

## Tangible Digital Humanities

What if we approach digital pedagogy through the framework of tangibility? Introducing students to a digital humanities that's tangible.

How might such a framework help us think about digital humanities as a methodology that works in tandem with and extends traditional modes of humanities thinking and teaching? How might such a framework move us away from teaching DH as a "suite of tools" and instead help us focus on critical questions and humanistic thinking as the anchor for our digital pedagogy? Finally, how might the framework of tangibility help us think about digital humanities within the broader category of applied humanities?

These are the questions my talk today will focus on and I'm going to offer some answers in the form of examples—models from my own teaching that help me think about what a tangible digital humanities could be.

Before I turn to the examples, I first want to outline the different ways I'm thinking about the term *tangibility* [SLIDE 2].

First, tangibility can mean simply: things we can touch. And here I borrow from an increasingly rich tradition of DH pedagogy that works at the intersection between digital and physical. Craig Mode (writer and photographer) has a particularly evocative description of the digital/physical intersection. Relating the story of how he and a team of designers and programmers developed a new iPhone app, Mode describes the "great experiential texture he and his team felt during the process of building this application."

"Clearly, we were making stuff. Lots of it. Making and throwing away and making more stuff. Building upon and learning from the ever growing pile of experiments...[but] this layered process happened almost entirely in digital space," leaving the design team with a "feeling of thinness."

Drawing on Mode's metaphor for the "feeling of thinness" that we grapple with when we work solely in digital spaces, I try to build my digital pedagogy around *thickness*: making the reading, writing, and thinking processes feel thick before we transition them to a digital register.

Second, I am defining tangible as [CLICK] the practices and methods we hold dear as humanities scholars. This connotation of tangibility invites us to ground our digital pedagogy in what we already know well and love. This also means making DH and digital pedagogy work for you, wherever you are in your training, whatever field or interdisciplinary intersections you've chosen as the basis for your research and teaching.

And, finally, I also want to invite us to think about the affective registers evoked when we use a word like tangibility, particularly as it's linked to terms like *touching* and *feeling*. Here I'm thinking with Eve Sedgwick and her wonderful book *Touching Feeling: Affect, Pedagogy, and Performativity*, where she not only troubles the relationship between touch and affect, but also offers a particularly rich account of affective feeling as the basis for pedagogy. I want to bring feeling into our conversations today and make sure we have space to talk about the feelings we aim to evoke in our teaching, as well as the feelings that emerge in us as we teach.

Each of the three examples I'll offer today will touch on all of these connotations of the term "tangible," but each is also meant to illuminate more fully one specific connotation. I hope the accumulation of these examples will demonstrate what I mean by tangible digital humanities, but I also want to emphasize up front that this is the version of tangible digital humanities that works for me. All of these examples may not be portable/usable for you—when I'm talking about structuring a specialized course, for instance. I'm very grateful for the flexibility I've had in designing such courses, but I know not everyone is in a situation where such flexibility is possible. I'm hoping, though, that we can still think about these examples as touchstones you can build on, seeds for later development, and, ultimately, the pedagogical experiments of just one person.

### **EXAMPLE 1:**

My first example comes from a class I taught last fall called "Digital Feminist Archives." This was a graduate and advanced undergraduate seminar that worked at the intersection of archival methods and digital practice.

The class met at KU's special collections library and the entire semester was centered on a 220-page manuscript recipe book penned (we think) by a seventeenth-century woman named Elizabeth Dyke [SLIDE 4]. For the first half of the semester we transcribed the entire manuscript while discussing critical readings on archival theory, early modern women writers, and feminist media and information studies. Then for the second half of the semester, the students worked in small groups to build a digital project based on Dyke's manuscript and informed by the theoretical and critical frameworks offered by our course readings.

For today's purposes, I want to hone in on the first section of the course—the manuscript to digital transcription [SLIDE 5]. This is a really good starting point for incorporating digital methods into the classroom in a way that has concrete outcomes for different kinds of training and professionalization: paleography, archival material handling skills, HTML coding and basic tagging, and transcription software training (Scripto, in our case).

