and procedures for carrying it out, and the techniques for disseminating the work and criteria for its evaluation. The lack of actual examples here, though, is slightly disappointing, as these would have illustrated some of the practical difficulties collaborators confront, but the case studies do perform their primary function well—they help the reader understand what really good digital humanities projects would (and sometimes do) look like.

The case studies are each interesting and innovative in their own ways. In Case Study 1, inspired by postcolonial theory, tries to reveal the differences in European and Native American conceptions of land and space by using a variety of European maps and historical documents, together with the indigenous accounts they contain, and the corpus of other period texts that constitute the reception of these accounts, as data. In the language of digital humanities, "techniques of thick mapping are used in combination with text analysis, data-mining, and large-corpus natural language processing" (62). The goal is to extract a "list of cartographic fundamentals from indigenous perspectives" and "create simulations from these perspectives" that can be contrasted with the known European cartographic principles. The end result would be a "geospatial visualization engine" for displaying these different cartographic worldviews—an exciting prospect indeed. The case study takes us through the process of building the project step by step, from the selection of source materials to building the analytical tools, creating the simulations, and presenting the results.

This chapter introduces one of the book's more useful graphical conventions, namely the arrow tabs in the margins that link the techniques and project types discussed in the case studies back to the overview section in which they were defined. Case Study 3, for example, entitled "Augmented Objects & Spaces: Jewish Ritual Objects in Diaspora," describes the creation of a museum archive of religious artifacts with several layers of information-rich discovery and classification, including not only their manufacture and use, but also their geographic displacement as a result of historic events. The tabs in the left-hand margin link us back to concepts developed earlier, including "pervasive infrastructure," "distributed knowledge production and performative access," "the animated archive," "visualization and data design," "augmented editions

and fluid textuality," and "enhanced critical curation." Linking concepts to instances of their application is an effective way of explaining them, and one that may well work better in real hypertext, if the amount of page flipping this reader had to do is any indication.

The third chapter, "The Social Life of the Digital Humanities," places the digital humanities in relation to broad questions about living and working in the information age. The authors argue for the renewed importance of the humanities "as new social structures, economic models, cultural forms, value systems, and forms of selfhood emerge, rendering the "human being" decidedly more motile, diffuse, and even fragile" (82). The notion that increased exposure to technology and media are changing what it means to be human is of course familiar, and the authors make a persuasive case here for the second humanistic renaissance, or at least the need for it. The humanities in their new manifestation will help us to understand and answer vital questions of our age, such as the consequences of new technologies on the institutional control of knowledge, the nature of authorial identity, and the role of technology in the system of human values.

To do so the authors engage with a range of themes from critical social theory. For instance, they give the questioning of the notion of the author initiated by Barthes and Foucault a digital upgrade when they assert that "The question is no longer "what is an author?" but what is the author function when reshaped around the plurality of creative design, open compositional practices, and the reality of versioning?" (83). It appears that digital media and the reality of distributed co-creation, have concretized problems of authorship that seemed considerably less obvious just decades ago. The authors evoke Foucault again, as well as Althusser, when they describe the collaboration of contemporary subjects in their own surveillance and regulation, and the role of pervasive technology in this. They leave the question open, however, as to the precise shape control and free expression will take in the coming years: "The interpellation of interior life and the restructuring of individual subjectivity in the face of constant communication exchange may yet produce long-lasting changes in the concepts of public and private space, security and privacy, identity and community" (81). These reflections raise the guestion of whether the digital humanities will add their momentum to the transformations already being brought about by social media and ubiquitous computing, or whether they will provide alternatives, and perhaps avenues of resistance. The authors seem to suggest that even while the humanities take on some of the characteristics of digital culture at large, like the embracing of multiple, distributed, and processual authorship, it also falls within their mandate to understand and evaluate the nature and effects of these changes. Digital humanities will not only adopt the tools of contemporary digital culture; it will also position itself to respond to the specific ways in which that culture constitutes power and identity.

