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Materiality, Craft, Identity, and Embodiment: Reworking Digital Writing Pedagogy

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MATERIALITY, CRAFT, IDENTITY, AND EMBODIMENT:
REWORKING DIGITAL WRITING PEDAGOGY

by

Kristin Prins

A Dissertation Submitted in
Partial Fulfillment of the
Requirements for the Degree of

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ABSTRACT
MATERIALITY, CRAFT, IDENTITY, AND EMBODIMENT:
REWORKING DIGITAL WRITING PEDAGOGY

by

Kristin Prins

The University of Wisconsin–Milwaukee, 2015
Under the Supervision of Professor Anne Frances Wysocki

Too often in Rhetoric and Composition, multimodal writing (an expansive practice of opening up the media and modes with which writers might work) is reduced to digital writing. “Reworking Digital Writing” argues that the opportunities and insights of digital writing should encourage us to turn our attention to all kinds of nondigital materials that have not traditionally been considered part of composing—including the materials that are already familiar to crafters and do-it-yourselfers (DIYers). Further, I argue that the material, technical, rhetorical, economic, and social dimensions of DIY craft provide a coherent framework for teaching multimodal writing in ways that encourage students to engage in the work of writing in ways that can make more apparent the composing activities and processes of writing and make more concrete the kinds of work that composed objects can do. Through this approach to composing, I argue that we can help students experience the very real ways in which writing can reshape our subjectivities and build new kinds of worlds with others. To that end, I examine DIY craft histories, theories, and practices to develop a new pedagogical framework for teaching multimodal writing.

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Chapter One: The Embodied Work of Multimodal Composing

But it was Roland Barthes that got to me, that led—no—seduced me into understanding that new media offered rhetoric the chance to comprehend the breadth of textuality, and rhetoric offered new media the mechanism for putting our experience with text into words.... Putting it more simply—in a world whirling so fast and so knotted together as it is, traditional approaches to text net us little in the way of understanding in what it means to be human today.

– Dene Grigar, “What New Media Offers” (214, 216)

[T]he sensual characteristics of specific materials; the regulation imposed by specialized tools when properly employed; the sociopolitical connotations of the figure of the artisan; and even the literal limits of time and space ... all provide a kind of friction that keep pressing questions of form, category, and identity open for further investigation.

– Howard Risatti, *A Theory of Craft* (5–6)

Several years ago, around 2010, the research writing class in my first-year writing program piloted digital portfolios. Instead of working toward a final portfolio of printed essays, students in a small set of sections would be encouraged throughout the semester to undertake research projects that didn’t necessarily take the form of print essays. As the pilot group of instructors met over the summer to plan for fall semester, we tried to imagine all of the kinds of digital projects students might want to undertake, and what resources they—and we—might draw on to help those projects come to fruition.

One of those resources was our course management system’s new ePortfolio plug-in—which administration very much wanted departments across the university to use. The D2L ePortfolio system, like just about everything else in the commercial course management systems with which I have worked, is cumbersome. So we went to our university’s Learning Technology Center to learn what an ePortfolio is meant to do, how the plug-in works, and how to develop workarounds so that we and our students could monkey the system into doing what we want. If one wants to develop a new ePortfolio

project (called a “presentation”), one works through a series of menu options to select the Properties, Content/Layout, Banner image/text, and Theme for the project. Each of these menus offers a small array of options. For example, there are three navigation options: a vertical list of links on the left or right margin, or a horizontal list of links along the top margin. Much like popular content management systems (CMSs) and blog/website platforms (such as WordPress, Tumblr, Blogger, Google Sites, Wix, and Squarespace) ePortfolio offers some themes that dictate the color scheme and other visual qualities of text, background, and layout.

Sitting in that Learning Technology Center lab, learning how to wrangle ePortfolio, we realized that students would *only* have three options for navigation. That was it. I asked our ePortfolio guru about it, and he—an otherwise smart and helpful teacher who has experience teaching writing and who works in Digital Humanities and visualization—indignantly asked what other options we could possibly want for our students. There is a lot going on in that question, but what first struck me was the assumption that the visual design of ePortfolio is meant to function much like that of popular templated CMS platforms: it is normative to the point of being invisible.¹ These

¹ The very real limitations of these options have been borne out in students’ ePortfolios, which are usually made of alphabetic essays chopped into sections, copied/pasted onto different pages, and peppered with links, images, and video and sound clips. While students can change the background and text colors in their projects, ePortfolio doesn’t allow students to make more meaningful choices. This means that all of their ePortfolio projects look and feel very similar, much like a stack of essays. Digital and multimodal writing scholars argue that, just as with word choices, design choices should be rhetorically meaningful. When students don’t have the option to actually consider, for example, how their readers should navigate through their digital text, they’re not making rhetorically sound design choices. There are other reasons this is important, but I will get to that below.

templates, in other words, teach us what digital documents, including websites, should look like and how we should expect to navigate through them.

On one hand, as digital composing environments, templated CMS platforms offer ease: the bar for entry is fairly low, and it can be motivating for students to make perfectly good, professional-looking sites without having to learn any code. What students can make using templated website builders will look nice and clean, will look familiar, will look like much of the web today. But on the other hand, I think the ePortfolio guru's question also carried an embedded assertion: that first-year writing students couldn't possibly have anything to say that couldn't be communicated perfectly well through the limited visual design and navigation options ePortfolio offers. This invisibility of design is a problem in the same way that practically-invisible five-paragraph argumentative essays are.² It cannot facilitate the kinds of expansive composing options I want students to consider as they make multimodal compositions.

Writing and Embodiment

Recent work in Rhetoric and Composition, like Anne Frances Wysocki et al.'s *Writing New Media*, Jody Shipka's *Toward a Composition Made Whole*, and Jason Palmeri's *Remixing Composition*, has emphasized the materiality of multimodal writing, both digital and analog. As Wysocki argues, however, much of writing pedagogy could be described as "attempts to get abstract thought present in the most immaterial means possible" (22). Much writing pedagogy still works this way, even though, as Margaret Syverson found in her study of writing, *The Wealth of Reality*, "Composition does not

² Otherwise known as *English papers* or *general academic essays* or other innocuous names outside of—and, frankly, sometimes even inside—universities.

consist in transferring what is inside the head onto paper or a computer screen. It is a manifestation of the coordination between internal and external structures, which are constituted by and expressed through cultural and cognitive dimensions of every human activity” (183). And yet common sense holds that writing is immaterial—that it does or should somehow directly telegraph ideas from our brains to words on screen or paper. This thinking is so ingrained in the ways students and instructors talk about, think about, and approach reading and writing that we often inadvertently perpetuate disembodied notions of writing, even when we don’t believe in them. Furthermore, this way of thinking about writing is pervasive at all levels of education. For example, see Figures One through Three below, a series of comic strips from the very popular webcomic *PhD Comics*, which show the character Cecilia working on her engineering thesis. The writing situation we see here is likely familiar to readers; I know I have sometimes experienced the feeling that everything I have to say is in my head, just waiting to get out. And when that doesn’t happen seamlessly, writers can experience a lot of negative affective and physiological reactions.



Figure 1: “Piled Higher and Deeper” by Jorge Cham, www.phdcomics.com. Posted 21 July 2014.



Figure 2: “Piled Higher and Deeper” by Jorge Cham, www.phdcomics.com. Posted 23 July 2014.

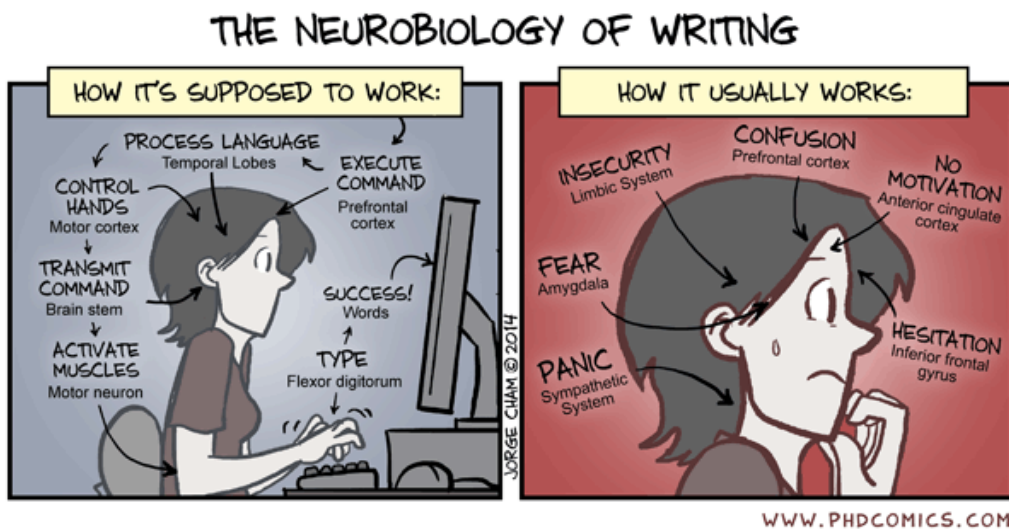


Figure 3: “Piled Higher and Deeper” by Jorge Cham, www.phdcomics.com. Posted 28 July 2014.

These comics circulated widely among the graduate students and faculty in Rhetoric and Composition who I follow on Twitter and am friends with on Facebook. After the initial shares in July 2014, when they were posted, the comics continued to circulate among ever-widening circles into the fall. It seems that many people, including those who study

and teach Rhetoric and Composition, identify with these experiences of academic writing.

And of course, there are real instances when there *is* something in one's head that can just be written down: grocery lists (although the act of writing one often leads me to think more carefully about what's in the pantry and refrigerator, to consider what meals we're actually going to make in the next week, etc.), to-do lists (ditto), quick informative emails, etc. Sometimes I even think of a sentence that articulates something I have been trying to say or a framework for working through an idea I have been struggling to situate (usually while washing dishes, for some reason), and if I am quick enough, I can get that sentence or framing written down before it is lost. But in my experience as both student and teacher, it is rare for academic or scholarly writing processes to consist only of telegraphing words from brains onto paper or screen. Instead, writing and revising activities are also invention activities. Through acts of writing—whether we transcribe ideas that are fully formed in our heads or (more often, I think) work to articulate in images or text a hazy collection of words and ideas—we see what it is we have to say and then work to develop, refine, and revise that saying. Further, as the New London Group convincingly argues in “A Pedagogy of Multiliteracies,” we draw from our brains and from the world around us (using the elements and arrangements we have access to as “available designs”) to produce (through the work of “designing”) not just hand-written or typed texts but all kinds of compositions (“the redesigned,” which becomes another available design we and others can use in the future). In both senses, writing is *embodied*: it is an activity we enact through our bodies and the distributed networks in which they participate, and it is an embodied articulation of what we have to say, something with

shape and weight that circulates, even if its material form, or medium, is invisible to us because we are so used to it. Such is the case with the ePortfolio website options I discussed above, and it is often the case with five-paragraph argumentative essays.

And yet Cham's diagram of "How [writing is] supposed to work" in the first frame of Figure Three above continues to hold sway, because of our engrained sense that writing should be a process of transcribing what's in our brains. Because of the difficult nature of the labor that academic writing demands, that sense of how it's supposed to work almost necessarily results in the feelings Cham associates with "How it usually works" (the second frame in Figure Three), including all of the panic, insecurity, and hesitation that many writers (both students and, I would venture, teachers) experience. I believe that scholarship in and important to Rhetoric and Composition that attends to the embodied nature of writing can help us address—fight, reframe, offer alternatives to—the common-sense disembodied notion of writing. In this chapter, I will first work through scholarship that helps to explain the embodied work of writing, and then I will turn to work that helps to explain the embodied nature of texts. At that point, I will turn to explaining how that translates to pedagogical practices that are sensitive to how I think writing (or at least how it's taught) should actually work.

Embodiment in Rhetoric and Composition

A. Abby Knoblauch, in "Bodies of Knowledge: Definitions, Delineations, and Implications of Embodied Writing in the Academy," offers a helpful categorization of how people in Rhetoric and Composition write about embodiment as it relates to academic writing and knowledge production: through embodied language, embodied knowledge, and embodied rhetoric. She defines each category as such:

embodied language [is] the use of terms, metaphors, and analogies that reference, intentionally or not, the body itself. Embodied knowledge is that sense of knowing something *through* the body and is often sparked by what we might call a “gut reaction.” Finally, embodied rhetoric is a purposeful decision to include embodied knowledge and social positionalities as forms of meaning making within a text itself. (52)

Embodied language, for example, happens when I on the previous page called writing “an embodied articulation of what we have to say (something with shape and weight that circulates, even if its material form, or medium, is invisible ...).” Embodied knowledge is reflected through Sara Ahmed’s assertion that “knowledge cannot be separated from the bodily world of feeling and sensation; knowledge is bound up with what makes us sweat, shudder, tremble, all those feelings that are crucially felt on the bodily surface, the skin surface where we touch and are touched by the world” (qtd. in Knoblauch 54).

Knoblauch’s third category, embodied rhetoric, happens when “an author represent[s] aspects of embodiment within the text he or she is shaping. Furthermore, when practicing embodied rhetoric, the author attempts to decipher how these ‘material circumstances’ affect how he or she understands the world” (58). As Knoblauch admits, these categories can be tough to pull apart: writers who practice embodied rhetoric are likely to use embodied language and are perhaps likely to assert the importance of paying attention to our embodied knowledge. But while Knoblauch’s interest lies very much with embodied rhetoric, I am interested in embodied knowledge. This is because of the visceral knowing that often comes with writing and is illustrated by Cham above: many writers often feel in their guts, hearts, and heads that they are terrible writers. This knowing is born out of

the sometimes painful and often messy experiences of writing—regardless of the very different experiences many writers have when others read and respond to their writing (for example, that their peers or teachers find their work interesting and important, even if it definitely needs revision before it’s ready to turn in for a grade or for publication).

Knoblauch offers an apt example for me to begin considering how embodied knowledge might be used in writing:

In her 2004 article “Words Made Flesh: Fusing Imagery and Language in a Polymorphic Literacy,” Kristie Fleckenstein relates the story [of] her five-year-old daughter, Anna, learning how to draw a star. Her hand over her daughter’s, Fleckenstein guides Anna through the motions, whispering “up down up over down” as the two of them make stars on the page. Fleckenstein gradually lets go of Anna’s hand and the young girl continues to draw rough stars on her own. Eagerly watching, Anna’s four-year-old sister asks Anna to teach her how to make stars, too. “No, Baby, I can’t,” Anna replies, “I don’t know how. Only my hand knows.” (56)

While Knoblauch is right to critique the mind/body distinction and oversimplification of embodied knowledge presented in Fleckenstein’s anecdote, I don’t think she takes seriously enough the similar experiences we frequently have, the muscle memory (instead of conscious thought) on which we rely when we enter our PIN at a store’s checkout, type online passcodes, or spell habitually-used words correctly as we type. Knoblauch does admit the embodiment of knowledge—”My hand, at those points, appears to know better than my mind. Such knowledge, it often seems, is of the body” (56)—but then quickly discounts it. Instead, I would argue for understanding that knowledge as being

very much of the body *because of* the extensive connections between brain and body (or, from another perspective, their very unity). I would argue that any learned habitual activity that doesn't necessitate explicit conscious thought (such as the kinds of activities we enact as we go about some writing tasks) *is* something our bodies know how to do. How does a body learn such things?

