Introduction

Emerging

Recent coverage of the digital humanities (DH) in popular publications such as the New York Times, Nature, the Boston Globe, the Chronicle of Higher Education, and Inside Higher Ed has confirmed that the digital humanities is not just “the next big thing,” as the Chronicle claimed in 2009, but simply “the Thing,” as the same publication noted in 2011 (Pannapacker).


It would be naïve to think that this boundary-breaking trajectory will happen without contestation. Moreover, practitioners in the field recall similar optimistic projections from fifteen or twenty years ago; in this respect, prognostications for rapid change have cried wolf all too often.


Keywords: interdisciplinarity, boundary work

The opening epigraphs frame an ongoing conversation about Digital Humanities (DH) as buoyed by optimism as it is laden with skepticism. Digital Humanities is a rapidly growing field at the intersections of computing and the disciplines of humanities and arts, interdisciplinary fields of culture and communication, and the professions of education and library and
information science. To begin with . . . The following examples are most often associated with the term, grouped roughly by kind:

- computational linguistics and language processing
- electronic text production and editing
- digital collections, archives, and libraries

- computing practices in disciplines of the humanities and arts
- computing practices in related interdisciplinary fields
- computing practices in related professions

- new objects and subjects
- new methods of analysis and interpretation
- cultural impacts of the Internet and new media

- design and production
- digital tools and methodologies
- project and program management

- the history and theory of Digital Humanities
- the field’s professionalization and institutionalization
- new approaches to teaching and learning
- changing modes of scholarly communication and publication.

As this list suggests, interest in digital technologies and new media is widespread. Not a day goes by without traffic in the blogosphere and Twitterverse announcing new developments, ranging from the first Cultural Heritage & Digital Humanities hackathon in Lithuania to a digital archive of materials about the Boston Marathon bombings. The academic press now routinely heralds new activities as well, from the local launch of an Annotation Studio or a week-long focus on DH sponsored by the library to a crowdsourced digital project in a discipline and DH-inflected sessions at its annual professional meeting. Scholarly interest has also expanded to the point the field is now anchored by a burgeoning body of publications, organizations, networks, research centers, academic programs, and funded projects. Some even believe the field is at a threshold point. At a 2008 workshop of Project Bamboo, John Unsworth declared a point of “emergence” had been reached. Project Bamboo began in early 2008 with funding from the Mellon Foundation for a planning and community
design program aimed at defining scholarly practices and technological challenges. At the fourth workshop in the series, Unsworth heralded the increased number of participants and developments since work began five years earlier on a report on cyberinfrastructure for humanities. Genuine change, he quoted one participant declaring, now seemed possible. That same year, editors of the inaugural issue of the journal *Digital Studies/Le Champ Numérique* took a step further, proclaiming Digital Humanities is now an established “inter-discipline.”

Digital Humanities is a growing international movement as well. Melissa Terras’s 2011 infographic revealed large clusters of activity in North America, Europe, and Southeast Asia, with added presence in Africa and the Middle East. New organizations continue to emerge, including Australasian and Japanese associations for Digital Humanities. In 2009 the inaugural Digital Humanities Luxembourg Symposium took place and in 2012 the Primer Encuentro de Humanistas Digitales in Mexico City. The 2014 conference of the Humanities, Arts, Science, and Technology Alliance and Collaboratory (HASTAC) took place in Lima, Peru, and in 2015 the flagship conference of the Alliance of Digital Humanities Organizations will be held in Sydney, Australia. The THATCamp movement of “unconferences” also continues to spread, with events in Brazil; the Caribbean; Wellington, New Zealand; Slovakia; and Panama. Global Perspectives on Digital History brings together material from multiple sites and forums in English, German, and French. The annual online forum “Day of Digital Humanities” has expanded from English to Spanish and Portuguese. And, the Bilateral Digital Humanities Program, co-funded by the National Endowment for the Humanities and the Deutsche Forschungsgemeinschaft, supports collaborative efforts between the two countries.