The authors strike one of their most inspiring notes when they make it a "core human value of the digital humanities" to "bring about a public sphere in which no one was excluded" (94). This, they admit, is a utopian ideal, but it's hard not to see the present moment of rapid technological and cultural change as offering a unique opportunity for its realization. Digital humanists tend to be motivated by a desire to open lines of communication not only between different corners of the academy, but also between the academy and a broader non-academic public. Many of them aspire to the role of the public intellectual, a category that's been sadly absent in certain quarters, particularly the United States, for many decades. Given the competition for attention that nearly defines the structure and dynamics of the public internet, the challenge for the digital humanities is to counter the "echo chamber effect," and to prevent it coming to pass that all that outpouring of public-facing digital scholar-ship ends up talking only to itself, in one big academic silo.

One recent example which the authors don't mention, perhaps because it surfaced after they had gone to press, is Bruno Latour's project entitled "An Inguiry into the Modes of Existence." The project is based on an effort to complete a research project, the first phase of which is presented in an "augmented" e-book, by inviting readers to contribute commentary, articles, images, and other documentation pertaining to the project's theme of modernization. Some of these readers will be selected as co-researchers and will be instrumental in producing the second incarnation of the book. While it certainly presupposes a threshold of intellectual adventurousness that is not, perhaps, widespread in the public at large, the fact that it exists in a public space, and offers the possibility of genuine engagement with the work of an esteemed philosopher and a team of academic researchers, is an encouraging sign. Placing humanities scholarship on the web in this way, and making inviting the public to engage with it in a meaningful and productive way, encourages public involvement in scholarly activities, and builds trust between the academy and its outside.

Another issue the authors address in this chapter is the changing nature of publishing, and especially the cultural and economic tensions that define the current debate over open access. Open access publishing is desirable because it removes barriers to access of the products of scholarly labor, and a wide-spread shift to open access would free libraries and institutions from the burden of prohibitively expensive journal subscriptions. The movement has already seen considerable success in the sciences with pre-print repositories like ArXiv and open-access journal collections PLoS becoming standard forums for the dissemination of research. Movement in this direction has been slower in the humanities, however, largely because publication in established commercial journals, which occupy an important place in disciplinary networks, remains an important benchmark for peer recognition and departmental review. The digital humanities buck this trend by publishing mainly in

open-access forums, on sites hosted by digital humanities centers, or on standalone sites. The authors draw attention to one of my own favorite examples of the new publishing landscape: the journal *Vectors* which, in place of articles, presents a handful of new digital humanities projects in each issue, along with explanatory text to familiarize the user to purpose of the project and orient them with the interface. *Vectors* is a well-designed, highly usable, and totally immersive experience, helping humanists to get up to speed with their colleagues' work by actually letting them use it.

The fourth and final chapter, "Provocations," advances a series of prophetic declarations intended to challenge are inspire. These are headed off with the startling pronouncement that "the era of digital humanities has just begun, but it may be coming to an end" (101). By this the authors mean that as the products and practices of the digital humanities become more commonplace and familiar, we will reach a point when labeling them as such will no longer be necessary or helpful. The humanities will simply grow to encompass a full complement of traditional and digital methods. Future generations of humanists will wonder how it could ever have been otherwise.

The provocations range widely over all aspects of contemporary scholarship. Some, like this one, point toward fascinating possibilities for future research: "Building tools around core humanities concepts—subjectivity, ambiguity, contingency, observer-dependent variables in the production of knowledge holds the promise of expanding current models of knowledge" (104). The authors go on to describe the hypothetical example of a "Heraclitean interface ... a hybrid of the very old and the very new, founded on notions of flux and the non-self-identical nature of experience. Such an interface might mutate and change, shifting ontologies on the fly, remaking the order of the knowledge field in response to the user's queries and reactions to the results." This sounds like an idea for a digital humanities project in philosophy, and an experimental one at that, which is exciting because only a handful of specifically philosophical projects have emerged so far, 44 and these have tended to be projects about philosophy, rather than projects that directly explore philosophical questions. There is something slightly ominous about this idea, too, in that it comes uncomfortably close how Google might like to function in ten years' time. As the authors themselves admit, their hypothetical interface could as easily be a dream or a nightmare.