While Knoblauch focuses particularly on texts, Marilyn Cooper's "Rhetorical Agency as Emergent and Enacted" helps me to connect texts with their production and offers a different approach to embodiment. Cooper argues that rhetorical agency is "an emergent property of embodied individuals" who develop "lived knowledge that their actions are their own" through acting and then consciously reflecting on their actions (421). Cooper continues, explaining that "agency does not arise from conscious mental acts"; instead, "As Jane Bennett suggests, 'agency is the ... capacity to make a difference in the world without knowing quite what you are doing'" (421). Like embodied knowing, embodied agency comes from lived, felt experience, but it involves making choices as one acts, whether those choices are consciously made or not. These choices are like little experiments: we don't ever know exactly what effects our actions will have, although with experience and reflection, we can get better at guessing what's likely, such as by re-playing a conversation in your head in order to understand how it developed the way it did so as to develop a sense of what the outcomes of future rhetorical actions might be. This process also grounds identity: "What [students] write or argue, as with all other actions they perform, makes them who they are" (Cooper 443). Cooper suggests that we might develop different embodied knowledges over time: through experimenting with

different kinds of actions, we receive different kinds of feedback, which in turn can shift our sense of ourselves.

Similarly, James Paul Gee argues in *What Video Games Have to Teach Us about Learning and Literacy* that video games are good at teaching us to do things because they demand that we repeatedly practice those things in a way that people tend to find pleasurable. He contrasts how video games teach with how schools usually teach: while video games get us started and then provide tips and explanations in-context as needed, schools tend to begin with theoretical explanation and then having students practice skills outside of any meaningful context for action (other than passing a test or getting a good grade)—what Gee and others refer to as “skill and drill” (68). To make his point, Gee provides several examples, one of which considers how architecture students might best learn new computer-aided drafting software. This example is fairly long, but it is instructive:

Imagine you were to design a video game in which the player, a student of architecture, had to learn a new 3-D architectural drafting system, a quite complicated system.... If this game operated like a good video game, then the player’s understandings of this new system—all its words, symbols, and procedures—would have to be embodied in materials, images, and actions in the game’s virtual world. Furthermore, the player’s understandings would have to change and transform in new and different situations. Additionally, the player would have to actively assemble these understandings on the spot and face real consequences in the virtual world for these assemblies. In fact, it is these

consequences that allow the player to test whether the situation- and action-specific meanings he or she has constructed are viable or not.

Compare this to having students sit down and having them read books, listen to lectures, and discuss these matters apart from any real consequences. In this case, students would have only general and/or verbal meanings, not embodied ones that they can customize to and for different situations of actual practice. I am not saying that we need to teach these architecture students—or any others—via video games. Good classrooms can teach people how to situate and embody meanings in a variety of different ways.... (86)

Gee advocates for giving students opportunities to experiment with different ways of approaching the work they're setting out to do, to see where their choices lead, to reflect on those results, and then to try something else as needed. This way of framing the learning process mirrors Cooper's process of developing rhetorical agency. In both cases, rhetors' and students' identities are shaped in part through what they produce.

But these processes do not only include people: Gee's learning includes, at minimum, a video game and gaming system on which to play. Cooper's rhetorical agency could include common writing materials like laptops and applications and desks, books and essays and videos, notes scribbled with pen on paper, and verbal or written feedback on a draft from a writing partner or teacher, among other things. Our interactions with these things are also importantly embodied. In *The Wealth of Reality*, Syverson insists on keeping "mediated action at the center of our attention" and "granting analytic primacy to individual(s)-acting-with-mediational-means" (Shipka 51). Continuing this work, the essays that make up Kristin Arola and Anne Frances Wysocki's collection *Composing*

(Media) = Composing (Embodiment) explore ecologies within which writers work, the media with which they compose, and the kinds of embodied identities that emerge from that work. Wysocki explains in the collection's introduction, "And so, again, our bodies—our primary media ... —are not fixed; they are mutable. Our relations with media matter, in other words, and ... we therefore need to consider our engagements with our media if we and the people in our classes are to learn about embodiment and so what we consider ourselves to be and to be able to do in our worlds" (4).

Just as scholars in Rhetoric and Composition have argued for the importance of considering the embodied work of writing, as Arola and Wysocki's collection suggests, scholars in other disciplines have argued that ideas are embodied through writing and other media. Perhaps the most influential voice in this chorus is N. Katherine Hayles, whose *How We Became Posthuman* investigates, in part, "how *information lost its body*, that is, how it came to be conceptualized as an entity separate from the material forms in which it is thought to be embedded," and declares, "It is this materiality/information separation I want to contest" (2, 12, emphasis in original). Although that separation tracks back at least to Plato, Hayles points to the Turing Test as a modern example of the disembodiment of information: "Here, at the inaugural moment of the computer age, the erasure of embodiment is performed so that 'intelligence' becomes a property of the formal manipulation of symbols rather than enaction in the human life-world" (xi). But when we consider complex contextual decision-making, humans process information in ways that are very different from computers: "embodiment makes clear that thought is a much broader cognitive function depending for its specificities on the embodied form enacting it" (xiv). Humans necessarily process and communicate information differently

from computers because of their different material embodiments (human having living bodies, as we commonly understand them, and computers having plastic, metal, and silicon digital bodies). Extending our sense of how knowledge is embodied, W. J. T. Mitchell and Mark Hansen argue in their introduction to *Critical Terms for Media Studies* that, when we consider media, “‘what is at stake is more than the form of a specific content,’ more than any medium serving simply as a carrier for content; instead, we are discussing ‘something that opens onto the notion of a form of life, of a general environment for living’” (qtd. in Arola and Wysocki 4). Different media here provide different “environment[s] for living,” and so the field of Media Studies exists in part to help us make increasingly fine distinctions among these different environments (so as to avoid the decontextualization that Hayles critiques).

To build on this attention to embodiment from inside and outside Rhetoric and Composition, I think we need a more robust approach to embodied materiality in composition pedagogy, and I believe that DIY (do it yourself) craft can help us develop that. My focus here is on how we can help students better understand the work of composing—specifically, multimodal composing—in a way that draws their attention to the materiality of their work, to the fact that the work of composing is the embodied work of making ourselves and our shared worlds.

One reason I am drawn to framing composition as *making* is that I have worked with several students who have a lot of anxiety, negative feelings, and bad experiences with the kinds of writing they believe they’ll be expected to do in my classes. This is a common experience for writing teachers (as Kristie Fleckenstein, who I quoted via Knoblauch above, demonstrates throughout *Embodied Literacies*). To a large extent, my

students expect to be writing *English papers* or, more generally, *academic essays*, which they have most often experienced as the kind of writing that, ultimately, gets them ready for standardized writing tests. These five-paragraph thesis-driven argumentative essays need not be based in any known reality except whatever students can make up in the time allowed—because they have to write removed from the books, notes, and online resources that would usually pervade academic (and many other kinds of) writing production. But these essays do need to use flawless Standard Academic English spelling and grammar, be well punctuated, and be tightly organized. Because of this, students often come into my classes expecting that they’ll need to follow *the rules*: that loose matrix of grammar, mechanics, punctuation, usage, organization, and formatting practices that can be marked as right or wrong. And while, of course, there are accepted conventions for academic writing that students should learn and practice throughout their coursework, many of those conventions are specific to majors, disciplines, and professions.

Instead, I believe that writing and rhetoric classes should help students practice a wider range of composing processes, gain a better sense of different kinds of rhetorical situations, and learn how best to approach and address those varieties of rhetorical situations. It makes sense that a too-narrow focus on rules for writing could stunt students’ ability to see the rhetorical situations they are constructing and within which they are composing. This is part of the critique of current-traditional rhetoric, a critique now canon in Rhetoric and Composition scholarship.³ But it doesn’t make sense to me just to tell students who are used to rule-bound test prep writing with a rater or computer

³ See the process theorists I discuss in the next section and scholars as different as James Berlin and Peter Elbow.

as their audience (rather than thinking, feeling people as their audience) that they are now accountable for what they have to say and how they go about saying it, that they are now responsible to an audience for the effects of their work. Instead of alleviating anxiety about rule-bound writing, doing so can produce even more anxiety. This was illustrated for me last year in a basic writing class: early in the semester, we were talking about arrangement, and one student pointed out that the assessment outcomes for their writing didn't dictate where in their work their purpose for writing should be articulated or what should go in each paragraph of their essays. We got into a discussion about why they weren't assessed on those issues, noting that the assessment guidelines pointed to rhetorical effectiveness, as opposed to rule following, as one measure of successful writing. When one student in particular had processed what we were saying, she blurted out, "Shit just got real."

I have become interested, then, in lowering the stakes of composing—or, at least, changing my students' perceptions of those stakes. In order to do this I try, following Wysocki, to help my students see their writings as things: things that they make and can see, touch, and physically manipulate (22). Things that, yes, can be important, interesting, critical, "academic"—but not things that induce unnecessary anxiety because of some Platonic ideal of perfection that real things can never achieve. And so in the next two sections, I am going to dig further into these two sides of how writing is embodied: as verb (embodied activity) and as noun (a made thing), and what that should mean for writing pedagogy.

Making Things: Writing (v.): Embodied Activity/Labor/Work (Or, the Need for Writing Studios)

Rhetoric and Composition's process movement was one approach to paying attention to the work of writing. Janet Emig studied *The Composing Processes of Twelfth Graders*, Sondra Perl focused on "The Composing Process of Unskilled College Writers," and Nancy Sommers sought to figure out differences among the "Revision Strategies of Student Writers and Experienced Adult Writers." Donald Murray argued that we should "Teach Writing as Process Not Product." Linda Flower and John R. Hayes studied writers at work to learn what physical actions they took and, to whatever extent they could, what mental processes writers used as they worked. In the course of studying how student writers work using various writing technologies (paper/pen and different computers), Christina Haas in *Writing Technology: Studies on the Materiality of Literacy* tracked activities leading to words, sentences, paragraphs, lists, outlines, notes, etc. In some senses, we know quite a lot about the activities that fall under the category "writing"—from what we know theoretically about writing process (prewriting, drafting, revising, editing, proofreading) and recursivity (none of those things happen just once or necessarily in the order listed) to what we know from our own experiences of writing (how informally some of those things happen, how much conversations or other events can shape the thinking that goes into what we have to say, how what you think you know isn't what you do know, how important different kinds of feedback from all kinds of parties is). And perhaps because of this, the post-process movement argued first against the lock-step textbook presentation of processes of writing as "the writing process"⁴ and

⁴ See Kastman Breuch, Gary Olson, and Thomas Kent.

then went so far as to argue against any systematic focus on students or writers more generally, favoring writing itself as the object we are meant to study.⁵

Although process pedagogy was initially rooted in pedagogical concerns about students' brains and bodies, newer post-process work seeks to focus on the materiality of writing while moving away from pedagogy and the students with whom teachers are necessarily concerned. I agree with Laura Micciche's critique of this position in "Writing Material":

Within the current wave of postprocess research is a longing for theory unfettered by the distraction of pesky subjects and their unruly bodies. The aversion to fleshiness is reaffirmed by the overrepresentation of men among the sources that tend to drive this research.... Meanwhile, some advocates, specifically Sidney Dobrin in *Postcomposition* and a handful of contributors to *Beyond Postprocess* (Dobrin et al.), substitute talk of bodies, identities, and differences with the materiality of texts. In the grips of this approach, writing becomes an effect of tools and technologies, an activity that is unteachable, a ghostly production, and the province of theory and men.... (491)

Because I am looking to forge more meaningful connections between what we know—and might learn—about the embodiment of both writers and writing, I find these post-process positions untenable. So I am interested in what neither process nor post-process theory offer: certain kinds of help for students when they actually sit down to work (anything beyond some general guidelines for specific kinds of alphabetic writing

⁵ See Sánchez.

activities) and a conception of writing as something that's not self-evidently alphabetic, printed, in one of just a few forms of essay, etc.

Just like my students, I'm often in need of some form of guidance when I first set myself to a writing task, regardless of where I am with a project—from those first itchings of an idea, to thinking through what the final thing should actually be/look like/do, to getting back into my project whenever it's time to sit down and work. (I have gotten better at all of these things over time, but “what to do next” is still something I have to think/write my way through very deliberately.) This is because there are so many levels on which we work as we write or make. These levels are in some sense what process theory sought to separate out: brainstorm your big idea and some supporting or connected ideas, organize them into an outline, write sentences that will flesh out that plan, etc. Instead, though, I often write with some kind of plan or argument in mind or sketched out, while a lot of my thinking happens as I put one word after another or arrange and re-arrange images or key terms into different relationships.

This is the kind of writing process T.R. Johnson advocates in *A Rhetoric of Pleasure*, one in which both process and product are valued: he argues that writing multiple drafts and focusing at different moments in those drafts on sentence- and paragraph-level issues like “stylistic figures, schemes, and tropes” can “play a powerful role in the drafting and revising process. These stylistic devices can help the student string together sequences of moments in their texts, help them choreograph these moments toward an increasingly grand moment of powerful connection between reader and writer” (25). In other words, the act of composing is itself world-building, idea-building, epistemic. Re-working words, sentences, and paragraphs creates new ideas. The

same is true of the varieties of work included in multimodal writing: although the materials with which writers work vary widely (words, images, videos, sounds, colors, fonts, spatial arrangements, transitions between slides or clips, pixels, paper, decibels, plastics, fibers), we usually start with initial ideas, and then the recursive processes of composing and revising (re-seeing, re-arranging) also lead to new ideas, new directions for thinking, new possibilities for being. This is illustrated through Susan Delagrange's "When Revision Is Redesign," an article that details how her *Kairos* Best Webtext Award-winning "*Wunderkammer*, Joseph Cornell, and the Visual Canon of Arrangement" changed and developed through a series of revisions and redesigns. In the Reflection section of "When Revision Is Redesign" she writes, "I'm convinced of the importance of making as an epistemological act, the importance of visual and other kinds of evidence as necessary to a full and fruitful epistemic space, and the necessity of embodiment as an ethical condition of the making and the made."

However, in my experience, beginning college writers in particular resist using time spent drafting and revising as experimental time for discovery—sometimes because they haven't used composing for these purposes before and this use of writing doesn't initially make sense but often because it's just not a quick way to get writing done.⁶ This approach is also discouraged by textbook examples of writing process theory and by the training students receive as preparation for standardized writing tests. (Les Perelman, for example, has written several articles about writing for—gaming—standardized tests.) For all these reasons, I think it makes good sense to do what teachers do in fine and studio

⁶ Although some writing tasks don't merit this approach, I believe academic work does (or should). An important difference between experienced and inexperienced writers is that experienced writers have developed affective and emotional incentives to do this difficult work.

arts classes: I think we need to spend significant portions of class time composing together. We need to foreground the work—the activities and actions—involved in writing by talking about it with students in classrooms and conferences, but we also need to actively do this work together.⁷

There are many forms this work can take. Instructors could have an entire class simultaneously write or revise a single document (for example, by using Google Docs, which allows several writers to make changes to a shared document at once, or by projecting a document and having one person make changes while the entire class talks through possible revisions),⁸ ask everyone to work individually on their own project (or in their groups, if it's a group project), or form pairs or small groups for students in which students each work on their own project but have a ready-made audience to discuss questions, make suggestions, and troubleshoot. In any of these scenarios, instructors should be available to answer questions as they come up, discussing issues either with individuals or small groups of students, or drawing the entire class' attention to something, such as how to do something technical (like with a software program) or to discuss something that has come up for several students (like how to introduce an author in a paragraph or how to signal a conclusion in a video). The idea here is that instructors and students alike can model how to recognize, assess, and deal with issues as they arise, whether they are intensely practical or more abstract in nature. This provides students

⁷ This studio time leverages longstanding practices in craft and other traditions of communal making. In some ways, this follows an apprenticeship model, although students will often follow each other's leads as much as their instructor's or an example text's.

⁸ The first scenario works well for digital alphabetical text, but it's less possible on, say, nondigital materials or for working on a website or video, which would necessitate the second scenario.

with a guided space in which their only work is to experiment a bit—even play—with their writing.