Given this momentum, two figures of speech inevitably appear in the discourse of Digital Humanities—*revolution* and *transformation*. Proclamations of Humanities 2.0, University 2.0, Learning 2.0, and Web 4.0 beckon a New Academy. Mauro Carassai and Elisabet Takehana even declare “an all-encompassing ontological shift” is under way. Yet, claims of “revolution” are overstated, and the rate of change is slower than the rhetoric of “transformation” suggests. In a special issue of *Daedalus* on the current state of humanities, James O’Donnell also questions whether DH is a “revolution” or “only automation” (100). Writing in his blog, Stanley Katz acknowledged the “revolution” propelled by computing and information technology has begun to transform humanities, but he is equally
mindful of the impediments. Despite the proliferation of DH centers, Diane Zorich also cites challenges to their sustainability, infrastructure, and preservation of digital content (1–2, 37). Still other threats stem from the weakened funding climate in humanities, inflexible publication policies, lack of common standards and evaluation criteria, the limits of copyright law, uneven development across institutions, and the entire range of infrastructure needs identified in Project Bamboo and in the 2006 report of the American Council of Learning Societies Commission on Cyberinfrastructure for the Humanities and Social Sciences (Our Cultural Commonwealth).

Ernesto Priego also questions uneven infrastructure across the globe. The Mexican Digital Humanities network, the Red de Humanidades Digitales, holds promise. Yet, shortages of “big money” underscore the need for innovations that use available and inexpensive technologies. Isabel Galina Russell concludes, in turn, “the full internationalization of the field has not been fully achieved,” despite notable projects in Mexico. Without a comprehensive register or documentation, they are not easy to identify. The field is also relatively unknown, and even with funding a solid infrastructure for projects is lacking, including academic recognition and sustainability and preservation. Three areas, she admonished, will be key to promoting DH in Mexico and the Latin American region: lobbying, promoting, and dissemination; training; and guidelines and aids for evaluating projects. Precedents in other countries are important, but so is understanding DH in Mexico’s academic, cultural, political, and economic contexts, while also conducting research and documentation in Spanish (202–4). In an address at Mexico City in November 2013, she also concurred with Domenico Fiormonte, who questioned why the Italian ComunidadInformática Umanistica has been largely neglected in official writing of the history of Digital Humanities.

In short, to echo Patrick Juola, an “emerging” discipline of Digital Humanities has been emerging for decades (83). In the academic world, emergence is documented formally in two classification schemes: knowledge taxonomies and organizational charts. These indicators, however, are slow to change. The National Research Council’s report on research doctorates recommended an increase in the number of interdisciplinary fields in its authoritative taxonomy. Digital Humanities, though, was not one of them (Ostriker and Kuh; Ostriker, Holland, Kuh, and Voytuk). Nor is it recognized in the 2010 U.S. Department of Education Classification of Instructional Programs, though “Digital Arts” was added to the category of Visual
and Performing Arts. The field’s status is also uneven. At some universities it enjoys a high profile in the form of a research center. On other campuses, it is a small program or dispersed interests that never gain traction. Debate also continues on the field’s identity. One of the most frequent claims is that Digital Humanities is interdisciplinary, an inevitable assumption given the marriage of technology and humanities in the name. Yet, discussion is rarely informed by the voluminous literature on interdisciplinarity. This book tests the claim by examining the boundary work of the field.

Boundary work is a composite label for the claims, activities, and structures by which individuals and groups work directly and through institutions to create, maintain, break down, and reformulate between knowledge units. Boundary work studies initially focused on disciplines, especially the demarcation of science from non-science. Subsequently, though, they were extended to interdisciplinarity (Fisher, 13–17; Klein, Crossing Boundaries, 57–84). The extension was inevitable, given widespread spatial images of disciplinary borders, domains, turf, and territory. Yet, Willard McCarty cautions in mapping Humanities Computing, metaphors of boundaries, walls, and spaces depict a barrier and confinement that disguises expanding structures (Humanities Computing, 133–34). In contrast, Michael Winter highlights organic images of generation, cross-fertilization, mutation, and interrelation that compare intellectual movements to ecological processes and the evolution of new species. Spatial and organic models may even be combined, Winter suggests, to form a third type that highlights interactions between social groups and environments. The Greek word ecology (oikeo) means household or settlement. The root idea is to make and reinforce jurisdictional claims and exploit resources to produce new forms and settlements (343–46). This study is an example of the third type. It examines both spatial and organic contours of Digital Humanities in order to understand the boundary work of establishing, expanding, and sustaining a new interdisciplinary field.

