Against the Grain
Reading for the Challenges of Collaborative DH Pedagogy

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ABSTRACT
This article provides a critical review of the past five years of literature in digital humanities pedagogy and faculty-librarian collaboration, commingled with reflections on personal practice, which extend findings from the literature. Faculty-librarian partnerships in DH pedagogy reflect a rapidly evolving area of engagement calling for expertise in teaching, subject knowledge, scholarly communication, digital technologies, and DH research methodologies. Although there is a rapidly expanding body of literature on these partnerships, the challenges of the work tend to be minimized. This article expands upon commonly encountered difficulties, and it points to potential solutions and best practices.

Keywords
digital humanities; pedagogy; embedded librarianship

INTRODUCTION
Digital humanities librarianship has often involved participation in grant funded digital research projects as well as multiple forms of community outreach and capacity building, even while it takes on various local inflections within academic institutions. As an extension of that capacity building work, which includes developing the human, technical, and administrative infrastructures of digital work, digital humanities librarians are increasingly stepping into the role of teacher and pedagogical collaborator in smaller scale but equally effective partnerships that introduce digital humanities thought and methods in the classroom. These engagements range from standalone

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workshops, lectures, one-shot embedded labs and in-class exercises, and more sustained teaching collaborations that involve multiple sessions over the duration of a semester-long course. Many librarians engaged in such activities have contributed to a rapidly expanding body of literature that addresses the practical issues of designing course exercises and projects, utilizing new library research spaces, collaborating with disciplinary faculty, and presenting a rationale for participating in DH pedagogy to library administrators. Critical reflections on the many challenges of this work are at present more difficult to find, even while they are vitally important contributions to the advancement of the profession.

Many digital humanities librarians make the case for collaborative pedagogy by inscribing it within traditional librarian roles and activities. Librarians have a long-established role as providers of information literacy instruction, and many DH librarians reference professional guidelines like the Association of College & Research Libraries’ Framework for Information Literacy for Higher Education in their DH pedagogical practice (Padilla et al. 2015; Locke 2017). Other scholars note that participation in DH pedagogy is an opportunity for libraries to facilitate new uses of their collections, particularly digitized archival and special collections (Mahony et al. 2014; Varner 2016). Librarians have relevant training in digital collection building, metadata, intellectual property, digital preservation, data management, and the online dissemination of scholarly work (Rosenblum et al. 2015, 165). Librarians and faculty can also “fill in each other’s disciplinary knowledge gaps” in the service of integrating new literacies into curricula and producing richer learning experiences for students (Rosenblum and Dwyer 2016, 120).

It may be partly due to the conservative positioning of collaborative DH pedagogy as a continuation of existing library work that authors often seek to deflect attention from the ways in which it sometimes falls short of expectations. Digital humanists with the Ph.D. degree have tended to be more forthright in their criticisms of DH pedagogy, as evidenced by the generous “failure” literature of journals like Hybrid Pedagogy and The Journal of Interactive Teaching and Pedagogy. This article aims to make a library-centered contribution to that genre of professional literature by drawing upon the work of both DH librarians and disciplinary faculty.

Historians often speak of reading against the grain of the archive to try to access the lived but hidden experiences of people. This article represents an attempt to read both with and against the grain of recent literature in digital humanities pedagogy and faculty-librarian collaboration, focusing attention on common problems and challenges that are often, but not always, consigned to small “lessons learned” passages in the latter half of articles and chapters. By instead foregrounding the discussion of the points of vulnerability and failure in this work, I draw attention to several of the more salient difficulties of collaborative DH pedagogy. I extend my analysis of the professional literature with examples drawn from my own experience. In this way, I aim to demonstrate how an openness about failure serves to advance pedagogical praxis by building a foundation of shared knowledge upon which others can build.
A secondary impetus for this article was the need to clarify for myself, and for my disciplinary faculty collaborators, issues relating to my early efforts in DH pedagogy.