Another mostly positive speculation involves our "becoming ever more seduced by the macro and micro ends of the perceptual spectrum, by very big and very small data" (106). What the authors have in mind here is the ability to "zoom" easily from one scale to another within a large text or corpus.

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⁴⁴ Apart from the long-running Archelogos Projects, the most visible current project is perhaps the Indiana Philosophy Ontology Project, or InPhO.

This could provide the basis for a promising new mode of humanities research in which digital and traditional methods mediate and inform one another. Tools built to identify clusters of word use, grammatical constructions, references and other patterns could help us identify sites in the text that are worthy of a closer reading. That closer reading could proceed in more or less the traditional way, but it would be guided by the data model that helped identify the site, and might yield discoveries and insights that would help researchers refine the model. There's a dark side to this too, however, namely that "we may become ever-more inclined to neglect the in-between realm within which most of human experience has unfolded over the millennia" (106). The authors speculate that we'll come to look back on traditional linear reading as a quaint curiosity, "a horse-and-buggy ride" (106). This prediction could be supported not just by "zoomability," but also by the increasing amount of time we spend with all forms of highly interactive media. We've already accustomed ourselves so completely to reading on the internet that when we're confronted with the limitations of print—the inability to link out, to open additional tabs, and to toggle back and forth between one text and another, between text and email, or sms, or online videos—registers as a strong phenomenological disjunct, and there are indications that the cognitive changes spurred by this familiarity may not be ones that lend themselves well to the type of deliberate work required in the humanities. 45

Another provocation: "The time of diagrammatic thinking is upon us" (119). Diagrammatic thinking would be the reverse of narrative thinking, I suppose—a thinking that privileges space over time, and lends itself to the exploration and comparison of possibilities. Reporting on the work of James Flynn, Nicholas Carr notes that the persistent rise in IQ scores over the last century seems to be explained in part by improvements in spatial reasoning ability, disproportionately to other measures of intelligence (144-148). It seems reasonable to speculate that diagrammatic thinking is encouraged by the sorts of tools we use—think of the mental maps you build in order to keep track of the location of a given page within the structure of a larger website, tracking the successive mouse clicks that brought you there. It also seems natural to suppose that diagrammatic thought would be characteristic of a period of great creativity, in which scholars seek out connections that had been invisible prior to the advent of network technology. But the humanities cannot concern themselves simply with the mapping of territories; argumentation and storytelling are also essential. Diagrammatic thinking is not an end in itself, but simply the ascendant thesis in an eventual, more encompassing, resolution.

⁴⁵ Nicholas Carr summarizes some recent research on this topic in his popular book *The Shallows:* What the Internet is Doing to Our Brains. Further discussion of the cognitive effects of digital media can be found in Hayles (2012).

We must turn, at some stage, to ask "Which newly meaningful narratives do these connections allow us to construct?"

Many more prophetic statements are made in the course of this chapter: that the digital humanities could split into qualitative and quantitative branches, that more complex and processual concepts of authorship will normalize over time, that we could end up creating a "vast digital cultural commons" (we could already be well on our way), that the drive toward open access and the democratization of knowledge will lead to intensifying confrontations with the economic interest of publishers and copyright holders, and so on. There are more issues raised here than could possibly be addressed in this review. Clearly much provocation is called for in order to fully appreciate the significance of the digital humanities movement.

This final chapter concludes with a "Short Guide to the Digital_Humanities," which was circulated online via social media channels prior to the publication of the physical volume. It combines an FAQ about the field with a series of "specifications" regarding how the digital humanities can best be embraced and implemented by scholars and institutions. Many readers will find this to be the most helpful section of the book, as it clarifies some basic facts about digital humanities, such as its relationship to the traditional humanities and its strong tendency toward collaborative, project-based work, and addresses issues of special concern for would-be practitioners and supporters, such as how digital humanities projects should be evaluated, how the various collaborators should be credited, what some core competences for practitioners should be, and how digital humanities should be incorporated into curricula. The most pressing issue dealt with here is how the digital humanities are to be counted in the departmental tenure review process. The authors' guidelines include certain procedural considerations (such as that a work "must be evaluated in the medium in which it was produced and published"), as well as discussions about the crediting of collaboration, intellectual rigor, the extent to which a project contributes to research, teaching and service, peer review, a number of ways of gauging impact, conditions under which a project might be considered the equivalent of a book or article, considerations of ethics and sustainability, and the assignment of some value for a project's willingness to experiment and take risks. These guidelines are not uncontroversial, however, nor do they address the thornier problem of persuading academic departments to adopt guidelines of this kind, and once they do, to ensure that they're followed.