Although I go into more detail in Chapter Five about particular practices associated with the DIY craft writing pedagogy that I have developed over the past several years, I offer here a more detailed example to help you get a better sense of the kinds of activities I assign when I configure my classroom into a writing studio. Sometimes I assign students to come up with two to three alternatives for whatever they're working on at that point (a paragraph, a sentence, a collage of images with text, a plan for the visual layout or navigation for a website, a title, etc.). Depending on how this work is organized, it can be very similar to a Writing Center session. The important difference is that Writing Centers almost always insist that students decide what to focus on during a session, that they guide the conversation, etc. Studio time is usually much more tightly focused: for much of the semester, I find it useful to set very specific tasks for students during this time. This includes framing for students what work I want them to do and how I want them to approach it.⁹ As I get to know students in a class, I will shift how studio time is spent, so that students can get practice doing a wide variety of writing tasks, focusing mostly on those with which they are not well practiced or comfortable. Toward the end of the semester, if I have a class that seems pretty comfortable and flexible with their writing processes, I might open up considerably what should be done during this time.

⁹ In practice, of course, I'm often quite flexible about how students work, but I do believe that asking students to work in ways they resist can help them to learn things they otherwise wouldn't about composing. There can be something very Oulipo about the whole approach.

In addition to modeling activities to support composing (such as different techniques for brainstorming or revising or recognizing a new idea or realizing that you need to do more research), studio time provides space to build a shared sense that our class is composed of a community of writers who are making things over which they have some kind of control—but over which their control is not complete. When the things students make in a writing class are not only discussed but also created and revised in the communal setting of the classroom, I believe that students are more likely to see how they have both individual and, in some measure, *shared* ownership of the things (ideas, essays, slideshows, posters) made as a requirement for the class.

Studio time also provides opportunities for my students and me to work with specific features of familiar composing technologies, as well as to experiment with new-to-us composing materials and technologies. While many writing instructors avoid this practice, I find it immensely useful. In *Multiliteracies for a Digital Age*, Stuart Selber's most polemical chapter is about what he calls "a functional approach to computer literacy" because, as he acknowledges, there are several good reasons why writing instructors often eschew teaching functional computer literacy. These all circle around the idea that functional approaches to literacy emphasize discrete skills, decontextualize literate practices, and neutralize what are often interested political, social, cultural, and economic choices (32–35). But Selber goes on to argue that there are good reasons to spend classroom time on direct functional computer literacy instruction: to ensure that students can use digital writing tools well enough to effectively meet their educational goals (for example, formatting essays correctly or successfully submitting digital projects), to practice accepted digital social conventions (using formal email conventions

or participating well on discussion boards), to make use of specialized digital discourses (learning the jargon used in graphic design or in advanced web search functions), manage their digital lives (naming, managing, and backing up files or managing passwords), and to negotiate technological impasses well (assessing and addressing problems systematically or accessing help) (45–72). As Selber points out, students are often left to their own devices to develop these skills or seek assistance on their own (30). This system results in a rather hodgepodge approach that likely underserves all but the most motivated students. Similarly, in “Rhetoric’s Mechanics: Retooling the Equipment of Writing Production,” Jenny Edbauer Rice argues that Rhetoric and Composition’s historical distancing of our work from teaching Standard English grammar and mechanics since the late 1960s has shaped and reinforced our general reticence for teaching the technological mechanics of writing with computers (370–74). But, as Rice argues, this means that our students are potentially missing out on composing with the most rhetorically effective means of persuasion. By way of example, Rice turns to a community audio documentary project for which the teenaged participants could have been left to their own devices to figure out which audio recording and editing software to use. In order for their projects to appeal to their intended audiences, however, Rice explains that they needed to have professional-quality sound (and so needed to record in specific spaces and work with specialized audio editing software). The best way for participants to achieve the sound quality they needed was for the project leaders to teach them about sound quality and how to use the specialized software.

Although Selber and Rice are both focused on digital composing, their arguments can be generalized to nondigital composing tools and materials, as well. In short, studio

time offers informal opportunities for students and instructors alike to experiment with the affordances of the tools (such as laptops, software applications, paper pencils, pens, markers, and more) and materials (words, sounds, images, etc.) with which they compose and to turn to help files, user forums, and how-to websites and videos as needed. It might seem counter-intuitive to think that functional software instruction could open up spaces for play, but that is exactly what I think can happen. When instructors and fellow students model how to seek help and work through what Selber calls “technological impasses,” other students have the opportunity to develop more robust approaches to working with new writing tools and materials. And the confidence that comes from successfully working through technological and material difficulties helps to free students to experiment and play with their writing in ways that lead to new ideas for composing and new insights into the rhetorical work made possible through different modes and media.

My hope is that the technical, affective, and embodied knowledge I students can develop through writing studios will help them to work more confidently in writing situations outside of class. Studio time provides space for really practical, in-the-moment discussion, modeling of different writing activities among students, real-time feedback, trying on different approaches to writing with some support right there, and it can help to make new writing activities feel more familiar, more useful, more like students’ *own* writing practices. These embodied writing practices situate students to understand connections between writing and other kinds of making, to understand the world making that happens through writing.

Making *Things*: Writing (n.): Embodied Object (Or, Why Form/Media/Mode Matter)

Just as, in the previous section, I placed the activities associated with writing within a broader set of activities of making, here I want to situate things that are called *writing* or *compositions* or *texts* within a broader range of things. In her often-cited “Openings and Justifications” chapter, Wysocki argues, “When we see our writing as objects—objects to be seen, to be physically manipulated—and not, for example, as attempts to get abstract thought present in the most immaterial means possible (as is how I think we have often taught writing), then we can consider the kinds of embodied, temporal positions that we need to be able to see” (22). She uses the word *objects* to name how she wants us to see writing: as things that can in some measure be separated visually, tactilely, aurally, or otherwise from other things; as things that are made up of traceable other things; as things that can be manipulated (changed, taken apart, perhaps joined with other things). Although *thing* and *object* at first sound like overly general terms for naming writing, they have some scholarly legs.

Thing, for example, has been very usefully theorized. Literary theorist Bill Brown, who developed Thing Theory in the late 1990s and early aughts, uses Heidegger’s distinction in *Being and Time* between what is “ready-to-hand” and what is “present-at-hand” to distinguish what is an object from what is a thing, whereby objects are what we don’t notice—what is outside our focus or consciousness. The “thing-ness of objects” comes to our attention when there is “an interruption” in our use or interaction with them, or with their intended function. Brown has characterized people as “floating through objects” until something breaks or functions in ways we don’t expect it to—that is when an object becomes a thing. Anthropologist Ian Hodder makes the same

distinction but in a slightly different way: for him, objects are stable, set apart, separate; while things exist in context with other things—they are entangled, enmeshed in use and relationships, and they change. So there are “distinct objects” and “connected things” (10). For Hodder, objects are kind of like ideas, the way I described them above: pristine, abstract, Platonic. Things, however, are known through the context of their use. Like sentences, when you actually try to write the fuzzy-but-perfect one that’s buzzing through your mind, things are messier, more complex, and less obedient than objects. They depend on what’s around them for meaning.

While Brown’s and Hodder’s definitions of *object* and *thing* differ, they both point to a distinction not between kinds of nouns, but between kinds of attention we pay to them. This attention is key. For example, using Heidegger’s “ready-to-hand” and “present-at-hand” terminology, we emphasize that we want students to be able to step back from ideas, things, software, etc., and engage with them as present-at-hand: to examine them theoretically, critically, at a distance. Often, of course, this means dis-orienting ourselves from our usual ways of interacting with the world. We de-naturalize how to use Microsoft Word¹⁰ or what writing is or the roles of our default assumptions about gender, race, class, culture, etc. Interacting with what is present-at-hand is to pull both ourselves and the objects of our attention out of everyday work and use and to consider those objects, in some sense, in isolation from all else. Of course, we never do that absolutely: we’re still thinking about and discussing these things with knowledge of our everyday use of them and in relationship to how we might go about using them in context in the future. But with Brown’s thing-ness of the thing as the center of our

¹⁰ For example, by talking about Word’s default page, paragraph, and font settings, shortcuts, document templates, etc.

attention, it becomes temporarily set apart, like Hodder's object. The point of the critical distance that the present-at-hand helps us gain is mostly to inform a revised or improved readiness-to-hand as the thing-ness of the thing recedes, or as the separate object becomes a thing in context, as we turn to using the thing (again: ideas, language, analog things, digital things, etc.) perhaps in a different way, but with our focus on the intended outcome of our work instead of on the thing itself.

This navigation among readiness-to-hand, presence-at-hand, things, and objects follows lines similar to Selber's *Multiliteracies*. With functional literacy, students use technologies as tools for getting things done, like an initial presence-at-hand; with critical literacy, students question technologies as artifacts to critique, like a readiness-to-hand; and with rhetorical literacy, students become producers of technologies through reflexive praxis, like a re-contextualized presence-at-hand.

While these phases are not linear, they do represent movement among different kinds of understanding and interacting with things, particularly to make new things. This understanding can be rooted not just in theoretical comprehension but also in embodied interaction with and material understanding of the stuff of literacy: language and other symbolic systems, writing technologies (writ large), etc. This movement between theoretical and embodied understanding is actually an arbitrary distinction, much like the one between form and content. In "Making as Knowing: Epistemology and Technique in Craft," Ulrich Lehmann explores the deep connections between episteme ("structural reflection" based on theoretical understanding or intuition) and techne ("technical and material innovation" based on observation and experimentation):

In the history of philosophy this apparent division between abstract theory and experiential practice has often been only a rhetorical one, as the interest lay in discovering productive relationships between theory and practice and not in separating them into cognitive entities. Plato, for instance, spoke of knowledge as the necessary basis for the philosopher's craft of teaching or governing; for him *techne* constitutes an outstanding example of knowledge, so that crafts like carpentry or weaving might serve as models for structuring the acquisition of philosophical thought. Aristotle discussed the probability of *techne* or craft existing as an *episteme* under the auspices of practice that is connected dialectically to theoretical understanding. (150)

The two can, however, be productively discursively separated for the sake of "principal epistemological concerns," as we can ask, "How do we acquire craft knowledge? What conditions have to be in place for us to know? What are the limits to our knowledge both in practical (physiological) as well as theoretical terms?" (150).

My discussion thus far has encompassed two kinds of things: 1) the tools and technologies used for writing, and 2) the texts themselves that we write—but it is the latter on which I am focused in this section. I believe that through revision, in particular, writers can start to see their work as Brown's or Hodder's thing, something present-at-hand to pay attention to and so change. This kind of change is less possible when students are encouraged to see the form (5-paragraph essay) or media (ePortfolio website) of their writing as somehow natural, neutral, or unchangeable. And this is why Wysocki's definition of "new media texts" is so important:

[New media texts] have been made by composers who are aware of the range of materialities of texts and who then highlight the materiality: such composers design texts that help readers/consumers/viewers stay alert to how any text—like its composers and readers—doesn't function independently of how it is made and in what contexts. Such composers design texts that make as overtly visible as possible the values they embody. (15, emphasis removed)

Wysocki explicitly connects the embodied instantiation of writing (as noun) to writer identity through a conception of identity Stuart Hall articulated in an interview for *JAC: A Journal of Rhetoric, Culture, and Politics*. Hall begins,

There is one sense of identity as a fixed position, and another idea that identity is relative to the extreme. There is now a third position in the debate because I think those people have moved away from identity as process and have sometimes gone right over to the point where identity is nothing at all; it's a kind of open field where one just sort of occupies a particular identity out of habit. So it is that there is no fixed identity, but it's not that there's just an open-ended horizon where we can just intentionally choose. What that means is that there is no final, finished identity position or self simply then to be produced in the writing. Any cultural practice plays a role in the construction of identity. While it's true that you may have a very clear notion of what the argument is and that you may be constructing that argument very carefully, very deliberately, your identity is also in part becoming through the writing. (qtd. in Wysocki 20)

Wysocki explains, "For Hall, that is, 'we therefore occupy our identities very retrospectively: having produced them, we then know who we are'" (20). She continues,

It is not that we find our selves in work that we do because there was a unified self that preceded the work and that only needed being made present somehow; it is rather that the work makes visible to us what and where we are at that time: “I think only then” (continues Hall) “do we make an investment [in the produced position], saying, ‘Yes, I like that position, I am that sort of person, I’m willing to occupy that position.’” One could also just as easily say, “No, I do not like that position ... how can I rework it?”—but in either case the position has to be produced before it can be so judged. (20)

With all this in mind, she resolves that,

because in acknowledging the broad material conditions of writing instruction we then also acknowledge the contingent and necessarily limited structures of writing and writing instruction—people in our classes ought to be **producing** texts using a wide and alertly chosen range of materials—if they are to see their selves as positioned, as building positions in what they produce. (20, emphasis in original)

This is why the narrow range of options in ePortfolio that I discussed at the beginning of this chapter so dissatisfies me, and it is why I believe that we should teach multimodal writing as such. While there certainly are writing situations that merit using ready-made templates to design a website, I don’t think that a multimodal writing class should be one of them. If students are to alertly choose the range of materials they compose with, and through those choices, see themselves as positioned and building positions, they need to be able to make a full range of rhetorical choices in their work, including design choices that are rhetorically meaningful to their purposes for writing. The narrow options found in website templates don’t give writers a chance to make those kinds of choices.

Making Meaningful Multimodal Rhetorical Choices

While I firmly believe that multimodal writing must encompass both digital and nondigital work, I want to stick with my ePortfolio example of multimodal writing for a bit longer. (Nondigital multimodal writing is an important component of this project, but this example happens to be digital.) ePortfolio, like other content management systems (CMSs), is intended to make constructing website-like digital objects easier on students and other users. CMSs vary widely in terms of their user-friendliness, however—they can frequently pull us to regard them as present-at-hand objects that are removed from their context of use because they seem so insistently unusable. ePortfolio, for example, often demands not critical attention but frustrated attention, as in, “How the heck do I get this darn thing to do the seemingly-simple thing I want it to do? Why are commands labeled with such obscure terms? How did it make sense to anybody to embed *this* command *there*?” As an instructor, I am happy to invite students to reflect on their assumptions about how ePortfolio should work, to discuss what they already know about D2L and content management systems more generally, as well as social media applications and other kinds of production applications, etc. But it is difficult to develop functional or critical literacy using ePortfolio because the system continually pulls us out of goal-directed work into regarding the system itself.

However, I appreciate the very difficulty ePortfolio provides because it can encourage more instructors to teach HTML, CSS, and web hosting, since doing all that is often simply easier. It is even easier, though, to use one of the more popular CMSs, such as WordPress, Tumblr, Blogger, Google Sites, Wix, or Squarespace. While there’s a learning curve to using any of these platforms, they often feel more intuitive and more

usable to students who are already familiar with text editors, web 2.0, and social media applications.¹¹ While these platforms can also invite the kinds of frustrated conversations about the present-at-hand that ePortfolio frequently demands, my sense is that students tend to develop a functional literacy of these CMSs more quickly—and are therefore able to work with them ready-at-hand, uncritically, more quickly. And while these CMSs offer more options from their far larger pool of templates, WYSIWYG (what you see is what you get) content management sites remain similar to ePortfolio in that their options for visual design, particularly navigation, are more restricted than I want for my students, regardless of how the ePortfolio guru from my opening anecdote assumed they should be able to organize their work.

I admit that templated WYSIWYG web building applications can be helpful to novices because they can get nice-looking results so quickly, which can be an important confidence booster for students who strongly doubt their ability to develop good, working digital texts. And, like any website, templated WYSIWYGs can be really helpful when teaching students to view the source code: messing around with another web page's code is a great way to learn how HTML, CSS, and other languages work. But the options we see for design and navigation every day on the web deeply influence our sense of what looks good or clean or professional, of what feels usable. That shaping of our own and our students' taste, the boundaries of what we consider good design, is naturalized, often invisible, and highly ideological, just as Cynthia L. Selfe and Richard J. Selfe argued in "The Politics of the Interface" twenty years ago. That's why my ePortfolio trainer simply

¹¹ I want to acknowledge here that not all FYC students are already familiar with these applications, and that among those who are, there is a wide diversity of experience, knowledge, and interest in using these applications well.

couldn't imagine that a digital research project might best be presented without top- or side-bar navigation. I am not advocating ugly or difficult-to-use web design for its own sake, although when I have students who decide that the project they're making would best work as a website, the websites they build are, often, rudimentary. But this is necessary if students are to experiment with relationships between content and form, with the relationships they can build with their audiences or users, and with learning to work with what the Internet is, in part, made of: HTML and other codes.