**CHALLENGES OF LIBRARY-FACULTY DIGITAL HUMANITIES TEACHING COLLABORATIONS**

**DYNAMICS OF THE FACULTY-LIBRARIAN RELATIONSHIP**

While much of the literature in digital humanities pedagogy celebrates collaboration as both a benefit and a foundational principle, its execution may often be quite difficult. First, humanities faculty culture still holds collaborative work, at least of the extra-disciplinary kind, in lower esteem than individual work. Absent a strong curiosity, or a tangible reward, disciplinary faculty have few incentives to partner on DH pedagogy. Then, there are inescapable power dynamics involved in the faculty-librarian relationship, given that librarians are commonly understood to perform a subordinate, service role in the academic hierarchy, and thus may struggle to engage with their disciplinary colleagues as equal partners in pedagogical collaborations (Meulemans and Carr 2013; Shirazi 2014; Keener 2015). Tellingly, “mutual respect” and a “shared understanding” of the complementary expertise held by librarians and disciplinary faculty emerged as key desiderata in the preliminary findings of a new study on collaborative digital pedagogy (Keener and Rowell 2016). Lastly, DH experiments in the classroom are time consuming to prepare and to execute well, which has the potential to overwhelm any overtaxed academic, be they faculty or librarian. While potentially discouraging, these observations on the difficulty of faculty-librarian teaching collaborations are also characteristic of the digital humanities field as a whole.

Successful DH pedagogical collaborations require a great deal of time, communication, and planning. As Rosenblum et al. state in regard to their specific use case:

> The first step in this potential collaboration was to have a couple of very casual, noncommittal, low-stress conversations with the professor about what he might be envisioning for his upcoming course . . . Each meeting was exploratory and somewhat awkward and involved a considerable amount of brainstorming . . . [E]ven with the conversations going in multiple directions, it was important to separately and then collaboratively envision a range of possibilities for the course (Rosenblum et al. 2015, 156–57).

My work experience mirrors that of the authors in that I have found it advantageous first to have informal conversations with the faculty member, and then to draft a course exercise that responds to the ideas expressed in those conversations. Working both collaboratively and separately might seem messy or inefficient at first, but it does create space for both parties to listen, reflect, and respond to each others’
ideas and proposals. In this way, it is common to go through several iterations of a course exercise, both before and during the semester, to allow for refinements and respond to problems that arise, all with the goal of establishing meaningful learning experiences that integrate disciplinary concepts as well as digital or data literacies.

I’ll continue by making three observations on the aforementioned passage. At the high level of organizational culture, humanists and librarians are speaking across a language and cultural barrier. Humanists are accustomed to, and may indeed prefer to, work alone; librarians tend to place a higher value on service and collaborative work. Either the humanist or the librarian (or both) may self-identify as a digital humanist, a hybrid role that brings its own distinct preoccupations about method, openness, and credit sharing (Rosenblum and Dwyer 2016, 120–21). The discursive and lengthy nature of these preparatory conversations relates at least in part to the necessity of forging a shared language and a common understanding across academic cultures of what to do, who will do it, and why. Second, as neither the faculty member nor the librarian is a complete expert in all aspects affecting the application of digital methods in the subject area, each must relinquish some control over aspects of the teaching in order for those differences to become strengths (Licastro, Rogers, and Savonick 2017). Not needing to possess mastery of all parts of the lesson plan can in fact be liberating for the instructors, while simultaneously allowing students to “occupy realms of authority” in their learning environment (Keener and Rowell 2016). Lastly, collaborative teaching is an opportunity for all parties to experiment, take risks, and learn from each other. Ideally speaking, the interdisciplinary mashup of collaborative DH pedagogy leads to a “provocative friction,” much as it does in good scholarly digital projects (Flanders 2009). A bit of awkwardness in the making may be a sign that the library and faculty partners are learning from one another.

**MAGICAL THINKING**

At the 2016 Digital Library Federation Forum, a comment by Caitlin Pollock (@stilettoibrarian on Twitter) about faculty describing herself, or her work, as “magic” prompted a lively Twitter backchannel response.