The Book

Given the scope of Digital Humanities, this book is written for a wide audience. The first and largest segment is comprised of individuals and groups who work in the field, whether they identify explicitly as digital humanists or as “doing” Digital Humanities in some way. They are as diverse as a scholar in literary studies designing a digital collection centered
on a single author, an anthropologist or a historian creating a computer visualization of an ancient site, a music instructor mapping sound patterns in the canon of a composer while creating an electronic music curriculum, an artist mounting a multimodal installation while involving students in its production, a professor of Italian producing a digital archive for an entire historical period while directing a humanities lab, a scholar in women’s studies doing research on the relationship of the body and technology, and a librarian building an online Digital Humanities research guide for faculty and students. To name but a few examples . . . Understanding the field’s contours will enable them to situate their activities within the larger expanse of theory and practice while sharpening their understanding of what interdisciplinarity entails. For that reason, this volume may also be used as a textbook in courses on related topics, and as a scholarly reference for funding agencies and professional organizations.

This book has an additional audience as well: scholars, teachers, and students of interdisciplinarity. Lessons from the literature on interdisciplinarity are often ignored in Digital Humanities, resulting in imprecise use of terminology and shallow understanding of theory and practice. At the same time, only by mapping situated practices can scholars of interdisciplinarity test their theories. The complex challenges of navigating interdisciplinarity in the 21st century, Jill Vickers admonishes, require ending the search for universal and timeless characteristics. We can better understand interdisciplinarity by studying how it is manifested in the contexts in which it emerges and evolves (“Diversity”). Tracing the history of another field with close ties to Digital Humanities—cultural studies—Stuart Hall also cautions that any field is situated within the political, theoretical, educational, and economic circumstances from which it arises. Projects and fields do not have simple origins. They are comprised of multiple discourses with different histories, trajectories, methodologies, and theoretical positions (“Emergence”). Digital Humanities is especially ripe for a study of its boundary work because members of the field have been quick to historicize, categorize, and institutionalize it.

In making this study of their arguments and actions, this book is itself interdisciplinary, in a triangulation of historiographical, sociological, and rhetorical methods. Historiographical analysis uncovers genealogies of origin, benchmark events, periodizations, and tensions between continuity and change. Sociological analysis examines how knowledge is codified in conditions of group membership and sanctioned practices. Rhetorical
Analysis dissects the claims by which people construct a field, patterns of consensus and difference, and the ways keywords and taxonomies structure hierarchies of value. These methods are not isolated. In the manner of Michel Foucault’s genealogical studies of knowledge, historiography considers how discursive objects, concepts, and strategies produce regularities, rules, and unities that are challenged by ruptures, refigurations, and transformations. In the manner of Pierre Bourdieu’s studies of the academic sphere, questions about power, conflict, and change arise in tracking the production, circulation, and institutionalization of knowledge. And, in the manner of Tony Becher’s studies of disciplinarity, tracing historical and rhetorical patterns also entails an anthropological interest in how influential figures, artifacts, and literature establish cognitive authority, reputational systems, cultural identity, and symbolism.

The integration of historical, sociological, and rhetorical perspectives is especially needed when tracking the naming of a field. “No name,” Cathy Davidson advises, “ever encompasses a field, either at its moment of inception or in its evolution over time.” Names are historical reference points that mark converging energies at particular moments. They define lacunae while demarcating what is tangential, intersectional, or orthogonal to a field (“Humanities and Technology,” 207). Given the immense variety of activities under “Big Tent Digital Humanities,” David Silver’s witty epithet is tempting: “Internet/cyberculture/digital culture/newmedia/fill-in-the-blank studies” (qtd. in Gurak and Antonijevic, 497). When tallying names of another field with close links to Digital Humanities—composition studies—Armstrong and Fontaine concluded that naming entails a process of sorting and gathering, comparing and contrasting, and marking territorial relationships in political-semantic webs (7–8). Understandably, then, the same name is used for different purposes. Matthew Kirschenbaum calls DH a “mobile and tactical signifier,” deployed for particular goals such as “getting a faculty line or funding a staff position, establishing a curriculum, revamping a lab, or launching a center” (“Digital Humanities,” 415, 421).