A prime example of purposeful web design that could not be accomplished in a templated WYSIWYG web design application comes from a keynote address at the 2014 Computers and Writing Conference. In "Centers and Margins: Access and the Ethics of Openness in the Digital Humanities," Digital Humanities scholar Kimberly Christen Withey presented two digital projects, "Digital Dynamics Across Cultures" and the Mukurtu CMS. These projects are purposely designed so as not to be navigable or usable in the sense that templated websites are. "Digital Dynamics Across Cultures" in particular demonstrates this: the principle navigation for this project works through nodes spatially arranged across the screen to look like a web or network (not a linear navigation bar). Users are purposefully restricted from viewing or hearing select content, in keeping with the project's purpose of teaching users about Warumungu¹² culture: there are some things that are inappropriate for some users to see or hear. Christen Withey explains that use of photographs and digital video recordings of the Warumungu people she worked with must be "guided by a set of cultural protocols concerning the circulation, creation and reproduction of Warumungu knowledge and traditions," which restrict who should

¹² Warumungu generally live in the Northern Territory of Australia, and the group of people Withey has worked with for about ten years live in Tennant Creek.

view or hear what. For example, she points out that “some ritual songs we recorded could only be heard by women.” And “some photographs could only be viewed by particular family groups, or that particular video footage of ancestral sites could not be viewed by the uninitiated.” Thus, the site’s navigation “is designed to make Warumungu cultural protocols for the distribution, reproduction and creation of knowledge the primary logic” (Christen Withey and Cooney “Author’s Statement”).

By the general standards of web design allowed by WYSIWYGs and found in design textbooks and tutorials, this is bad design. But for this project and the relationships it builds among authors, participants, and audience/users, these choices are appropriate—even necessary. Similarly, the Mukurtu CMS, a “free, mobile and open source platform built with indigenous communities to manage and share digital cultural heritage,” violates some of the design norms to which Westerners are accustomed. And these very violations, again, are what allow the system to function in ways that follow Warumungu cultural protocols. Christen Withey and her team built the CMS because other available options don’t allow users to follow those cultural protocols. The composing environments of commonly used web design and content management software necessarily foreclose some design and composing options, just as they make others readily available. As Lisa Nakamura, Selfe and Selfe, Wysocki (“The Sticky Embrace of Beauty”), and others have critiqued, what we usually think of as “good design” is raced, gendered, sexually oriented, classed, and nationalized. This suggests to me that we and our students must carefully attend to the composing environments constructed by software applications, classrooms, and students’ own workspaces. Further, we must be able to critique what kinds of designs those environments encourage. I want to acknowledge that it is often

important for composing environments to fade into the background (for example, to be able to focus on producing writing), but it is equally important that we sometimes critically engage with composing environments. When we are looking to produce different kinds of writing or to interact with our ideas and work in new ways, it makes sense to work in different kinds of spaces.

A Look Ahead

Of course, “Digital Dynamics Across Cultures” and the Mukurtu CMS were built by a Digital Humanities expert on-site in Australia collaborating with Warumungu people. Novice digital writers and designers won’t make sites that look or function like this, especially within the context of one or two semesters of first-year composition (FYC). So when I advocate that students who make websites should do so from scratch, I also expect that they won’t look as polished as templated sites or be so thoroughly developed as “Digital Dynamics.” This is an example of how DIY craft is important to my teaching: it helps us to think deeply about the kinds of relations we want to build while working playfully and critically with materials—knowing all the while that it takes a lot of practice and revision before something you make is going to look polished. Craft emphasizes relatively slow, reflective work, while DIY emphasizes a robust, thrilling, bull-in-a-china-shop approach to giving things a try, possibly failing, and learning a lot along the way. I want students to develop or take up that resilient, experimental, trial-and-error-approach to making things from scratch that DIY crafters have.

Because of the particular histories and contemporary practices associated with craft and DIY (which I will discuss in more detail in Chapters Two and Three), DIY craft offers a framework that I think can help to coherently address a variety of issues with

which I want writing students and instructors to wrestle. Table One below outlines this framework and provides examples of how these issues might shape a writing class. Rows are composed of different perspectives from which we might engage the work and products of writing (material, technical, rhetorical, economic, and social); columns represent the different levels at which those perspectives shape my work as an instructor and the work students do in and for class (theoretical, pedagogical, and practical).

	Theoretical	Pedagogical	Practical
Material	Pay attention to the materiality of digital and nondigital writing tools and materials (computers, networks, software applications, paper, pencils, pens, etc.)	Assign projects without predetermined media/modes/materialities to encourage students to learn about different material engagements	Teach students to thoughtfully work across a variety of media/modes/materialities
Technical	Critically engage a variety of writing technologies	Get our hands dirty, learn how to learn to work with a variety of writing materials	Learn through experience what different writing materials might be used to do
Rhetorical	Learn that media/mode/material and design decisions are not neutral	Dig in to rhetorical design, ask rhetorical questions of projects	Make media/mode/material and design choices that support the rhetorical work of a project
Economic	Question received notions about the production and circulation of objects	Encourage an economy of skill sharing and collaboration	Build noncapitalist relations among students and with readers
Social	Develop a taste for and understanding of a larger variety of designs and texts	Open up the kinds of relations writers might build with audiences	Instill a serious sense of play (with materials, ideas, collaborators, and readers) about writing production

Table 1: A DIY Craft Framework for Composition

I write about each of the practices identified in Table One at different points throughout this dissertation. For example, the sections above discussing D2L's ePortfolio platform, "Digital Dynamics Across Cultures," and the Mukurtu CMS engage a rhetorical perspective across theoretical, pedagogical, and practical levels. My explanation above of the technological mechanics that are likely to come up during studio time in writing classes engaged a technical perspective across all three levels, as well. While this table doesn't necessarily reflect the organization of this dissertation, I hope that it helps readers develop a better sense of the project as a whole and of how the range of issues this project addresses come together.

In this chapter, I have situated multimodal writing as an opportunity for FYC instructors and students to re-engage the embodied experience and the materiality of writing. Embracing this opportunity means taking up as composing processes new activities and practices, trying out new composing tools and materials, working in new physical (nondigital) and digital composing spaces, and experimenting with new kinds of relations we might enact through the work we produce. I believe that craft and DIY together provide a framework for drawing each of these elements together into a coherent pedagogy for teaching writing.

I begin Chapter Two by considering how craft has traditionally been taken up in Rhetoric and Composition, through the *techne* tradition. This tradition situates craft as a kind of wily knowledge put to productive ends. However, as I will argue, the *techne* tradition has allowed us to separate knowledge from production: this is, I think, one of the contributing factors to our current disembodied approach to teaching writing. Seeking to connect knowledge to production, then, I turn Craft Studies scholarship and examine

several examples of craftspeople at work. Using these examples, I explain how craft can help us to approach process and medium in ways that are useful for making sense of the wide varieties of materials and ways of working with them that multimodal writing invites us to negotiate. I also explore the values associated with craft practice and consider how those values shape the products and circulation of craft work.

One of the values typically associated with craft production is that it is removed from capitalist enterprise and industrial production. Indeed, I value craft in part because crafted objects are hand-produced, beginning to end, by human makers. Of course, these humans could very well be working with simple or complex tools, machines, computers, or even robots. But craft production suggests that there is a human making thoughtful, meaningful decisions about the work those tools and machines are doing, as I discuss in Chapter Two. I begin Chapter Three, however, by complicating this notion. Indeed, we live in a world seemingly saturated by capitalism and industrial production, and so in this chapter I seek to nuance common-sense notions of economy. This move is important to my project because economic relations are so tightly bound up in our subjectivity and in our material relations with others. This move also brings DIY into focus: DIY is all about amateur material-cultural production and the political and economic subjectivities and communities that can be built through that work. DIY and craft together help me to take a much closer look at multimodal composing processes and products in the wild, which I then develop for use inside writing classrooms.

Chapter Four turns our attention back to some of the larger forces at work in those classrooms. In K–12 education, writing instruction is necessarily shaped by the standardized writing tests that are part of state and national assessments and of college

entrance exams. The kinds of writing demanded by these tests provide students with very limited experience of many of the larger rhetorical, ethical, and material concerns that are central to FYC and, more broadly, to most academic, civic, and workplace writing situations. This chapter considers, then, how DIY craft pedagogical practices can help first-year college students hold on to what remains useful from their previous writing practices while adapting to the new demands of college writing. And because one of the necessary demands of multimodal composition is that composers make meaningful choices regarding medium, I then work through several examples of DIY crafts to demonstrate how we might take a more expansive approach to materials.

Chapter Five focuses in more tightly on the classroom activities and practices that enact a DIY craft pedagogy. I provide examples from two kinds of classes: a 200-level course on rhetoric, writing, and culture; and a 100-level FYC course focused on research writing. I explain the nature of the in-class activities and assignments I have used in these classes and connect the goals for that work to the ways that DIY craft shapes productive practice. I also provide some specific frameworks for building activities and assignments. In the final section of this chapter, I step back to consider more broadly the ways in which a DIY craft pedagogy might shape writing classes—the work that might be done in them, the relations that might be built during them, and the subjectivities that students might develop through them.

Chapter Two: Craft, *Techne*, *Poiesis*

In English departments, craft as such usually only comes up in discussions of Creative Writing. These discussions center around form, technique, and quality. While Creative Writing is the branch of Writing Studies that discusses craft explicitly, I think that most writers and writing teachers—regardless of what kind of writing they teach—would agree that there is a craft to writing, and that writers can develop in that craft. I also believe that the way craft is discussed in Creative Writing is interesting and potentially important for Rhetoric and Composition. This field’s attention to craft—to how a piece is put together; how discrete sections of a poem, short story, or novel are developed; why a writer might choose a particular genre or form and how that writer might make use of and break that genre or form; why a writer might make particular word choices; etc.—is differently codified than ours in Rhetoric and Composition. This is likely partly due to the different histories of the fields and partly due to students’ differing motivations for taking an Introduction to Composition class versus for an Introduction to Creative Writing class. There is much we can learn from the ways in which our colleagues in Creative Writing talk about craft; my sense is that they tend to spend much more time helping students develop a hands-on sense of the “stuff” their writing is made of: words, rhythms, tones, textures, lines, narrative arcs, etc.¹³ That said, I am going to focus my discussion of craft outside of its use in Creative Writing. While scholars in both Creative Writing and Rhetoric and Composition are already working to develop a better understanding of what our fields can learn from each other, I want to start a different conversation: one that explores how Craft Studies’ sense of craft, of working with tools and materials to make

¹³ See Bishop, Hesse, Johnson and Pace, and Mayers.

useful things, might help us to engage materiality, identity, embodiment, technology, community, and economy in ways that would benefit our theories and pedagogies of writing, and so our students. (Recall my discussion of Brown, Hodder, and Heidegger in Chapter One. The kinds of things I want students to make are those that can function as ready-to-hand or put to work as needed—but that also merit the attention of being present-at-hand, that reward theoretical or critical engagement.)

In Rhetoric and Composition, if the term *craft* is used, it is usually in relationship to the ancient Greek term *techne* and rooted in what Socrates, Plato, and Aristotle had to say about *techne* as it relates to rhetoric and philosophy.¹⁴ *Techne* is an important component of our understanding of craft more generally, and so I will spend some time in this chapter tracing the history of *techne* and how it has been used in the field more recently. My larger project in this chapter, however, is to demonstrate what Craft Studies, a discipline largely rooted in the visual arts and design, offers to enhance our understanding of craft-as-*techne* in Rhetoric and Composition. The perspective offered by Craft Studies helps me to articulate why craft-beyond-*techne* is important: Craft Studies scholarship helps us to better see potential material, economic, social, and embodied effects of craft practice that we can harness in composition pedagogy.

Craft-as-Techne

Definitions of *techne* often include wide-ranging discussions of etymology and significant historical uses of the term, as well as arguments over how to particularly characterize its connections to our contemporary term *technology*. Like craft, *techne* is a

¹⁴ Or to technology (usually in reference to Heidegger’s “The Question Concerning Technology”), but I will spend time on that in a later chapter. Here, I am focused on *techne*-as-craft and not *techne*-as-technology.

site of ongoing debate instead of a word with a narrow meaning. So in this section, I am seeking to outline the key components of the debate as it relates to Rhetoric and Composition.

In *Of Art and Wisdom*, David Roochnik traces *techne* to its Indo-European root. *Tek* is a verb that means “to fit together the woodwork of a woven house” (19). *Techne* originally referred to the knowledge or skill possessed by a *tektōn*, a woodworker. *Techne*’s origins in woodworking are perhaps surprising, considering that activities like metalsmithing were comparatively more important, but Roochnik explains that carpentry is in part distinguished from activities like smithing by its seemingly more rational character: “[Carpentry] demands a capacity for intellectual solution of determinate tasks, some rudimentary knowledge of statistics, in general an ability to combine and improvise” (19). In other words, although *techne* came to include the knowledge or skill held by metalsmiths and other craftspeople—including rhetoricians—whose work is less straightforward than carpentry, its definition includes a tension between knowing how to follow steps to completing a straightforward task and knowing how to improvise in the course of completing less rational or predictable tasks.

In both the *Physics* and the *Nicomachean Ethics*, Aristotle defines *techne* by contrasting it with other terms. In the *Physics*, Aristotle compares *techne* to *physis* (natural growth), emphasizing that things made through natural or by biological processes are different from those made through *techne* because of their different causes: “Again man is born from man but not bed from bed. That is why people say that the shape is not the nature of the bed, but the wood is—if the bed sprouted, not a bed but wood would come up” (II.193b.7–12). In other words, nature creates itself, but art or craft must be

created by an outside agent, such as a craftsman. Nature also takes the shape of its own material (wood grows in the form of a tree), not the shape of made objects (wood does not grow in the form of a bed or a house or a ship). It takes a craftsman's knowledge and skill to turn that tree into a bed.

In the *Nicomachean Ethics*, Aristotle compares *techne* to *poiesis* (making) and *praxis* (acting), arguing that making and acting are different from each other, and that *techne* is knowledge or skill necessary to making, not acting: "making [*poiesis*] and acting [*praxis*] are different . . . ; so that the reasoned state of capacity to act is different from the reasoned state of capacity to make. Nor are they included one in the other; for neither is acting making nor is making acting" (VI.4.1140a1–5). Above, I referred to craftwork as productive activity. Aristotle explains that *techne* allows for production or making (*poiesis*) in the same way that practical thought (*phronesis*) allows for action (*praxis*). This way of understanding knowledge and its use is based on the broad distinctions Aristotle makes between theoretical, productive, and practical knowledge: theoretical knowledge encompasses philosophy and what have now become the sciences, practical knowledge covers political and ethical action, and productive knowledge includes the arts and crafts, such as rhetoric, the fine arts, construction, agriculture, and medicine.