Digital transcription is one of those activities that can seem very straightforward: ultimately, aren't we just typing up what we read? But I wanted to be sure that this

process had significant heft. I wanted students to think critically about and with the transcription work as they did it. So, I structured the transcription project to ensure that it had both process- and content-driven weight.

Here's what I mean. During our transcription weeks (the first eight weeks of the semester) every Thursday class session was a workshop day, and I structured these sessions like lab meetings for a large-scale text-encoding project. The students had to come in with questions and examples from their transcription work for the week, and in the workshops they collectively decided on best practices for encoding things like illegible lettering and page damage [SLIDE 6].

Not only making these decisions, but making them collectively gave the students a strong sense of ownership over the work. And, I think even more crucially, it got them thinking more humanistically about the decisions they were making. The conversations often began with something simple: "how should we note text that's been crossed out?" But our critical readings and conversations about the transcription process quickly shifted such conversations: "should we include content Dyke clearly intended to strike? if we do, what kind of record are we building? are we being responsible to this historical figure? are we being responsible to future researchers?" This is what I mean by process-driven weight.

I also included hands-on class sessions with the material manuscript at both the start and end of our transcription work—tactile bookends to the digital transcription process. In the first of these sessions, we talked solely about the manuscript as an object: how it came to the Spencer Library, what kinds of physical details could we learn from interacting with the object, and how did we feel when we handled it? When we returned to the manuscript at the end of the transcription work, we were able to talk about content. Students turned to individual pages they had transcribed, they noted new discoveries about content ordering (why several clusters of headache recipes in different sections of the text?), and found page damage they had missed in their transcription work. In addition to adding material heft to the digital transcription work, these hands-on sessions also gave them two very different experiences with the archival object. They approached it first as a commodity and then as an intimately familiar historical material.

We treated the transcription work as a collective close reading exercise—and here's where the content-driven weight comes into play. Every week during our transcription lab meetings, the students contributed to one another's knowledge about the actual content of the text. No one read all 220 pages of the manuscript (at least I don't think any of them did), but in conversations about their transcriptions from the previous week, we were able to establish patterns in Dyke's rhetoric, note differences between medicinal recipes for the same ailment, and flag where to look for recipes that used cinnamon. They were teaching each other the content of the text, so their transcription work became a

close reading exercise as they prepared what to share with their peers during our workshops.

Finally, to add a kind of meta-tangibility to all of this, I chose a text that was incredibly “physical” as the basis for this course and the students’ digital work. Early recipe books, as Mary Fissell and Wendy Wall have thoroughly demonstrated, are highly somatic archival objects. Dyke’s text invited us into embodied contact with its content (giving us directions for making medicinal treatments and culinary delights) as well as its status as an archival object. This physicality—what I’m thinking about as the “tangible-ness” of the manuscript content itself—translated into the students’ final digital projects, which I’d be very happy to share examples of in the Q&A.

The crucial take-away here is that even though the entire premise of this course was “build a digital project,” our day-to-day classroom work was grounded in research methods that humanities scholars hold dear and know intimately. Such a model helps us confront concerns, for instance, that we need a lot of special training to do digital pedagogy, or that teaching with digital tools comes at the detriment of traditional humanities research methods. My second example is for those of you who want to go even more old school—pen and paper old school.

### **EXAMPLE 2:**

This also might be a much more manageable example because it’s not an entire course structure, but a simple, short-form activity using analog tools as a way into teaching a digital method.

Let me first nod to the excellent models of low-tech (or no-tech) approaches to digital pedagogy that I used to build this classroom activity:

- Kalani Craig’s “Analog Tools in Digital History Classrooms”
- Paul Fyfe’s “Digital Pedagogy Unplugged”
- Jesse Stommel’s series of short essays on “Decoding Digital Pedagogy”

Like these scholar-teachers, I am convinced that analog activities (that is, computer-less activities) can actually be the best way to introduce digital methods into the classroom. Such activities foreground humanistic questions and frameworks and then deal with troubleshooting the tech. In addition to giving students something they can literally get their hands on, these activities emphasize the “mechanics” of the digital tool over the tool itself, keeping classroom work focused on how we think rather than what we’re thinking with.