Concluding Remarks

Digital_Humanities depicts a field that, while still in flux, is steadily coalescing, and is endowed with a special capacity to connect and fortify the various facets of the humanities we've inherited from the last century. Its strength as a manifesto lies in its ability to present the digital humanities as compellingly relevant, as an incarnation of the humanities that belongs fully to the digital age, taking the very shape and substance of this age, and addressing itself to its unique questions. What the authors aim for is a true synthesis, which they insist upon lexically in the underscore between "Digital" and "Humanities." As they explain in the "Short Guide" that closes out the volume, "The Digital Humanities is defined by the opportunities and challenges that arise from the conjunction of the term digital with the term humanitas to form a new collective singular" (122).

The synthesis they propose is a highly admirable goal. The book's task as a manifesto, though, is to sketch out an ideal, not to describe the field as it currently exists. As such it contributes something significant to the search for disciplinary identity that has prompted so many attempts to pin the digital humanities down with a definition. The desire for definition is motivated, beyond the need to render what digital humanists are up to intelligible to newcomers, by the eminently pragmatic concern for disciplinary stability. Digital humanists want to have their work recognized by their peers and tenure review boards. At the same time, departments and institutions must negotiate their own positions within the academy a whole, and they do so sometimes by demonstrating their investment in new forms of scholarly capital, for which they require the digital humanities to present a strong identity. Funding agencies must have working definitions of the digital humanities, too, and indeed require significantly richer nomenclatures, in order to sponsor and evaluate worthy projects. Whether the vocabularies and models presented here are equally well suited for all or any of these purposes remains to be seen, but it's clear that they've been assembled with a sharp cognizance of the need for such maps and guideposts among stakeholders.

In another approach at definition the authors state that "Digital humanities is less a unified field than an array of convergent practices that explore a universe in which print is no longer the primary medium in which knowledge is produced and disseminated" (122). This notion that the digital humanities achieve unity in practice is one that certainly rings true. The digital humanities as a field is composed of several complementary strands, but because of each these strands aims at elucidating some aspect of the human condition, and because of the specific challenges of undertaking new types of collaborative work, they have given rise to a distinctive disciplinary culture. Lisa Spiro describes the digital humanities as a community influenced by values drawn from several quarters, including "the humanities; libraries, muse-

ums and cultural heritage institutions; and networked culture" (2012: 19). She also recommends codifying this set of values, which includes openness, collaboration, collegiality and connectedness, diversity and experimentation, in order to promote the interests of the field. It will be a favorable consequence if in extending its reach to the far corners of the academy the digital humanities are able to further demonstrate and disseminate these values.

Where Digital_Humanities falls short is in its sometimes one-sided presentation of the field. In spite of its espousal of a unified understanding of "digital" and "humanities," and notwithstanding its laudable call for scholars to become "hedgefoxes" (hybrids, "capable of ranging wide, but also going deep" (98)), the emphasis throughout falls too often on the digital, at the expense of the humanities. The authors risk perpetuating an impression of the digital humanities as an unrestrainedly technophilic movement, one that favors tools over research, innovation over scholarship, and mapping and linking over reading and writing. While it's likely that this imbalance is to some extent merely rhetorical—an attempt to promote those aspects of the digital humanities that are necessary now, it obscures the fact that the present extension of the humanities into new media is not an end in itself, but a critical moment in the larger unfolding of humanistic inquiry. What's needed is a pluralist conception of the digital humanities that embraces both sides of the tension. For, as the authors do clearly recognize, the digital and the human are not ultimately separate, but are wrapped up in each other. We should view this digital revolution, therefore, not as a supersession of traditional scholarship, but as a balanced expansion of the humanities toolkit.

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