In order to understand the complex connotations of the name, keyword clusters frame each chapter. When clustered together, Raymond Williams taught us, a particular set of words and references constitutes a field of meaning defined by their particularities and relationalities (22–25). Because individuals will be unevenly familiar with all of the field’s disciplinary, interdisciplinary, and professional parts, the chapters also include short synopses of representative developments, arguments, and practices. The
focus, though, remains on interdisciplinary theory and practice. Some will wonder why another book is needed. Matthew Gold’s anthology *Debates in Digital Humanities* and David Berry’s *Understanding Digital Humanities* provide textbooks, along with the predecessor Blackwell Companion to Digital Humanities. Two more recent textbooks also present an overview. Terras, Nyhan, and Vanhoutte’s 2013 *Defining Digital Humanities: A Reader* compiles core readings on the meaning, scope, and implementation of this field, with commentaries by the editors and authors, an annotated bibliography, and sample postings and analysis of the definitional exercise “Day of Digital Humanities.” Aimed at non-specialists, Gold’s forthcoming *DH: A Short Introduction to the Digital Humanities* will present a broad historical picture from antecedents to recent expansion and future directions. Warwick, Terras, and Nyhan’s *Digital Humanities in Practice* is a practical guide to key topics for academic and cultural heritage audiences, with bibliographies. And, Burdick and colleagues’ *Digital Humanities* includes synthetic mappings, emerging methods and genres, case studies, along with a short guide. However, none of these and other publications interrogates the claim of being “interdisciplinary.”

Chapter 1: Interdisciplining

**Keywords:** Multidisciplinarity, Interdisciplinarity, Transdisciplinarity, interprofessionalism, Methodological versus Theoretical ID, Instrumental versus Critical ID, interdisciplinary humanities, cross-hatching, travel, identity, transversality

Any book that places interdisciplinarity at its heart begs an overriding question: what does this ubiquitous word mean? In order to foster more informed use of terminology, chapter 1 presents a baseline vocabulary of the three most common terms—multidisciplinarity, interdisciplinarity, and transdisciplinarity, supplemented by a fourth term, interprofessionalism. It situates Digital Humanities within the baseline while elaborating on differences between Methodological and Theoretical forms of interdisciplinarity as well as Instrumental and Critical forms. It then places DH within the larger history of interdisciplinarity in humanities while considering the roles of disciplinary change, increased crossing of boundaries between humanities and social sciences, the cross-hatching of new developments, and the mobility of concepts. The chapter closes by draw-
ing insights from other interdisciplinary fields about their identity and transversal intersections.

Chapter 2: Defining

Keywords: Humanities Computing, Digital Humanities, discipline, interdiscipline, modes of engagement, 2.0 interactivity, visualization, spatialization, code

The English word *definition* derives from the Latin *dēfīnītiōn-em*, referring to both a statement of the meaning of a word and the act of setting bounds or limits of explanation. Rafael Alvarado contends “there is no definition of digital humanities,” if that means “agreement on theory, methods, professional norms, and criteria of evaluation.” Instead, he posits “a genealogy, a network of family resemblances among provisional schools of thought, methodological interests, and preferred tools” (50–51). Closer analysis of six statements opens a more nuanced picture of how the field has been defined across nearly sixty-five years of work, comparing both resemblances and differences. The chapter then contextualizes Digital Humanities within three major disciplines where digital technologies and new media are changing the nature of practice—English, history, and archaeology. It concludes by weighing the significance of three themes that have emerged in the field’s recent history—visualization, spatialization, and a computational turn in culture.

Chapter 3: Institutionalizing

Keywords: institutionalization, critical mass, overt versus concealed interdisciplinarity, location, migration, leveraging, partnership, infrastructure

Institutionalization is a process of establishing something within an organization or a social sphere, whether it is an idea, such as democracy, or an occupation, such as teaching. Categories of knowledge are also institutions, Steven Shapin suggests, not in the conventional sense of buildings and structures but a set of marks constructed and maintained in cultural space (355). Chapter 3 initiates a three-part exploration of how the category
of Digital Humanities is located within the cultural space of the academy, through institutionalizing, professionalizing, and educating. It begins by providing a conceptual framework for thinking about institutionalization of interdisciplinarity. It then identifies patterns of affiliation of scholars and educators in the field, followed by an examination of the most prestigious structure, research centers, and closing reflection on the challenge of sustainability.

Chapter 4: Professionalizing

Keywords: professionalization, platforming, communities of practice, network, partnership, scholarly communication, federation, remixing, modularity

Professionalization is a process by which a group establishes and maintains control of a social world. In the academic sphere, the primary mechanisms of professionalizing disciplines and fields are representative organizations and their annual meetings, publication venues, educational credentials, qualifications for career advancement, skill sets, norms of conduct and values, specialized discourse, criteria of evaluation, and standards of practice. Chapter 4 examines two major mechanisms of professionalizing in Digital Humanities: the formation of communities of practice and scholarly publication. Communities of practice range from small informal groups to global partnerships. Scholarly publication, in turn, is changing as new digital forums are appearing, from enhancements of traditional formats to new platforms and multimodal genres. In the process, the nature of knowledge production is also changing, along with underlying concepts of authorship and communication.