> ‘librarians are not magic,’ says @stilettoibrarian Many times my work has been described as ‘magic’ which obfuscates my expertise #DLFforum (Rowell 2016)

While the original speaker had most likely intended the remark as a compliment, several of the conference attendees saw in it instead a willful ignorance of the time, labor, and expertise required to produce the “magical” effect. While I agree, to a degree, with their assessment, I would argue that anyone—librarians, disciplinary faculty, administrators, or even students—is susceptible to magical thinking. In some cases, one can detect a whiff of the belief that whatever labor is involved is of a lower order, and, therefore, someone else’s problem. Alternately, there may be a
trace of technological determinism, an earnest hope that the technology in question will make the work easier, better, and faster. Or, the magical thinker could simply be demonstrating ignorance of the more innocuous sort; this person is usually grateful to be enlightened. In any event, wanting to do DH without making an effort to understand the relevant processes and methodologies will in all likelihood frustrate the scholar and impede the very aim that brought her to DH in the first place (Chun and Rhody 2014).

It is common enough, for example, for a faculty member who is inexperienced in DH, but who has been excited by a recent presentation of a digital research project in their field, to approach a DH librarian for help replicating some aspect of that work as a classroom project. While the faculty member will moderate her expectations for the students’ critical analyses of the subject matter, knowing that undergraduate students are beginners at the research craft, she may assume that whatever digital literacies the work requires will come quickly and naturally to a generation of students already immersed in digital culture. Indeed the faculty member may look to the digital humanities exercise as a sort of pleasing visual or multimedia foil to primarily text-heavy (intellectual) course work. The DH librarian who receives this sort of inquiry has at least two challenges. The first is disabusing the faculty member of the belief that her students will intuitively grasp the technology selected for use in the assignment. So-called “digital natives” may be adept users of digital technologies, but they tend to demonstrate little critical understanding of the ways in which technologies work (Mahony and Pierazzo 2012). This lack of prior critical engagement complicates the transition from a “point and click” user to a researcher capable of critically evaluating the results of a digital process, let alone one capable of analyzing the theoretical, cultural, or ethical implications of that process. The second, related challenge regards the additional complement of digital epistemologies and competencies introduced by the technology. Aligning the disciplinary learning expectations of the course with the requisites of data curation and data modeling requires intentionality and thoughtfulness, and, above all else, time for students to reflect upon, integrate, and apply what they have learned.

Any measures that we as librarians can adopt that render visible all that invisible, “magic” labor will benefit our pedagogical partnerships with disciplinary faculty. Several scholars have written on the utility of project charters and service level agreements for addressing issues of credit sharing and resource allocation within the framework of scholarly digital projects (Ruecker and Radzikowska 2008; Nowviskie 2011; Vinopal and McCormick 2013). On a basic level, documents such as these “can make . . . implicit understandings more explicit” and expose in detail the labor that each participant agrees to undertake (Siemens 2017). In the context of collaborative DH pedagogy, I would argue that memoranda of understanding and course development grants perform an analogous role. On a basic level, both MOUs and course development grant proposals impose the need for a plan and a timeline. Demonstrating in this way that there is no magic, only the work, improves communication and
understanding among partners. And while an MOU may be too robust an instrument for most course collaborations, it does require collaborators to have an upfront discussion about assumptions and expectations before the actual teaching begins.

DH course development grants serve a threefold purpose of building DH capacity, addressing faculty reward structures, and communicating planning expectations. At the Institute for Digital Research in the Humanities (IDRH) at the University of Kansas, for example, grant recipients participate in a training session that formalizes discussions about course assessments with various stakeholders, including IDRH staff and librarians (Rosenblum et al. 2015, 163). While not all DH professionals have the ability to offer financial incentives for course planning discussions, models for memoranda of understanding and other agreements exist and can be readily accessed and adapted (Vinopal and McCormick 2013; Mirza, Currier, and Williamson 2016). This type of instrument belongs in the toolkit of the project manager, whose skill set is increasingly demanded of digital humanities librarians, even while its value still needs to be defended (Guiliano 2013; Shirazi 2014).