Aristotle's definitions of *techne* echo the term's original tensions between more straightforward forms of making (like woodworking) and those that are less so (like medicine or agriculture). In Roochnik's criteria for the original meaning of *techne*, the third criterion emphasizes predictability: "It is reliable. The *tektōn* can be counted on to perform his [*sic*] tasks correctly" (20). Once she has amassed enough experience with the

specific qualities of different woods and their performance in different conditions, a *tektōn* is likely to be able to consistently produce consistently good outcomes through her woodworking. Not only will she perform the correct actions, etc., but also the end product will be successful. However, even though both Socrates and Aristotle¹⁵ call medicine a *techne*, the outcome of a doctor's work is far less predictable than that of a woodworker. As Roochnik makes clear, doctors work with a larger complex of materials than wood, woodworking tools, and environmental conditions: they are concerned with bodies, beliefs, habits, microscopic germs, diseases, and medicines. Even a great doctor cannot control the outcome of her work if patients come to her when an infection has spread too far or if they don't follow her advice about tending their wounds and taking medicine as directed (46).

This tension regarding the predictability of the outcome of putting one's knowledge or skill to work has been expressed in *techne* scholarship as the difference between a *techne*₁ and a *techne*₂. Roochnik points to Alexander of Aphrodisias' commentary on Aristotle's *Topics* as the point where this inherent tension in *techne* is codified into a split:

For the function ... of the physician is to use all the possible means of saving, but it is not saving. For if someone were to say that this is the function of the physician, then he who is not a physician would be a physician, for often those who are not physicians save those who are ill, having with good fortune applied something to them. And it is also possible that physicians may fail to save. (qtd. in Roochnik 54)

¹⁵ Socrates does so, for example, in Plato's *Gorgias* (464b–501a) and Aristotle, in the *Nicomachean Ethics* (I. 1094a5–10).

Roochnik explains that “in a *techne*₁, end is identical to function; in a *techne*₂, it is not. The function of rhetoric is to use all the available means of persuasion. It is not to persuade, for if it were, then failure to do so would disqualify even a good orator from having a *techne*” (54). A *techne*₁ is defined by its straightforward outcome and its ability to be mechanically taught and mastered. It is in this “systematic handbook” sense of *techne* that rhetorical instruction has been disparaged, from Plato on down through the ages. In *Against the Sophists*, Isocrates criticizes teaching rhetoric as a *techne*₁ like so:

I am amazed whenever I see these [Sophists], who fail to understand that they are applying the paradigm (*paradeigma*) of a fixed (*tetagemenē*) *techne* to a creative process, setting themselves up as instructors of youth. For who except them does not know that, on the one hand, correct spelling is stable and remains unchanged, so that we continually and always use the same letters for the same purpose, whereas, on the other hand, when it comes to speeches (*logoi*), the situation is exactly the opposite. (qtd. in Roochnik 74)

Just like a doctor curing an infection, a rhetor making a successful speech involves negotiating factors outside of one’s control. Imagine yourself in a Greek gymnasium or forum: the success of your speech depends, of course, on smart decisions about the words you are going to say to the people who will likely be present and on the manner in which you deliver them. But it is also contingent on a host of other factors, such as the actions and words of others during your speech. A prescribed set of rules or steps is unlikely to work once, much less every time. As Roochnik explains, this *techne* is “not as fixed and determinate, and as a result, rigid procedures invariably attaining correct results cannot be established. Some measure of chance may interfere with the workings of [a *techne*₂], and

proper exercise of its function is compatible with failure” (55). Even a seemingly perfectly prepared speech, as any orator can attest, can fail to have its planned effect. The same goes for infections that are correctly treated by a doctor or for the ship of a seasoned sailor beset by a tempest: proper application of knowledge or skill represented by a *techne*₂ doesn’t necessarily mean success.

We can understand the much more recent history of Rhetoric and Composition along these lines: many people (the popular press, some scholars working outside the field, makers and proponents of standardized tests) treat writing as a *techne*₁: a straightforward skill, not much more than following conventions of spelling, grammar, punctuation, and usage. This thinking echoes through writing handbooks, and yet many of those handbooks themselves insist that there is more to successful writing than following rules. (And so do most writing teachers, and so does almost anyone else who undertakes a careful consideration of writing.) Writing teachers attempt to teach writing as a *techne*₂: a practice that necessarily includes negotiating complex factors outside of one’s control, a practice that can fail despite following all the rules or succeed despite—and sometimes, even *because of*—breaking some of those rules. When writing teachers object to teaching grammar and mechanics, engaging with Stuart Selber’s functional literacy of technology or covering what Jenny Edbauer Rice calls the digital mechanics of writing,¹⁶ they are objecting to the *techne*₁ status of the parts of writing that can be covered in a handbook. However, as anyone who has attempted to really parse the rules of grammar and mechanics or who has used a computer for long enough knows, there are always contingencies, always exceptions to the rule or bugs in the program. The line

¹⁶ See my discussion of Selber and Rice in Chapter One.

between a *techne*₁ and a *techne*₂ isn't a clear one: what appears to be straightforward isn't always so.

Janet Atwill's discussion of *techne* in *Rhetoric Reclaimed* mirrors this. She bypasses Roochnik's two-*techne* solution in favor of emphasizing the active contingency of *techne*, giving primacy to much of the realm covered by Roochnik's *techne*₂ by tracing examples of craft knowledge and skill put to use throughout the Greek mythic tradition. Atwill's three criteria for *techne* in relation to that tradition emphasize the risk of practicing a *techne* by focusing on the opportunities—even the necessities—for change presented to someone attempting to put productive knowledge to work. Atwill's criteria specify:

- 1) A *technē* is never a static normative body of knowledge. It may be described as a dynamic (or power), transferable guides and strategies, a cunningly conceived plan—even a trick or trap. This knowledge is stable enough to be taught and transferred but flexible enough to be adapted to particular situations and purposes.
- 2) A *technē* resists identification with a normative subject. The subjects identified with *technē* are often in a state of flux or transformation. For example, when an art is employed or exchanged, characters frequently change their identity. They cross the boundaries that separate animals from humans and mortals from immortals. Since a *technē* is always transferable, no matter how brilliant the plan or strategy, it is never confined to a specific human or god. In other words, *technē* is never "private" knowledge, a mysterious faculty, or the product of unique genius.

- 3) Technē marks a domain of intervention and invention. A technē is *never* knowledge as representation. Technē appears when one is out-numbered by foes or overpowered by force. It not only enables the transgression of boundaries but also attempts to *rectify* transgressions. (48, emphasis in original)

These criteria emphasize *technē*'s concern with "what could be otherwise," which Atwill refers to as "Aristotle's version of contingency" (173). As her second and longest criterion demonstrates, the contingency involved in *technē* includes the subjectivity of someone who uses a *technē*: one who practices a *technē* is potentially in a state of flux through personal transformation or a repositioning of boundaries and relationships through "intervention and invention."

The primary myths illustrating Atwill's sense of *technē* tell us of gods who transgress boundaries and shift identities: Prometheus, who steals fire from heaven and delivers it to humans; Hephaestus, who overcomes his physical limitations to smith clever and useful tools and machines, even to ensnare his wife Aphrodite; Hermes, a messenger and inventor who created the lyre the day he was born; and Metis, who morphs from goddess to animal to fire or water and whose name means "cunning intelligence." Atwill also turns back to Homeric myths in which the tool, or *organon*, is characterized as both an instrument to be manipulated and an extension of one's own body: "In other words, the organon 'transmits and amplifies the force of man [*sic*],' " which "suggest[s] that technē is inseparable from the subject it enables, and, reciprocally, the intervention enabled by technē redefines that subject" (54, emphasis in original). For the gods of Greek myth—as for doctors, rhetors, and even woodworkers—learning and putting to use productive knowledge is a bodily and not just intellectual experience. As

Pierre Bourdieu articulates, what is “learned by body ... is not something that one has, like knowledge that can be brandished, but something that one is” (qtd. in Atwill 59).

Importantly: practicing a *technē* reshapes one’s subjectivity.

However, very early in the introduction to *Rhetoric Reclaimed*, Atwill asserts, “What is at stake in a *technē* is neither subjectivity nor virtue” (2). This seems like a strange statement, given my discussion of her work thus far. But Atwill’s larger project is to critique of the Western humanist liberal arts tradition.¹⁷ She argues that this tradition claimed rhetoric as a realm of knowledge to be mastered, harnessing rhetoric to shape students into Quintilian’s “good man speaking well” while marginalizing Tacitus’ characterization of rhetoric as “an associate of sedition, a goad for the unbridled populace” and “devoid of reverence” (5). Unlike the liberal arts tradition, with its interests in “protecting a specific set of values from the forces of time and circumstance,” Atwill sees in the “ancient *logōn technē* tradition” a concern for “challenging and recalculating standards of value” (2). Atwill contends that rhetoric’s power to create changes that upend established values was stifled by the liberal arts tradition, a tradition that concerned itself instead with using a stable body of knowledge to shape predictable subjects characterized by conservative virtues. In making this argument, Atwill asks us to consider what it might mean to emphasize the productive nature of rhetoric as a *technē*.

¹⁷ It is important to note the context in which Atwill was writing: *Rhetoric Reclaimed* was published in 1998, so her critique of the liberal arts tradition is very much shaped as an answer to conservative backlash against multicultural movements in American universities and the broader culture in the 1980s and 90s. She is concerned with “the character of the social identities of gender, race, and class and the nature of the social ties by which we are bound” and “the type of subjectivity produced by the *paideia* of a multicultural curriculum (that subjects values, views of reality, and relationships to cultural and political authority)” (3, 13).

With this move, I see Atwill emphasizing a necessary relationship between *techne* and *poiesis*. As a realm of knowledge, a *techne* can be corralled, but as productive knowledge put to use through making, a *techne* enacted through *poiesis* is more difficult to control. “In the domain of productive knowledge,” Atwill writes, “subjects are ‘users,’ not ‘knowers’; and every different use of a *technē* defines the subject differently. Subjects of productive knowledge are defined by social exchange rather than private possession” (185). Rhetoric’s productive power, then, helps to reshape the subjectivities of those who practice it and allows them to create and seize moments of social and political opportunity to redraw lines of power. This is why neither subjectivity nor virtue is at stake in a *techne*: there are many possible subjectivities that may be created or inhabited, and there are multiple competing virtues that might be enacted through production.

I want to leverage Atwill’s claims in order to argue that our focus in Rhetoric and Composition on *techne*/knowledge apart from *poiesis*/making has contributed to the opacity of composing processes. Further, it prevents us from teaching writing as a fully embodied practice. When we pay attention to both craft knowledge and craft production, we can begin to understand how students might negotiate contingencies and opportunities to bring about “what might be otherwise.” We can also work through the theoretical and practical aspects of why students might work to bring about such things. As I will explain in more detail below and in Chapter Three, greater attention to *poiesis* in conjunction with *techne* will allow us to better help students negotiate the many subjectivities and values they might try on or enact through their work.

Some elements of the subjectivity Atwill critiques are apparent in another important text on *techne*, Martin Heidegger’s “The Question Concerning Technology.” I

will close this section, then, using part of Heidegger's essay as an example of the normativity produced through the tradition Atwill critiques. Heidegger's conception of *techne* addresses the connections between it and *poiesis* that I am interested in, but it also separates both *techne* and *poiesis* from real people and the hard work of making. This turn will help me to situate the rhetorical tradition of *techne* scholarship within another tradition through which to examine *techne* and, importantly, *poiesis*: craft.

In "The Question Concerning Technology," Heidegger warns that the essence of technology is enframing, through which the world reveals itself as standing-reserve. In other words, when we see the world through technological eyes, we see it as made up of resources to exploit in the service of technology. While I would argue that one of the ways practicing a craft influences us is, in fact, to approach the world thinking about what we might do with what we find in it, Heidegger's "technology" and my "craft practice" bring different attitudes and concerns along with the question concerning "what might I do with this material?"¹⁸ More importantly for me here, I'd like to take a closer look at the way Heidegger characterizes *techne* in what he believes was its original form in ancient Greece. At the end of "The Question Concerning Technology," Heidegger removes *techne* and *poiesis* from the realm of knowledge enacted by actual craftspeople through processes of making, idealizing it in a way that disembodies craftworkers and the things they make. Because of the moves Heidegger makes in this passage—and their value to my argument here—I quote him at length:

¹⁸ I will argue later in this chapter that digital technologies can absolutely be used as craft tools, but I also believe that the material, economic, and social concerns that are central to craft practice work against Heidegger's notion of enframing.

There was a time when it was not technology alone that bore the name *technē*.
Once that revealing that brings forth truth into the splendor of radiant appearing
also was called *technē*.

Once there was a time when the bringing-forth of the true into the
beautiful was called *technē*. And the *poiēsis* of the fine arts also was called
technē.

In Greece, at the outset of the destining of the West, the arts soared to the
supreme height of the revealing granted them. They brought the presence ... of
the gods, brought the dialogue of divine and human destinings, to radiance. And
art was simply called *technē*. It was a single, manifold revealing. It was pious,
promos, i.e., yielding to the holding-sway and the safekeeping of truth.

The arts were not derived from the artistic. Art works were not enjoyed
aesthetically. Art was not a sector of cultural activity.

What, then, was art—perhaps only for that brief but magnificent time?
Why did art bear the modest name *technē*? Because it was a revealing that
brought forth and hither, and therefore belonged within *poiēsis*. It was finally that
revealing which holds complete sway in all the fine arts, in poetry, and in
everything poetical that obtained *poiēsis* as its proper name.

...

Could it be that the fine arts are called to poetic revealing? Could it be that
revealing lays claim to the arts most primally, so that they for their part may
expressly foster the growth of the saving power, may awaken and found anew our
look into that which grants and our trust in it? (34–35)

Here we see Heidegger elevating the knowledge used to produce craft objects to a fine art, but this understanding of *techne*, common in Western idealizations of ancient and classical Greece, participates in a fundamental eliding of realities of craft practice and the fine arts. While much of the rhetorical and philosophical *techne* traditions tend to focus on building, woodworking, medicine, shipbuilding, etc.—all fairly modest *technes* compared to the fine art Heidegger refers to here—he uses his philosophical argument about modern technologies to glorify what likely includes Greek public architecture, sculpture, and pottery (and perhaps poetry and theater). In their book *Artful Crafts: Ancient Greek Silverware and Pottery*, archaeologists Michael Vickers and David Gill argue that this attitude toward Greek material culture began during the sixteenth century and developed through the eighteenth and nineteenth centuries.

Most of the fine metalwork from the Classical and Hellenistic periods had been lost to history (plundered, melted and reused, etc.), but the pottery survived (55–76). In its original context, this metalwork was much more valuable than the pottery. Vickers and Gill support this claim by going over records noting the value of household and temple goods and by pointing out that many of the motifs of pottery decoration are skeuomorphic references to precious materials (including silver, gold, and other metals, as well as ivory and precious gems), demonstrating the difference in their value at the time (106–23). In the sixteenth century, however, Thomas More’s Utopians “were systematically conditioned to despise precious metals” and revere more humble materials (77–78). This trend continued in the Modern period, and by 1890, William Morris’ *News from Nowhere* could plausibly describe “Banded-workshops” at which,

folk collect to do handwork in which working together is necessary or convenient; such work is often very pleasant. In there, for instance, they make pottery and glass ... there are a good many such places, as it would be ridiculous if a man had a liking for pot-making or glass-blowing that he should have to live in one place or be obliged to forgo the work he liked.... As to the crafts, throwing the clay must be jolly work: the glass-blowing is rather a sweltering job; but some folk like it very much indeed. (qtd. in Vickers and Gill 78)

In these Utopian societies, gold and silver held an inverted status with earthier materials: clay, glass, and stoneware were esteemed, while fine metals were associated with lower classes (80). As Vickers and Gill contend, by the eighteenth century in Europe and North America, “there had been ... a change in taste which favoured simplicity in design and a change in the perceived role of the artist. Art ceased to be simply a means by which individuals or institutions could display their wealth and influence” and became one of many ways through which people could express themselves (80). Vickers and Gill point to the popularity of “art pottery” associated with the American Arts and Crafts Movement as one example of this shift: during the mid-nineteenth century, “the act of painting pottery itself became socially acceptable” among the fashionable classes, as though it had not been before (80).