Chapter 5: Educating

Keywords: context, balance, tractability, relationality, interplay, participatory, relationality, interplay, remixing, intentionality

Although research centers have been more prominent in the institutional profile of Digital Humanities, the number of courses and programs is increasing. Pedagogy is also a topic of growing interest. Yet, the pattern of
development and implementation is uneven, and claims of interdisciplinarity need to be weighed against generic indicators of strong programs in interdisciplinary studies. Chapter 5 begins by examining the general picture of DH syllabi and then turns to the particularities of introductory courses, the balance of humanities content and technological skills, and the roles of theory and critique. Next, it defines pedagogies that promote interdisciplinary learning in Digital Humanities curricula and attendant learning styles and skills. Taken together, the overview of trends and traits advances a definition of digital teaching and learning as interdisciplinary practice. The chapter closes by comparing strategies in different institutional settings and the ongoing professional development of faculty and staff.

Chapter 6: Collaborating and Rewarding

Keywords: collaboration, trading zones, interactional expertise, associative thought processes, negotiation, mutual learning, hybridity, culture of recognition, interdisciplinary paradigm shift, triple efficacy, aggregate activity

The closing chapter deepens understanding by exploring two final topics essential to interdisciplinarity in Digital Humanities: collaboration and a culture of recognition. It begins by defining characteristics of interdisciplinary collaboration, common problems, dynamics of integration in trading zones of expertise, the roles of conflict and mutual learning, interdisciplinary work practices, and ethics of collaboration. It then explores parallels between efforts to legitimate interdisciplinarity and digital work in the academic reward system, including impediments in peer review that are countered by new authoritative guidelines for candidates preparing credentials for tenure and promotion. The chapter closes by returning to the question that prompted this book in the first place: Is Digital Humanities an interdisciplinary field? A triple “efficacy” is unfolding across disciplines, interdisciplinary fields, and professions; within and across their institutional locations; and within and across all organizations and groups that are grappling with implications of digital technologies and new media. “Strategic tractions” are located in particular contexts, but at the same time they have multiplicative effects in the “circuit of work” and evolving “network aggregate university” of Digital Humanities.
Resourcing

Keywords: contours, scatter, scale, strategies, aggregators, taxonomy versus folksonomy, depth vs. breadth, timeliness, degree of specialization, purpose

The final section of the book, by Andy Engel, guides readers to resources. It highlights primary sites and aggregations of resources, bibliographies and library guides, networks and professional organizations, and ways of keeping up to date in the future. Being up to date is a significant challenge in the fast-paced world of Digital Humanities, with new tools, approaches, and meetings appearing every day. Yet, there are good places to begin and strategies for continuing identification of new resources.

http://www.an... 

A final note: much of the discourse about Digital Humanities takes place online. As a result, this book draws on more online sources than customary in traditional research. Policies also differ on whether to cite URLs. Some publishers discourage their use, since the life of a link may be short and dead ends clog the Internet. Some publishers, though, make inclusion optional, and some authors contend that even a dormant link can furnish clues to finding a resource. I am one of the latter but respect the objection that a clutter of URLs interferes with the flow of reading. To the extent possible I have clustered multiple URLs at the end of paragraphs and chapters while selecting the most likely routes of access.

NOTE: Print and online sources are equally important in this book. Print sources appear at the end in a traditional References section. All URLs for online sources cited at the ends of chapters were confirmed accurate as of July 17, 2014.

Clustered Links for Introduction in Order of Appearance

Lithuania Hackathon, Hack4LT: http://pro.europeana.eu/web/guest/pro-blog/-/blogs/1713396
Boston bombings: http://www.northeastern.edu/news/2013/05/our-marathon-project/
Project Bamboo: http://projectbamboo.org/
John Unsworth: https://wikihub.berkeley.edu/display/pbamboo/John+Unsworth's+Remarks+about+Cyberinfrastructure+and+Bamboo
Digital Humanities Luxembourg: http://www.digitalhumanities.lu/
Global Perspectives on Digital History: http://gpdh.org/
NEH/DFG Bilateral Digital Humanities Program: http://www.neh.gov/divisions/odh/grant-%09news/announcing-4-nehdfg-bilateral-digital-humanities-program-awards
Isabel Galina’s comments and slides from a presentation in Mexico City in November 2013: http://humanidadesdigitales.net/blog/2013/07/19/is-there-anybody-out-there-building-a-global-digital-humanities-community/