INCIDENTAL COMPLEXITY

Once, after a particularly harried class workshop on digital mapping, the faculty member entreated me to eliminate the reflections on the tool itself from the workshop materials, and just send the students a list of step-by-step instructions on how to use it to complete their assignment. At the time, I was taken aback by the request. I had wanted to teach the students not simply how to use this particular tool (Carto), but also encourage discussion about what it was doing to their data and what it succeeded and failed to represent. I wanted them to think about the affordances of mapping and GIS techniques in their subject area (history). I wanted to sensitize them to the complexity of extracting and geocoding location data from historical texts and give them strategies to work through some of the difficulties they would encounter. Instead, I overwhelmed them. In reflecting on this particular experience, it is clearer to me now that the workshop I had helped to develop was overladen with incidental complexity. As a consequence, it was hard for the students to see past the technical difficulty to the larger, and, more interesting, disciplinary conversation about representations of place and space in the study of history.

Researchers in computational fields distinguish between intrinsic (or necessary) complexity, referring to the high-level thinking we want to be doing, and incidental (or sometimes accidental) complexity, which describes “the upfront tax” we have to pay in data cleanup and manipulation, software installations, and glitchy interfaces in order to do the work we want to do (Guo 2014). In any digital humanities teaching setting, these two types of complexity will coexist, but in a first introduction in the classroom, where the students haven’t necessarily volunteered for the experience, we would do well to keep the incidental complexity to a minimum, just what is necessary to achieve the identified learning goals (Mullen 2015a). Even when the syllabus
makes explicit the digital or technical literacies involved in the course, a high level of incidental complexity will cause trouble, not only because of the increased likelihood of human and technical failures, but also arguably because it conflicts with student expectations of what a humanities course is supposed to be (Godfrey 2016; Croxall 2014). And while it may be desirable to challenge some of those expectations, spending a lot of time trudging through technical issues will rob attention from the disciplinary discussion the assignment has been crafted to explore. Burying that necessary complexity will make it harder for students to connect the exercise to the subject matter, and it may lead them to conclude (quite reasonably) that their instructors have imposed upon them an arbitrary and meaningless exercise.

Most of where I went wrong in this class exercise can be traced to poor assumptions about the students’ familiarity with concepts relating to digital literacies and web development (my own case of magical thinking). For example, I had assumed that the students would have a basic familiarity with spreadsheets and would be able to format their own location data after viewing a few models. As it turned out, it would have been more practical to remove this difficulty by creating a web form that constrained the set of column headers and gave specific instructions on how to look up and format data for each column, much the way Swafford did in her exercise, “Mapping Holmes Stories” (Swafford 2015). Another complication involved asking the students to reuse a snippet of HTML markup that would retrieve image URLs from their dataset and display them in popup windows in their maps. At the time, I was unaware that Carto had implemented an image header feature in their web interface that obviated the need of knowing HTML. Although the students were only asked to copy and paste the HTML markup, it bewildered some of them and introduced an unnecessary complication that brought little appreciable benefit to the exercise.

Of course, I hadn’t set out to confound the students of this course; rather, my intention was to support their development as independent and critical users of spatial techniques. Herein lies the crux of the workshop dilemma. When we teach our workshops with pristine datasets and orderly steps, we propagate a fantasy of what DH work is like (Posner 2014). Once the student returns to her own research problem, the steps are no longer so clear, and it becomes evident that a significant amount of preparation work has been elided. On the other hand, if we teach some of that preparation, we may provide students with a better foundation for doing the work independently; however, we also run the risk of leaving too little time for the necessary complexity, which is, after all, the intellectual reward of all that preparation. To confront this particular challenge, we might consider two factors: audience and format. In a standalone workshop setting, students volunteer themselves for the experience, and for that reason they can usually be relied upon to show greater interest in the behind-the-curtain aspects of the topic. Conversely, in an undergraduate course setting, the professor has made the decision to incorporate digital humanities work into the syllabus, not the students. This is an environment in which the incidental complexity needs to be brought to its lowest possible levels so that the rewards of the
activity become obvious.