Vickers and Gill point to a “growing antiquarian interest in ceramics of all kinds” as part of the trend of Greek pottery’s increasing importance in the historical imagination (81). The archaeologists go to great lengths in the second chapter of their study to establish that pottery and potters specifically—and the vast majority of Greek artisans generally—were not highly valued in Ancient Greece, although the *products* of fine

metalworkers were prized. For nineteenth century Westerners, however, “It was ... quite reasonable ... to believe that ‘fine ceramics could only come from the labours of independent artists using new technical knowledge with the pure objective of making beautiful [as opposed to useful] things” (82). And by the mid-twentieth century, “it could be stated with absolute confidence that ‘a potter must be an artist’” (83). But Vickers and Gill are adamant in their argument that craftspeople working in ancient Greece did not enjoy status or power and that the respect craftspeople enjoy from the modern period forward is a new phenomenon. “Rousseau’s *Émile: ou de l’éducation* (1762) was ... a seminal work, in that the well-born hero is taught by actually making something,” while Plutarch’s description of the role of artisans in ancient Greece was quite different: “It does not necessarily follow that we esteem the workman because we are pleased with the work.... No well-born youth, having seen the Zeus at Olympia, would wish to be a Phidias” (95).

Extrapolating from Vickers and Gill’s work, I believe that it is safe to say that Heidegger wrote in a period of great respect for ancient Greek culture and for the surviving elements its material culture. But this respect for Greek fine arts is based on what Vickers and Gill contend is a fundamental misunderstanding of the place of the arts and artisans—particularly those working in ceramics, earthenware, and stone—in ancient Greek culture. The aesthetics of surviving Ancient Greek material culture fit well with modern sensibilities, but those surviving pieces weren’t the objects most highly prized in their original context. Further, they don’t necessarily look today the way they did in their original context: sculpture in particular has changed. In 2003, German archaeologist Vinzenz Brinkmann debuted his painted plaster reproductions of Classical Greek

sculpture at the Glyptothek museum in Munich. For *Smithsonian Magazine*, Matthew Gurewitsch writes of Brinkmann,

Armed with high-intensity lamps, ultraviolet light, cameras, plaster casts and jars of costly powdered minerals, he has spent the past quarter century trying to revive the peacock glory that was Greece. He has dramatized his scholarly findings by creating full-scale plaster or marble copies hand-painted in the same mineral and organic pigments used by the ancients: green from malachite, blue from azurite, yellow and ocher from arsenic compounds, red from cinnabar, black from burned bone and vine.

Brinkmann's painted replicas might seem gaudy to contemporary Western eyes—especially those that have been trained to prize clean whiteness, whether it's in marble, modern art, print, or web design. But the palette of Greek sculpture was decidedly colorful. In short, Greek art in its time didn't conform to the standards to which we hold it today.

Thus the Greek arts Heidegger might have pictured as he wrote likely didn't represent for the Greeks what he (or we) might assume. His discussion of *techne* is situated in a historical set of assumptions that likely over-estimate the esteem of artisans in Greek culture. Suffice it to say, the story of an ancient Greek cultural golden age has frequently been used by Westerners seeking an idealized cultural origin story. This narrative was supported by early archaeology in Greece, but it is less so by current archaeology, as Vickers and Gill and Brinkmann demonstrate. In order to dig into the lives, knowledge, and work of craftspeople in ancient Greece, then, I am next going to turn to an archaeological study of pottery workers. This will help us to develop a more

complex understanding of what it meant to practice a *techne* in Greece. With this in mind, I will then argue that paying attention to craftspeople at work makes obvious the shortcomings of understanding craft (and, ultimately, composing) primarily as knowledge (*techne*). In particular, I advocate for paying increased attention to its productive dimension (*poiesis*). As I argued in Chapter One, process pedagogy and other production-focused movements in Rhetoric and Composition haven't satisfactorily accounted for writing practice and activities, the *poiesis* of writing. And so, finally, I will turn to Craft Studies scholarship to begin explaining why I find that to be a more useful approach to understanding productive practice.

A Look at Craftspeople Working in Ancient Greece

Despite our contemporary image of noble Ancient Greek craftsmen, they did not typically enjoy a high place in society. In their reading of Justin, a Latin historian of Alexander the Great, Vickers and Gill write that “to be a potter was not a praiseworthy calling—on par with rent-boys; indeed, ‘rough trade’ seems to have been a step up from ‘vile profession’” (96). Highly skilled workers were, of course, valued, but Vickers and Gill don't find archaeological or written evidence for the “exaggerated claims for high status” that have been made. “Thus,” they find that Kittos and Bakchios, who were high-status Athenian potters, “are thought to have made the containers for the prize oil at the Panathenaic games.... [But] while some individuals are given full citizenship, the potters are only granted citizens' rights for as long as they remain at Ephesus” (96). Metalsmiths, who worked with inherently more valuable materials than potters, were more highly regarded than potters. But even they didn't necessarily enjoy high social status: while very skilled gold- and silversmiths used their artistry to “add to the mere bullion value of

precious metal,” many of them “will have been slaves, often working for a household, fulfilling its requirements for plate” (101). Part of the reason for this low status of craftworkers resides in how the Greeks thought about cleanliness, as this section will in part explore.

The production of cultural objects, such as pottery, sculpture, architecture, and fine metalware, is dirty and dangerous work. Although much of the danger of craft production has been mitigated through the centuries with the invention and refinement of safer and more reliable tools, machines, materials, and processes, craftspeople today know that there is risk in production: pots can break in the kiln, stone might fissure as it’s being carved, a building’s foundation could give way if the ground shifts. In practice, Heidegger’s “poetic revealing” entails quite a lot of not-so-poetic negotiating chance. Although work is inherent to productive endeavors, the definitions of *techne* that we usually emphasize in Rhetoric and Composition through the rhetorical and philosophical traditions rarely focus on the very real labor that is involved in making something. But for those who practice a *techne*, from novices to master craftspeople, work—not theory or idealized knowledge—is at the core of what they do. This is why taking up the relationship between *techne* and *poiesis* is important. In short, it’s time to get our hands dirty.

Archaeologist Christine Smith’s *Controlling Miasma: The Cult Practices of Greek Craftspeople from the Archaic through Hellenistic Periods (6th–2nd c. BCE)* studies the archaeological, literary, and historical remains of beliefs, myths, rituals, and cult figures important to craftworkers in and around Athens and Attica. Smith argues that craftworkers participated in worker or industrial cult practices “such as prayers and

apotropaic devices ... to avert malign influences” on their work processes and products (1). Ancient Greeks, including craftworkers, understood these malign influences to be fundamental to craft activities like cobbling, metallurgy and metalsmithing, pottery, and sculpting because these activities involve some degree of danger or risk, and because the processes for acquiring materials and working them into final products are dirty, messy, and can even produce toxic byproducts.

Smith identifies *miasma* as the ancient Greek signification of ritual pollution or uncleanness. *Miasma* was associated with social and religious transgressions and improprieties, as well as with environmental pollution: “Industrial activity is extremely dirt-producing, resulting in smoke, debris, and poisonous residues. For example, kilns are frequently located in or near cemeteries in the Greek world,” which can be “attributed to a desire to keep a dangerous process outside the city” and to “a desire to keep all the ‘polluted things’ together” as far away as possible from a city and its people (129). Importantly, then, *miasma* connected actual physical dirtiness (such as pollution) with undesirable or unclean physical states or materials (including human fluids, disease, and death):

Pollution was a particular concern for craftspeople because many of their jobs—quarrying into the earth for stone, digging for clay, or constructing pits for bronze casting—brought them into contact with chthonic deities, spirits who inhabited the underworld. These spirits were dangerous when angered, and represented the ultimate form of pollution.... The power of these spirits ... seems to stem from some sort of sacrilegious disruption, which in turn allows them to affect, usually to wreak havoc on, various human and cosmic relations. (119)

Worker cults tried to curry favor with these deities “through the elimination of dangerous sources of *miasma*” by undertaking “rituals, sacrifices, offerings, festival participation, and other cult activities” (116). These cult activities were connected to state cult activities through sacrifices made to worker-affiliated gods like Hephaestus, Prometheus, and Athena Ergane¹⁹ and craft-related civic festivals held to protect both craftspeople and the inhabitants of the city: festival activities like “torch-races and other fire-renewal rituals cleansed the city of pollution, either from transgressions or hazardous contact with chthonic forces, while simultaneously appealing to the craft divinities for future protection” (121). Similarly, craftspeople sometimes made official dedications inscribed on votives to be dedicated in civic religious sanctuaries (official religious sites maintained by the state), offering thanks to the gods “for past successes and physical safety, or pray[ing] for protection in the future from polluting and other dangerous influences” (121).

In addition to associating with state cult activity, craftworker cult practice included attending to worker-focused shrines and making sacrifices at pyres in and around industrial areas (away from the city center and separate from state religious sites). Archaeological evidence indicates that curse tablets (lead tablets inscribed with curses or magic spells) were used to influence one’s enemies by appealing to chthonic deities in writing and then delivering the message to the deities by burying them in the ground, sometimes in cemeteries. Smith points to one example, a third century Sicilian tablet directed at craftsmen, inscribed with the words, “I bind the workshops of these men

¹⁹ This is Athena’s persona as the patroness of crafts or protector of craftsmen; she is sometimes especially associated with weaving, although Hurwit, in *The Athenian Acropolis*, points out that Sophocles called her “the goddess of those who work ‘on the anvil with heavy hammer’” (16).

... so that they may not be productive but be idle and without luck” (93). In other words: Dear gods, make sure that all the things people in this workshop *can't* control *do* go wrong.

And many things could go wrong. Inside workshops, icons of visiting gods and apotropaic imagery were used to ward off chthonic deities (121). In the “Kiln Poem,”²⁰ potters and their work are plagued by five specific demons, each one associated with a way that pottery might be wrecked inside the kiln: Syntrips (“Smasher”), who breaks pots; Sabaktes (“Shake-to-Pieces”), who causes a whole stack of pots to tumble down when the lowest one is broken; Smaragos (“Crasher”), who makes pots burst in the kiln; Asbestos (“Unquenchable”), who raises the heat too high in the kiln; and Omodamos (“Conqueror of the Unbaked”), who causes distortion in vases and in the kiln itself or causes clay to crack as it dries to its leather-hard state (85–89). The “Kiln Poem” demonstrates that ancient potters were well aware of very specific things that could go wrong during firing if contingencies, from the physical to the spiritual, weren't accounted for. And even then, sometimes the gods surprise us.

Although the position of craftworkers and their work has changed quite a lot since the second century BCE (for reasons including the invention and use of increasingly complex tools and automated machines and of new kinds of materials to shape into final products; industrialization and globalization; Taylorist divisions of labor; and the rise of academic departments and professional fields of Art, Design, and Craft; and more), craftworkers (and industrial engineers and middle managers everywhere)

²⁰ This is a short poem from the 13th Homeric *Epigram* that was preserved in the Pseudo-Herodotean *Life* of Homer and in the *Suda* (Smith 85). According to Martin L. West in *Homeric Hymns, Homeric Apocrypha, Lives of Homer*, it was likely written during the sixth or fifth centuries BCE (304).

continue to face the reality that we can't control everything about the outcome of productive activity. Similarly, processes of learning—and their close companion, failure²¹—are often on the periphery. Yes, learning happens in the brain, and so is difficult to study. But learning is also bodily, as Atwill, Bourdieu, Merleau-Ponty, and others attest, and bodily actions deserve more attention.²² I believe that this is in part because of that disembodied sense of writing I discussed in Chapter One. It might also be in part because of the rhetorical tradition of focusing on successful examples to analyze and emulate—rhetoric's focus on “good men speaking well.” Pedagogical innovations throughout the history of our field—which are at the core of our scholarship and research—are basically different approaches to fostering student success. I want to uphold this tradition of helping students succeed, but I think that an untapped way to do this is to pay close attention to the learning curve, to the series of trials and errors that writers *work through*. In doing so, we can help students modify their habits of thought and action in ways that will allow them to become more sensitive to, more flexible with, and more at ease during the work of writing. And I would especially like for students to become more attentive to the ways in which all kinds of factors (their audiences and contexts, the exigencies of their work, the malleability and inflexibility of the tools and materials they work with and against as they write, and their own dexterity with those

²¹ While there is existing scholarship on learning and failure with regard to assessment, Allison Carr's work is the only research I've found in our field that focuses on how failure happens and how it operates as an embodied experience.

²² Research on ecologies of writing (including work from Cooper, Syverson, and Inman) and ecologies of literacy (including work from Brandt and Ivanič) take up this in part (by focusing on what's at hand as writers work) and will come into focus in my next chapter. But they tend not to focus on writers' *embodied actions*, which is what I want to pay close attention to here.

tools and materials) are at play as they work, so that they can manage more precisely (and with less angst) when they inevitably encounter difficulty with their work.

Production is messy, and it's fraught with risk. While understanding *techne* helps us to account in some measure for risk and failure, it doesn't really give us a frame for what to do when those things happen. Descriptions of those who possess a *techne* point to their wily flexibility, their ability to switch tracks as needed, but focusing on the knowledge itself that a *techne* represents isn't adequate for learning how to become that kind of actor. While Greek myths seem to suggest that one is either born skilled in a *techne* or can learn it on one's own, Greek archaeology suggests otherwise: it is only with a lot of practice within a community of practice—and some lucky breaks from the gods—that one can successfully make use of a *techne*. Attention to *poiesis*, then, points us toward productive process, work, and all of the odd and interesting practices and things surrounding the learning and sustaining of that work.

Turning to Craft Studies

As I have suggested with Smith's archaeological work above, craft offers us a way to get at the fraught work of making that the *techne* tradition alone does not. While the *techne* tradition covers some of the same territory, the craft tradition allows us to develop a more grounded, concrete, not-abstracted, human-scale (as opposed to mythic-scale) understanding of productive labor, or *poiesis*. The craft tradition is taken up, as we have already seen, in Rhetoric, Philosophy, Archaeology, and it is also taken up in History, Sociology, and Art History, Art and Design, and Architecture. I engage the latter set of fields in this section, pulling together craft-focused scholars from a variety of backgrounds. Although not an official discipline, I will refer to this work together as

Craft Studies. For all their differences, what these works have in common is their attention to human-scale production and to parsing out what this kind of production, as distinct from industrial-scale production, might offer. Together, this disparate but similarly-focused scholarship provides a useful perspective for understanding *techne*'s relationship to *poiesis*.

Much like the discussions surrounding definitions of *techne* in Rhetoric and Philosophy, the term "craft" is also a site of debate. As art historian Howard Risatti explains,

According to the *Oxford English Dictionary*, the word "craft" is Teutonic in origin, where its original meaning had to do with strength, force, power, and virtue. In Old English it additionally came to mean skill or skilled occupation, an ability in planning or performing, ingenuity in construction, or dexterity. In this usage the word "craft" emphasizes the kind of technical knowledge and technical skill required to make an actual object come into being. Skill of this kind was so useful and so extraordinary that in the Middle Ages the word "craft" also became associated with magic and the occult, as in the word "witchcraft," a vestige of which remains in our use of "crafty" for a shrewd or even underhanded person. (*A Theory of Craft* 17)

Similarly, Paul Greenhalgh, also an art historian, writes,

whilst craft has represented specific ideas at any one time over the past three centuries, it has continually developed and changed. Time-laden and traditional as it might seem, the years have not bestowed the word with a solitary or even consistent meaning.... It has moved from being an adjective to a noun; from being

a description of things to being a thing in itself... Once it acquired a meaning, craft never wholly lost it. (“The History of Craft” 25)

This accretion of meanings associated with *craft* is useful—just as the constellation of meanings associated with *techne* has made that concept central to rhetoric. In addition to what we can learn from *techne* about productive knowledge, discussions of craft draw our attention to working on a human (not mythic) scale, to certain kinds of tools and materials, to both small- and large-scale social relations, and to specific historical cultures and economies.