The analog activity I’m sharing today focuses on network analysis. Network analysis is a mathematical model for analyzing a complex problem by breaking it down into how its parts are related. Building a network model requires a relational data set: every data point

is connected to another (or multiple other) data points in some way, and you build your data set based on the proximity or distance of those connections. Network analysis is increasingly popular in DH classrooms, particularly in history and literary studies because it's such a useful method for helping students visualize, for instance, the relationships among characters in a novel [SLIDE 8].

For my purposes, though, I wanted to use network analysis slightly differently. One of the things I work hard to do in all of my classes is introduce students to the value of interdisciplinary thinking. And one of my favorite early modern texts for doing this is Margaret Cavendish's *Blazing World* [SLIDE 9].

If you don't know Margaret Cavendish, she's a 17<sup>th</sup>-century writer and thinker worth knowing. She publishes an extraordinary amount of writing during her lifetime (which is very unusual for a woman in the mid-1600's). Within her texts, you can find everything from plays about female separatist communities, to poems about early atomic theory, to extended complaints about the frivolity of upper-class English women. And, most crucially for the classroom activity I'm sharing here, a lot of her texts work at the intersection of science and literature because she's super interested in how "reason" shapes "fancy" and vice versa.

The best example is her text *Blazing World*, considered one of the earliest science fiction novels written by a woman. *Blazing World* tells the story of a woman who gets shipwrecked in an alternate world. She meets the people who populate that world (who are actually kind of animal/human hybrids), and they show her all the different parts of their very unusual and very utopian society. This is a highly interdisciplinary text—it involves philosophical discussions about the value of microscopes, as well as classic adventure story plot-twists like shipwrecks.

Crafting an activity for reading *Blazing World* in the undergraduate classroom, I wanted to draw out the interdisciplinary of the text itself, but even more importantly, I wanted to use this text and our discussion of it to think about our current disciplinary divides. The goal was to get students interrogating their own educations a bit—thinking about whether or not their educational goals fit within the program silos constructed by academic institutions.

I apologize for not having images—I've gotten better at documenting my digital pedagogy as the semesters have gone on. But here is a breakdown of the activity prompts [SLIDE 10]. First we discuss the different forms of knowledge and ways of knowing on display in Cavendish's text, along with how different kinds of knowledge manifest. How do we recognize that Cavendish is thinking about astronomy versus theology, for instance? Then the students work in small groups on a selection of pages to explore the relationships between different kinds of knowledge within those pages. How do we track relationships between forms of knowledge? What markers do we look for in the text's

content to signal those relationships? Do certain kinds of knowledge tend to manifest together?

Grounded in these questions and conversation prompts, the students drafted network graphs of the interconnected forms of knowledge in Cavendish's text. The graphs started as simple concept mapping—circles and connecting lines to show relationships between ideas. But then they worked with color, scale, other design elements to think about how to visualize the relationships in a more nuanced way.

Starting with pen and paper helped foreground the mechanics of network analysis without getting into the weeds of building relational data sets or creating accounts on a data visualization platform. But through this work the students learned the basic concepts underlying network models, they thought about design decisions that make for effective versions of such models, and they can now read network graphs when they encounter them. This was a hands-on network modeling activity, one with very tangible data, gathered as students flipped through their copies of the text and jotted references to incorporate into their graphs. Digital mechanics learned in a conscientiously tactile way.

### **EXAMPLE 3:**

My final example is a commonplace book assignment. I used this as the final project for a course on early women writers, but I think this assignment has legs for many other kinds of classes. There are wonderful examples out there of people using similar assignments in more general introductory writing courses, in history classes, and in other literary survey courses. I built this assignment based on generous, open-access models from Colleen Kennedy and Vimala Pasupathi, and I'd be happy to share my assignment sheet with anyone who'd like a copy.