TOOL-BASED THINKING

A corollary of this imbalance between incidental and necessary complexity is the unintentional reinforcement of tool-based thinking. For better and for worse, the field of digital humanities is frequently understood as one in which its practitioners use tools. Critics of digital humanities have interpreted the use of digital tools as a form of scholarly decadence, or worse, and indeed the implicit message of those lists of tools and tutorials that those of us working in DH so frequently provide is a kind of “plug-and-play” approach to academic work in which methodological underpinnings can be safely ignored (Lincoln 2014). Yet, tool-based thinking in DH is quite understandable, given how reassuringly concrete the notion of a “tool” is in an otherwise overwhelmingly complex field. And indeed, this kind of thinking is frequently where librarians and humanists begin their initiation.

What precisely is the problem with tool-based thinking? An initial difficulty stems from the fact that tools are acquired, not built. When a researcher lacks knowledge of the inner workings of a tool, when the tool itself is a black box, the process by which inputs become outputs is obscured. Under such circumstances, it is difficult for the researcher to distinguish between the deliberate, and, therefore, useful, decisions regarding their source data and the arbitrary artifacts of computation (Gibbs 2016). Schmidt provides an extended reflection on his experiments with MALLET, the most commonly used application for LDA topic modeling, that contextualizes this particular difficulty (Schmidt 2012). He is, at first, amazed by the output of the algorithm and recognizes patterns that he would have expected to find based on his knowledge of the data. In subsequent attempts, in which he experiments with the algorithm’s parameters, he observes arbitrary merging of very different clusters of data. Had his knowledge of the underlying data, or of the process of LDA topic modeling, been weaker, he might have been tempted to interpret those merged topics as meaningful. Instead, he was left to wonder about the perilous ease of interpretive leaps with this particular digital methodology. As the title of Schmidt’s post implies, once one has learned such a tool (and when one’s own research community is momentarily fixated upon it), it becomes irresistible to use it in all manner of contexts, whether or not the research question actually justifies its use.

On a more basic level, teaching a tool becomes a problem when it retreats from concepts and principles to focus instead on buttons and menus, which invariably change across platforms, and with nearly every update to the software. In more advanced contexts, any argument built upon the outputs of a tool that is imperfectly understood will be, at best, guesswork. An introductory session that raises more questions than answers may productively engage students in new ways of thinking and knowing and start them on a path of DH inquiry. However, as several scholars have observed, there is an appreciable difference between learning digital tools (including
programming languages) and learning to construct analytical arguments with the aid of those tools (Jessop 2005; Mahony and Pierazzo 2012; Mullen 2015b; Goldstone 2018). At more advanced levels of instruction (i.e. upper level undergraduate and graduate study), students will eventually need to be able to demonstrate original insight and to participate meaningfully in scholarly conversations in their field. In order for this to happen, DH course work must not lose sight of the theory and methodology that the tool enacts.

THEORY VS. PRACTICE

An old but tenacious argument associated with digital humanities pits making against interpreting, hack against yack, practice against theory. Most digital humanists would bristle at the “more hack; less yack” phrase, which, contrary to what one might expect, was not intended to be an anti-intellectual call to arms, but rather an appeal for greater informality (Nowviskie 2016). It may be that the hybridity of DH exacerbates the tension between making and interpreting, since the interpretive act is more closely tied to the specific discipline in the humanities, while the “hack” is usually an interloper from the sciences or social sciences. Be that as it may, digital humanities is both a “hack and yack” field. Though challenging in a pedagogical context, it is important to prepare exercises that account for both, in either implicit or explicit ways. The interpretive lens plays a determining role in the selection of appropriate tools; thus, when theory is ignored, practice suffers. In what follows, I narrate the details of a course collaboration in which we made some infelicitous choices, which resulted in a stressful, albeit ultimately productive, learning and teaching experience.

A few weeks before the start of the semester, a history professor approached me for help developing a digital humanities exercise for a new undergraduate course on the history of Poland. From the start, we had little time to prepare, but she was eager to integrate a DH component to her class to explore the concepts of ethnicity, national identity, and geopolitical space. We had several exploratory conversations that were long, animated, and somewhat scattered. Although she had initially wanted the students to be able to manipulate maps of Poland dating back to the sixteenth century to capture its fluctuating borders, we quickly discarded this idea after I explained the complexity of georectification and the difficulty of locating suitable, high resolution maps. We eventually settled upon a book review assignment in which the students would map the locations mentioned in a twentieth century autobiography of a Jewish exile. The professor intended for the exercise to help students understand the geographic displacements, but also the experience of places, the babel of languages, and the interconnectedness of people’s lives. She also hoped that the students’ location data might be gathered and integrated into a composite class map to provide a bird’s-eye overview of the course topic.