Additionally, craft points to qualities like high standards (craftsmanship), systems for organizing work and education (craft guilds), materials (natural materials like wood, clay, rock, gems, metals, or fabrics made using plants and animals—but traditionally not, for example, plastic), and processes of work (by hand using tools but probably not advanced digital technologies). Craft is usually acknowledged as inherently associated with the production of objects necessary for human sustenance, comfort, and culture: shelter (huts, homes), coverings (blankets, clothing, etc.), furniture (chairs, beds), food storage and preparation (jugs, bowls, teapots, etc.), and personal, home, and public adornment (jewelry, vases, some types of sculpture). Risatti characterizes craft objects as those relating to the (usually human) body through their “containing, covering, or supporting” function (18). He argues that craft is best understood through the perspective of function: “When this is done, the relationship between material, technique, and form becomes clear and meaningful, because practical physical function, what in the past would have been called ‘applied function,’ is that element that has been common to craft objects for millennia, regardless of the material or process of their making” (17–18).

In contrast with Risatti’s perspective—and more useful for a consideration of *poiesis*—art and design researcher Glenn Adamson has argued that craft should be analyzed as a process: “an approach, an attitude, or a habit of action. Craft exists only in motion. It is a way of doing things, not a classification of objects, institutions, or people” (*Thinking through Craft* 4). Echoing Adamson, contemporary popular uses of the term *craft* often indicate “a way of doing things”—and those things include everything from making clothing to building websites to preparing food to brewing beer. When someone today takes particular care in her work, she is often called a craftsperson, or described as having elevated her work “to a craft.” While craft implies mastery, of course, craftspeople spend hours upon years honing their craft, getting to know their tools and materials, practicing techniques, developing muscle memory, and figuring out how to work when things don’t go as planned, as I will illustrate below. According to Peter Dormer, a curator and art critic, skill (as practical or local knowledge) is acquired only through attentive practice: “thinking in the crafts resides ... in the physical processes involving the physical handling of the medium [in which one is working]” (*The Art of the Maker* 24). Competence in a craft, then, “refers to the possession of the tacit knowledge that gives the artist a mental, conceptual and imaginative grasp of what can be done with and through [a particular] media” (31).

This knowledge (*techne*) does not precede making (*poiesis*): competent craftworkers think *through* their work—which is one way of reading Adamson’s title cited above, *Thinking through Craft*. Dormer echoes: “the process of making by hand allows the maker’s intentions to develop and change in response to what he or she is creating over a period of time” (80). Dormer next turns to art historian Michael

Baxandall's *Patterns of Intention* to consider the importance of decision-making throughout productive processes:

A static notion of intention, supposing just a preliminary stance to which the final product either more or less conforms, would deny a great deal of what makes pictures worth bothering about, whether for us or for their makers. It would deny the encounter with the medium and reduce the work to a sort of conceptual or ideal art imperfectly realized. (qtd. in Dormer 80)

One example of “a work in which all thinking operates through process,” Simon Starling’s 2005 *Shedboatshed*, comes from Adamson. Starling, a contemporary European conceptual artist/craftsperson, found a shed “along the banks of the Rhine river, transformed [it] into a raft, paddled [it] down the river, and re-erected [it] at a museum in Basel,” Switzerland (167). Adamson explains, “The word ‘craft’ has a double meaning here, as both an activity and a genre of object. Woodcraft turns into a watercraft, and back again.” He concludes that this work is “a highly aware way of being-in-the-world” (167). Starling’s “thinking through process” includes a close consideration of location and material, traditional considerations for artists and craftspeople alike—but these have not traditionally been considerations, in any real sense, in writing classrooms. However, they have newly become very important to multimodal writing. To turn again to Wysocki’s definition, “new media texts” are

those that have been made by composers who are aware of the range of materialities of texts and who then highlight the materiality: such composers design texts that help readers/consumers/viewers stay alert to how any text—like its composers and readers—doesn’t function independently of how it is made and

in what contexts. Such composers design texts that make as overtly as possible the values they embody. (15)

Starling's project embodies what Wysocki describes. Adamson comments:

Shedboatshed makes no claims about an intrinsically superior craft “ethic,” and in its displacement of materials from one site to another (a combination of baroque excess and rigorous efficiency) seems even to lampoon the first law of ecologically responsible tourism—“take nothing but photographs, leave nothing but footprints.” ... Serious thinking about our own personal place in the environment, Starling suggests, will inevitably involve thinking through craft. (167)

Starling's work demonstrates one way in which thinking can happen *through* craft.

Another example comes from Dormer's *The Art of the Maker*, where he provides a several-pages-long description of Henri Matisse's training as an artist. Matisse left his job as a law clerk in 1891 and spent the next several years training under painters in the Académie Julian, the Ecole des Arts Décoratifs, and the Ecole des Beaux-Arts. Matisse studied and practiced portraiture, Impressionism, Pointillism, and Fauvism, as well as sculpture. As Dormer explains, Matisse's experience painting taught him about color.

From Pointillism, Matisse learned that

brighter secondary colours can be obtained on a canvas not by mixing primaries on the palette but setting the primaries down as individual dots on the canvas. To obtain the secondary colour green, a painter usually mixes blue and yellow on the palette, but by intermingling separate dots of blue and yellow on the canvas and

viewing the canvas from a certain distance, the colours “mix” in the observer’s eye. (31)

These experiments led Matisse to join other painters experimenting with new ways of combining paint colors on canvas: “In 1905, working with André Derain and encouraged by Pointillism, Matisse began using freer colours and harsh combinations of complementaries: red against green, orange against blue, and yellow against violet,” a manner of painting called Fauvism (32). While some Fauvists moved on to Expressionism, Dormer argues that Matisse took another, “more controlled” direction because of his studies of sculpture and “the nude model, his training in the Western tradition of Renaissance and post-Renaissance art and an interest in Near Eastern art, [and] especially in pattern-making” (32). In other words, Matisse’s experience working across several different traditions in art led him on a path different from many of his contemporaries. Concerned for the training of upcoming artists, Dormer emphasizes the importance of years of painting, sculpting, and other artistic study and production that culminate in Matisse’s greatest works:

Throughout his career Matisse also pursued etching, drypoint, lithography and book illustration, as well as designing the sets and costumes for Sergey Diaghilev’s production of *Le Chant du Rossignol* in 1920. In the 1940s Matisse produced many deceptively simple figurative paintings such as the *Deux Fillettes*, *Fond Jaune et Rouge* series. Among Matisse’s last works were cut-out gouaches of decorative charm and simplicity. The French poet Louis Aragon, one of Matisse’s biographers, wrote that these paper cut-outs crowned Matisse’s work.

Today, however, in the spirit of specialization, and with art regarded in terms of linear progress, the modern student is most likely to eschew all the work that preceded Matisse's last works and to begin his or her own career by 'studying' the art of creating semi-abstract paper cut-outs, and thereafter trying to extend his or her own art from that small base. Moreover, the contemporary student will do this without the broader framework of craft knowledge that Matisse himself acquired as a student.

Today's student might be misled even more by the Matisse paintings of the 1940s (which preceded the cut-outs) whose spontaneity, ease and directness of line, extreme simplicity of form and bright yet limited colour appear to present easy victories for the aspiring student who does not want, for example, the slog of painting four still-lives a day in order to learn tonal painting. Additionally, the apparently straightforward techniques—the lack of detail in the Matisse figures—appear to offer an easy way into a style. (32–33)

Dormer's major concern, then, is that contemporary artists will be tempted to emulate work like Matisse's without learning through the eye and hand—through the body—the principles Matisse learned, such as color combination and paint technique. This is not because of some undue deference to tradition or because Dormer wishes that later generations will suffer for their art in the same ways former generations have. Instead, he argues,

Matisse belongs to a handicraft tradition in art that has been rendered almost defunct, partly as a consequence of the radical change in the nature of "art's objects." Any meaning that a Matisse painting or sculpture has is a result of craft

knowledge: the thinking and making are soluble one with the other. With the transfer of art from a craft-based to a theory-based discipline, the objects of contemporary art stand as cyphers for theory: instead of being an expression, the contemporary art object is a representation of an idea. (33)

Dormer's aversion to theory comes from his concern for craft in art; he is worried about "the relationship between the work of art and how it conveys or expresses ideas and whether or not the ideas gain by being expressed in art" (33). From his perspective—again, echoing Wysocki's definition of "new media texts"—what an artist has to say must be meaningfully communicated through the artistic medium itself, and this is much more difficult for an artist to accomplish if she has not expansively trained and studied across media. This is why Dormer believes that artistic training should remain rooted in craft, in intensive work with a wide variety of materials: "Visual works that are aesthetically and conceptually complex are virtually impossible for individuals to create once their craft knowledge becomes atomized" (36). However, the hours and years of training associated with craft are often discouraging: "Craft knowledge keeps getting drowned out by those who either want to relegate it to knowledge that is 'mechanical and separate from imagination' or who seem to insist that anything done in the plastic arts can be translated into words. Or who ... keep reinstating the hierarchy of making what ever is said about an object more important than the object itself" (69).

To follow Dormer closely here is to get caught up in an ongoing discussion between craft and art (which continues today, as Adamson's discussion of *Shedboatshed* above indicates). What's important for me in this work is Dormer's insistence (similar to Adamson's) on taking process and medium seriously as the foundations for craft. And

interestingly, Dormer, in the early 1990s, was willing to extend this craft to the digital, despite his concern that “computerization” threatened traditional craftwork. Sounding much like Andrew Feenberg in *Transforming Technology*, Dormer asserts that if the loss of craft knowledge continues in art education, “it will be not only as a consequence of computerization, but of our response to it” (104). Dormer argues, as Feenberg later does, that there are potential ways of working with computers that might not only accommodate human and humane work (as, for Dormer, craft traditions do in art), but also extend that work.

Digital Craft

[I]t should be safe to say that given ubiquitous technical examples such as oil painting or motion pictures, technology can become a medium, or at least the basis of a medium.

– Malcolm McCullough (21)

So far in this chapter, I have examined the *techne* tradition in Rhetoric and Composition, suggested supplementing a knowledge-focused craft-as-*techne* with a production-focused craft-as-*poiesis*, and turned to the field of Craft Studies to introduce what craft might offer multimodal writing. That is, craft provides a tradition of practice that pays close attention to the embodied and affective work of making (principally represented above by the example of ancient Greek craftworkers Smith describes in *Controlling Miasma*) and that insists on meaningful composing choices (such as those regarding media, process, and circulation).

Although a key component of my argument is that multimodal writing must work across a very wide variety of modes and media (and not just digital ones), I do include digital writing as part of multimodal writing. Given the tensions that likely spring to mind

for most readers when they think of *digital* and *craft* together, I would like to turn our attention now to digital craft. In short, I argue that digital work can be practiced as a craft, just as work with wood, clay, or fiber might be practiced as a craft. As I noted above, Dormer worries that computerization and the “plastic arts” endanger craft knowledge and practice, but he also admits that computers themselves aren’t the problem. Instead, our shaping and uses of computers are. As Feenberg puts it, “technology is a dependent variable in the social system, shaped to a purpose by the dominant class, and subject to reshaping to new purposes under a new hegemony” (48). He goes on to argue that “technology does not pose an insuperable obstacle to the pursuit of ‘humanistic’ values” because technologies can be adapted to interests other than efficiency or profit (143). In fact, digital technologies could be developed or changed in ways that have no direct connection to efficiencies of profit whatsoever. We could shape them according to other values in order to accommodate our own needs or actions: recall from Chapter One the digital interfaces Christen Withey designed with the Warumungu people. Technologies can be generalized to a variety of usually similar tasks and then more specifically shaped by users, if those users know how. In other words, digital technologies don’t necessarily have to be shaped in a way that elides craft processes.²³ (Some have argued that we have already developed digital technologies that *do* actually encourage craft practice, and I will examine their work in the following section below.)

²³ Admittedly, Feenberg is taking on a much larger project regarding digital technologies than I am here. But I take as fundamental Feenberg’s argument that technologies can be reshaped to accommodate and encourage different kinds of human activities and human relations, such as craft activities (my example) and building more democratic relations (Feenberg’s, although my discussion of DIY in Chapter Three comes close to this).

Jack Bratich quips in “The Digital Touch” that we can play “linguistic tricks” connecting digital technologies with craft practice, such as noting that the digital refers not just to “the informational, virtual realm of ones and zeros but also to the fingers—those physical manual extensions that apprehend the world” (303). Perhaps more meaningfully, in their essay “Notes on Weavin’ Digital: T(h)inkers at the Loom,” Teshome H. Gabriel and Fabian Wagmister point to the history of weaving as a deep connection between these two senses of “digital”:

In fact, despite the newness often attributed to computer technology, much of its vocabulary, as well as that of the internet, draws on relational concepts borrowed from back-strap weaving. Terms such as texture, pattern, layering, links, nodes, sampling, net, network, web, web weaver, and threads belong to a lexicon employed both in weaving and computing. On a structural level, they both rely on the use of crossing, interweaving lines. Aesthetically and conceptually, too, there are similar cross-thread mechanisms at work. The origins of the computer have in fact always been connected to weaving: the first machines were merely extensions of looms, and computers the extensions of mechanised looms. (par. 7)

With this deep connection in mind, then, I argue for extending what Dormer and Feenberg suggest about the possibilities of digital craft.

Perhaps the most foundational voice in discussions of digital craft is Malcolm McCullough’s. McCullough is a scholar of architecture and design, and his book *Abstracting Craft* makes an early and pivotal argument that craft is possible in contemporary technological contexts. He makes a distinction between craft as a noun and as a verb: while the noun “usually opposes high-technology processes,” the verb points to

the condition where people apply standard technological means to unanticipated or indescribable ends. Works of computer animation, geometric modeling, and spatial databases get “crafted” when experts use limited software capacities resourcefully, imaginatively, and in compensation for the inadequacies of prepackaged, hard-coded operations. As a verb, “to craft” seemingly means to participate skillfully in some small-scale process. (21)

This echoes Adamson’s discussion of craft as “an approach, an attitude, or a habit of action,” as “a way of doing things” cited earlier in this chapter. It also echoes the practice of paying close attention to, and to working meaningfully with, the materials and tools one manipulates, and manipulates with, through craft (whether those tools include a paintbrush, paint, and canvas; clay, water, a pottery wheel, and hands; or fingers, a mouse or digital stylus, computer, screen, and Photoshop software). The term *craft* is used in Rhetoric and Composition, for example, when Karl Stolley plots out his present-tense vision for the future in “Source Literacy,” a future in which “there has been a renaissance in publishing on digital craft in our field,” rooted in “rejecting a model of computing that is suited to office cubicles and deskilled writers. By embracing, instead, a deep appreciation for the raw materials, the languages, of the digital medium, and seeing digital writing as more than the on-screen result of the machinations of commercial software.”

McCullough argues that this move from noun to verb involves several consequences, which echo the discussion thus far:

First, it affirms that the results of involved work still surpass the results of detached work. To craft is to care. Second, it suggests that partnerships with

technology are better than autonomous technology. For example, personal mastery of open-ended software can take computers places that deterministic software code cannot. Third, to craft implies working at a personal scale—acting locally in reaction to anonymous, globalized, industrial production—hence its appeal in describing phenomena such as microbreweries. Finally, the usage of “craft” as a verb evades the persistent stigma that has attached itself to the noun. The noun suggests class differences and amateurism [while the verb sometimes sidesteps these issues and sometimes takes them head-on]. (21–22)

McCullough points to the abstraction of work as correlated with historical technological developments, noting that “[s]uccessive levels of invention have freed us from hunting down our next meal, breaking our backs in the fields, sweating over the forge, and numbing our minds with accounting” (28), but he also points out that new layers of abstraction can become important for cultural production, that “there is a growing appreciation for new abstractions” (27). And computers happen to be very good at letting “us treat abstract relations as visible, workable things. As a result, new kinds and levels of work become viable” (27). This is because, as McCullough later writes, “visual abstraction [for example] is active, imaginative, adaptable—and above all else, *generative*” (37, emphasis in original). If we and our students can learn to approach digital technologies as craftspeople—shaping them, working skillfully with them, experimenting with them, pushing digital media in ways that might be unexpected or indescribable, making meaningful “new media texts” with digital technologies—then I see real possibilities for digital craft in multimodal writing.