Again, let me do a bit of scaffolding here for those who aren't familiar with commonplace books. A commonplace book is essentially a scrapbook of fragments from others' writings—a way of recording useful snippets from reading, organizing information for one's future use, or just jotting down favorite quotes. We have some excellent examples from early modern women writers, like this commonplace book from Anne Southwell housed at the Folger Shakespeare Library [SLIDE 12]. And as we get later into the 17<sup>th</sup> and 18<sup>th</sup> centuries, extant examples of commonplace books become even more elaborate, like this example from Agnus McIntosh who documented the career of her brother, natural historian W.C. McIntosh [SLIDE 13].

In my class on early women writers, we read a few commonplace books and thought about how compilers of such books were experimenting with different kinds of knowledge organization. We also thought about how these texts offer knowledge in a very different format than what we're used to from reading clean, print editions of early modern books.

For the student's final project, I asked them to create their own commonplace books and one of the goals was to take from the digital and turn it into the physical. Here are the basics of the assignment [SLIDE 14]:

1. The students had to include roughly twenty "entries" (whatever that term meant for them).
2. They needed an organizational apparatus for the book—something beyond "these are all interesting." When we discussed the project in class, I encouraged them to have a central question around which they gathered entries, or at least a focused concept from the course they wanted to explore further.
3. They were required to gather all their "entries" from digital spaces and transfer them into their chosen analog medium.

In its most basic version, this assignment gets students thinking carefully about how their knowledge of something gets constructed. It makes tangible research practices and knowledge formations that so frequently take place only in digital spaces in our tech-heavy academic culture.

I thought that would be the major take-away of this assignment, but the most unexpected outcome was an affective one. The students became incredibly attached to their commonplace books over the weeks of the assignment. Their hands-on work became the foundation for a kind of tactile intimacy not just with the book object but also with the work of knowledge production signified by the book itself.

The students spent several weeks compiling their own commonplace books (with built-in progress checks together in class). And then they circulated their books among their peers with the requirement that they read and contribute to at least two of their classmates' books. This second part of the assignment asked them to actively engage with their peers' thinking and create a tangible record of collective knowledge building. It also diffused the affective attachments the students had to their own books—these became precious objects to everyone who encountered them. I even had a few students who submitted loose sheets as their contribution to a classmate's book because they didn't want to mark up the original.

I want to note one final thing about this assignment, particularly as we think about digital pedagogy and the relationship between humanities thinking and digital practice. This commonplace book project was ultimately an exercise in thinking about our interactions with digital technology—the way we read and think with infinite digital space. Because the students had to take from the digital and remediate into the physical, it slowed down (and made hyper-visible) the processes of digital engagement. The structure of the assignment gave them room to go down rabbit holes on the internet, to be diverted by clickbait, and to give in to the vast interconnectedness of the worldwide web. But it also

helped them slow down and think more critically about that interconnectedness and how we navigate it as we build knowledge. The digital/physical interaction lies at the core of this assignment.

## **Conclusion**

With these examples, I've tried to model how digital pedagogy can literally give students something to put their hands on. I'm going to cheat a bit by ending with my opening questions, because these are what I want to leave on the table for this afternoon's conversation.

If we approach digital pedagogy through the framework of tangibility, how might such a framework help us think about digital humanities as a methodology that works in tandem with and extends traditional modes of humanities thinking and teaching? How might such a framework move us away from teaching DH as a "suite of tools" and instead help us focus on critical questions and humanistic thinking as the anchor for our digital pedagogy? Finally, how might the framework of tangibility help us think about digital humanities within the broader category of applied humanities?

To draw out that final question a bit more: what is the promise of hands-on humanities work made possible by digital training? Here I'm thinking about my talk's title ("Tangible Digital Humanities") in terms of "hands-on humanities work," humanities in practice, applied humanities, "alt-ac." Digital humanities pedagogy transforms very easily into applied humanities pedagogy. There's real promise here to help students see the stakes of humanities work more clearly—and how that work can translate and move beyond the classroom—even as we help them think critically about and with technology.

Thank you.