Since the preparation for this course was rushed, we did not adequately discuss questions relating to interpretation, and I did not attempt to limit us to one of her
many ideas. Should the students focus their analysis at the scale of place? Or was it more important to think in terms of distance and space? Was it realistic to expect to do both? Although neither of us was familiar with this term at the time, the professor’s most cherished ideas approximated the concept of deep mapping:

Deep mapping aims, broadly speaking, to engage with, narrate and evoke ‘place’ in temporal depth by bringing together a multiplicity of voices, information, impressions and perspectives as a basis for a new connectivity (Biggs 2011).

Deep mapping constitutes an attempt to reconcile place and narrative (Cateridge 2015). In this approach, the researcher emphasizes the three dimensional “street” view, over the two-dimensional “map” view, to seek a representation that accounts for overlapping and competing narratives, fictional and geographic space, as well as personal and communal memory (HASTAC 2013; Anderson 2016). In fairness, this professor and I did not have enough time to develop an effective deep mapping assignment, which would have required multiple class sessions and most likely an immediate introduction to Omeka and Neatline in the first few days of class. Our other options included a narrative map, which can be used to tell a story through space and time. In this way, the students could trace the movements of their protagonist through various locations, and integrate relevant citations and images. StoryMap JS and ESRI’s Story Maps are both good tools for this purpose. I instead opted to use Carto, largely because I was already familiar with it. Carto is built more for thematic or data maps, which are used to display quantitative information arranged spatially on a map. Carto would have been the preferred choice for the integration of several data layers, as in the case of the composite class map. However, that idea proved too ambitious in the execution.

Most interactive online maps have a built-in capacity to scale or zoom; thus, they can in theory become instruments of either close or distant reading. In reality, however, each mapping application will have its own particular strength. For most of the students whose location data were geographically diverse, Carto worked well for communicating the story spatially. The great expanse of land and water in between Kraków and Vancouver, to take a specific example, readily communicates displacement, searching, and striving. Other students whose location data stayed circumscribed within small towns or regions were less well satisfied with Carto because of a want of contextual information at the higher zoom levels. In retrospect, the wide-ranging character of the location data present in the autobiographies made it difficult to identify a single appropriate interpretive approach and tool to use. It did strike us, however, that close reading – focusing on place over space – was the more productive framework in the context of this course. Losing sight of the role of interpretation and using a technology of convenience were the biggest flaws of our course assignment; in spite of this, the resulting student work nevertheless demonstrated merit. And after
our review of the experience, the faculty member and I emerged with a fund of new ideas to start planning the next iteration.

CONCLUSION

This list of challenges in collaborative digital humanities pedagogy is offered in a spirit of professional comity, with the hope that we can build on our collective experiences in a complex, evolving area of engagement. It is not intended to be exhaustive. There are many other challenges that deserve continued attention, such as the education and training of library professionals in both digital as well as humanities research methods, and the assessment of the work students produce in co-taught digital humanities courses. Although the topic of failure is a sensitive one, particularly in library culture, pedagogical collaborations are an ideal space in which to experiment, take risks, and advance one’s own knowledge and practice. Sharing our failures with our professional and scholarly communities helps to ensure that our knowledge does not need to be rediscovered by others.

REFERENCES


of Understanding Collection.” ResearchCommons, University of Texas at Arlington. https://uta-ir.tdl.org/uta-ir/handle/10106/25646.


Rowell, Chelcie. 2016. “‘Librarians Are Not Magic,’ Says @Stilettobrarian Many Times My Work Has Been Described as ‘Magic’ Which Obfuscates My Expertise #DLFforum.” Microblog. @Ararebit. https://twitter.com/ararebit/status/796040309008437248.