McCullough roots digital craft in “direct manipulation,” a term first used in 1983 by Ben Shneiderman, a software designer, to explain what happens when you point at and interact with something on a computer screen through a mouse or other device. “More specifically,” McCullough explains, “the expression referred to the combination of three fundamental activities: (1) continuous visibility of the object of interest; (2) rapid, incremental, reversible, physical actions on the object; and (3) immediately visible results” (23). The first popular direct manipulation programs included MacPaint and MacDraw in the mid-1980s, and by the early 90s, the graphic user interface of Microsoft Windows brought direct manipulation to mainstream computer users of the time.

Fitting with the tradition of craft work as making something whole, from beginning to end, and working in reaction to the object itself as it takes shape, McCullough explains that the “best measure of direct manipulation as a basis for digital craft is its capacity for continuous actions,” which is dependent on computing speed and capacity (24). With increased speed and computing capacity, “there is no reason why direct manipulation cannot also be applied to gestures, three-dimensional renderings, tactile textures, complex multimodal structures, or abstracted architectures of information”—and in the mid-1990s (*Abstracting Craft* was published in 1996), McCullough was already able to say that in some research settings and “specialized commercial products, it already does so” (24). Direct manipulation depends on more than continuous action, though; it also depends on sensory feedback that is often accounted for through haptic research, which is related to “the exploratory and manipulative aspects of touch, as opposed to passive sensation” (25). Haptic feedback is tension in the yarn when crocheting, resistance from piano keys and pedals, and the variable consistency of clay. It

is also at work in the controller for Nintendo's Wii Fit (introduced in 2006). If you have ever had a hard time getting the tennis ball to fly over the net or getting your avatar to travel more than just a few feet in the ski jump while playing Wii Fit games, you have received haptic feedback through a small vibrating mechanism in the Wii controller. It feels like the controller is pushing back when you swing the tennis racket or pulling you down when you try to jump up.

Another kind of haptic feedback (which draws us more closely to the more active modes of making associated with traditional crafts than to the more evidently stationary mode of sitting at a computer and moving usually just one's fingers and maybe arms)²⁴ is also evident in video game systems like the Wii. As McCullough points out, "sophisticated motion tracking can incorporate gesture, and large flat-panel displays can unite the computer's metaphorical 'desktop' with a real physical desktop.... Multimodal activities, such as coupling actions to sounds, are beginning to emerge" (26). This is the case with sophisticated motion tracking, which has since been implemented commercially in video game systems like Nintendo's Wii and PlayStation's Move (2010) controllers. Players hold these controllers in their hands while the game systems track the controllers' movements in three dimensions, to simulate swinging a tennis racket or a golf club, throwing a bowling ball, or dancing. Even further removed from the hand, but also accounting for sound, Microsoft's Kinect sensor (2010) remains stationary—usually positioned near the TV or computer screen players reference—and tracks players' movements and sounds with a camera, depth sensor, and microphone.

²⁴ Of course, many traditional crafts are just as apparently stationary as working at a computer: consider crocheting, knitting, and weaving. Just like writing at a computer, these are fully embodied activities, but they do often include quite a lot of sitting.

Scholars in Rhetoric and Composition have played with the Kinect a bit, as Microsoft released a software development kit for it in 2011. This allows non-Microsoft employees to legally write Kinect apps. For example, at the 2011 Conference on College Composition and Communication in Atlanta, Johndan Johnson-Eilola, Anne Wysocki, and Ryan Kornheisl set up the game system with a large projection screen so that people could walk up to the video game system and see their bodies and words from the #cccc2011 Twitter stream represented on-screen. People could then pull words from the Twitter stream on-screen and place them together to write and send new tweets.²⁵ This setting for writing isn't efficient in the sense that it costs more than a simple computer with keyboard and in the sense that it cannot be done using the typing skills that many of us now find to be second-nature. And in that sense, it actually takes us away from a craft practice in which experts can offload many of the details of their work to their subconscious minds while their conscious minds tackle larger issues like conceptual decision-making and how to deal with any unexpected problems as they work.²⁶ But the writing situation Johnson-Eilola, Wysocki, and Kornheisl encouraged participants to try in Atlanta denaturalized what many of us take for granted and so rarely consciously consider: how we use our bodies when we write.²⁷ "Bodies of Words" encouraged writers to consider possibilities for writing spaces and writing techniques—physically reaching up, out, and across themselves to grab words on-screen and order them into a phrase—

²⁵ For images illustrating how this worked, see Johnson-Eilola, particularly the Hash Tags page.

²⁶ See, for example, McCullough (26–28), where he discusses how experts work with tools and technologies.

²⁷ Unless, of course, we are suffering from pain (such as sore neck, shoulders, and back, or possibly pain in the wrists and arms) related to sitting and typing for extended periods of time or we are working in an uncomfortable space.

that might someday be a perfectly normal way to compose with words, images, sound, etc. And while that doesn't seem likely to me now, "Bodies of Words" does remind us that it is up to those of us in Rhetoric and Composition to help build—and help our students to build—the digital writing environments that will accommodate and encourage the kinds of work writers need to be able to do.

While McCullough sounds the call to digital craft, there are several writers who rightfully advise caution. In his book *The Craftsman*, sociologist Richard Sennett demonstrates this through the example of computer-aided drafting (CAD) software in architecture—McCullough's own field. Sennett identifies several problems with uncritical uses of CAD, several of which are rooted in the fact that projects are laid out digitally, and so are really only sketched out once with adjustments being made and calculations being re-run on the fly: "As in other visual practices, architectural sketches are often pictures of possibility; in the process of crystallizing and refining them by hand, the designer proceeds just as a tennis player or musician does, gets deeply involved in it, matures thinking about it" (40). To make his point, Sennett quotes famed architect Renzo Piano: "You build up a kind of circularity between drawing and making and then back again.... This is very typical of the craftsman's approach. You think and you do at the same time. You draw and you make. Drawing ... is revisited. You do it, you redo it, and you redo it again" (40). But CAD removes the redoing because it remembers the initial sketches for architects, allows them to make small-scale changes, and then recalculates and fixes in the background any negative consequences those changes might have for buildings' users. "The problem, as Victor Weisskopf says, is that people may let the machines do this learning, the person serving as a passive witness to and consumer of

expanding competence, not participating in it” (Sennett 44). And so CAD takes away the time architects and designers might use to think as far as they used to through what it might feel like to use the spaces they are creating. Sennett argues that this lack of time spent drawing and reflecting makes for a “disembodied design practice,” and he points to three major issues in the 5.8 million square-foot Peachtree Center in Atlanta, completed in 2004. Each of these issues track back to the drawing time architects lost to CAD:

- 1) The simulation doesn’t fit with reality: “In plan, the Peachtree Center populates the streets with well-designed sidewalk cafés. Yet the plan has not actually engaged with the intense Georgia heat: the outdoor seats of the cafés are in fact empty from late morning to late afternoon much of the year.”
- 2) There is a lack of relational understanding: designers of a hotel at Peachtree Center used CAD to ignore issues—such as hotel rooms that look out over a sea of cars in the parking lot—by shifting the visual perspective of the project on-screen, and so did not have to see what people who use the space they designed will see.
- 3) CAD is so precise that it exacerbates a problem inherent to blueprint designs, overdetermination: While Peachtree Center was designed and zoned for mixed-use, “these mixtures have been calculated down to the square foot; the calculations draw a false inference about how well the finished object will function.... There is thus missing the informal and so easy, sociable street life of Atlanta’s older neighborhoods. A positive embrace of the incomplete is necessarily absent” in blueprints, and this is not corrected, but made worse, through CAD. (42–43)

CAD functions as an example of a digital technology poorly used for craft, but Sennett doesn't attribute the problems to digital technology itself. Similar to Feenberg, Sennett argues that the structure of CAD lends itself to uncritical uses—and so we might assume that there is a way to build architectural modeling software that encourages critical use. Supporting this assumption, Sennett points to Linux, a digital technology that is built to promote thoughtful, critical use because it's "set up to discover problems" instead of hide them (43).

Linux does this by making code openly and freely available. Developed by Linus Torvalds in 1991, Linux is an open-source computer operating system kernel (a program that allows the central processing unit of a computer to talk to software applications). A kernel is one of the central protected spaces of computer software, so keeping that secure makes good sense. Companies like Microsoft protect operating system kernels, like other software, in the name of security (and, of course, profit), but as an open-source project, Linux allows—and the community that has grown up around it invites—a maximum number of eyeballs on the code (and so programmer brains and bodies interacting with that code in order to make it as robust as possible). Sennett calls Linux a "public craft" because "when people squash one 'bug' [a problem in the code], they frequently see new possibilities open up for the use of the code. The code is constantly evolving, not a finished and fixed object. There is in Linux a nearly *instant* relation between problem solving and problem finding" (24, 26, emphasis in original). Linux, then, is also an example of developer-craftspeople thinking *through* code in much the same way that Matisse thought through painting, sculpture, and papercraft, and Simon Starling thought through *Shedboatshed*.

Craft: A Site of Knowledge and Action

This chapter critiques the *techne* tradition in Rhetoric, drawing attention to *poiesis* as an under-privileged term. I have used examples of scholarship on craft to illustrate what making looks like *in action* instead of through our usual route, *as knowledge*. These examples bring to the fore the rather messy, disorganized processes of human-scale making, as well as the complexity of defining craft itself. While craft is rooted in preindustrial productive practices, craft continues today as an approach to work with both traditional and contemporary materials and technologies. The next chapter continues to investigate craft as an action by considering what can be made when craft is modified by DIY.

Chapter Three: Modifying Craft through DIY

The term “do it yourself” (or “DIY”) as a point of differentiation within the world of craft has always struck me as odd. Aren’t the words “craft” and “DIY” interchangeable? Aren’t all makers, to some extent, doing it themselves?

– Andrew Wagner “Craft: It’s What You Make of It” (1)

Chapter Two introduced the problems I see with the rhetorical tradition’s focus on *techné* over *poiesis*. Specifically, this focus on knowledge has trained us in Rhetoric and Composition to understand process and production as obscure, as things we cannot access because they lie in the realm of action and not language, and so to understand them as less valuable than knowledge. The working assumption of many teachers of writing is that if students just learn enough about textual analysis, academic writing practices, and the writing process, then they will produce better writing. But I contend that we undervalue attention to process, in part because we tend to stay away from mechanics, both in terms of grammar, usage, and punctuation, and in terms of digital and other writing technologies.²⁸ While I am not arguing that there is one perfect process for writing that we should teach students, I do believe that renewed interest in and focus on production in our scholarship and classrooms will benefit students. How so?

The craft practices I discussed in Chapter Two should be joined with and modified through DIY, and this will be my focus in this chapter. The joint framework of craft and DIY bring together issues that multimodal writing students and their teachers need to wrestle with: processes, tools, materials, production relations, distribution and circulation, tradition and innovation, subjectivity, politics, economics, the affective relations we build with others, and the consequences our choices hold for people and

²⁸ See my discussion of Selber’s and Rice’s work in Chapter One.

planet. While these issues are often taken up in the course of multimodal writing instruction, I think that their interrelatedness, the fundamental ways in which they are interconnected, can be elided by students and teachers, particularly when multimodal writing is taken up as digital writing, which often turns specifically to students' development as future (likely neoliberal capitalist) workplace writers.²⁹ And even when instructors have designed their courses to attend to these issues and are personally committed to them, it can be fairly easy for students to miss or ignore them.

I don't think that a DIY craft pedagogy does or should teach students to take on anticapitalist activism per se, but I do believe that the DIY craft framework I am developing here can help students to consider how capitalism has shaped their subjectivities, as I will detail later in this chapter. It can also help students understand production and consumption in more granular, more nuanced ways. And this understanding will be fundamentally important to answering a whole host of questions (regarding climate change, labor migrations, economics and politics at all levels, the production and circulation of goods at all levels, and more) that we will be facing down in the coming decades. Capitalist subjectivities are likely to turn (or, more accurately, defer their own thinking and action) to those in charge, experts and professionals. And because I am invested in increasing democratic participation in political and economic decision-making—as well as in the rhetorical power individuals can leverage through their words, actions, and productive practices—I see DIY craft serving as an important framework for helping multimodal writing students make choices in their work.

²⁹ For example, see discussions of digital writing in Ceraso and Pruchnic and the Writing in Digital Environments (WIDE) Research Center Collective.

To begin working through connections between craft and DIY, it might make sense to consider their modern connotations. Craft is often associated with a fairly staid tradition. This tradition is rooted in respect for grandmothers and in the idealization of expert craftsmen putting in an honest day's work to produce something solid, like a wooden table. As Glenn Adamson makes clear in *The Invention of Craft*, however, craft isn't always as respectable as our contemporary veneration of William Morris³⁰ might suggest. If you consider the cultural status of the craft store, where inexperienced novices are thought to run amok, you will begin to understand how different kinds of craft materials, processes, and objects are differently gendered, classed, and aged. Crafts we typically associate with masculinity (woodworking and carpentry, metalsmithing, stonemasonry, etc.) made a fairly easy transition into the fine art world, while those we associate with femininity (papercrafts like scrapbooking; embroidery, weaving, and other fibercrafts; etc.) have only gained entry fairly recently.³¹ The popular narrative is that these divisions are a legacy of medieval guilds and the gendered division of labor, although historical data doesn't necessarily bear this out.³² Still, we continue to make cultural distinctions between the value of crafts that begin with a trip to places like a hardware store (or other places where we think of people as buying raw materials) versus

³⁰ Morris was a central figure in the British Arts and Crafts movement in the late nineteenth century. He was a social activist, author, and textile designer, probably known equally well for founding the Socialist League in 1884, starting the Kelmscott Press in 1891, and influencing Victorian interior design.

³¹ See Adamson *Thinking through Craft* and Risatti.

³² See Coffin and Howell.

those that begin with a trip to the craft store (or other places where we think of people buying kits).³³

In *The Invention of Craft*, Adamson seeks to disrupt the popular narrative we tend to tell of a smooth transition from pre-industrial productive practices through the nineteenth and twentieth centuries to craft practice today. “Rather than treating craft as an ever-present aspect of human behavior increasingly threatened by technological advances,” Adamson writes in the introduction, “I argue that craft is itself a modern invention” (xiii). Instead of linking craft to “what it is to be human” (and so to the *techne* tradition I discussed in Chapter Two), Adamson argues that skilled productive labor, which he refers to as *artisanal*, has always existed. But he reserves the term *craft* to point to an ideologically-charged way of describing labor and objects: “There is no way of talking about modern craft that is neutral. It was invented at a time of conflict between the ranks of the skillful and others involved in production, who recognized the unique potency of skill and therefore wanted to contain and control it” (xxiv). The division and specialization of labor associated with the Industrial Revolution did not, he argues, de-skill workers:

Rather, the modern invention of craft literally put artisans “in their place.” In fact, it was precisely their workers’ valuable skills that motivated capitalists to invent new techniques of controlling them. As craft technique was isolated as a subject of concern in its own right through division and explication, the person executing the technique was—in a countervailing move—made to seem inconsequential or generic. (xix)

³³ Of course, these are false distinctions: hardware stores also sell kits, and craft stores also sell raw materials.

This historical dimension of craft, which is far from our present context, provides a necessary entry for DIY into the conversation. As Adamson reiterates, he uses the term craft “to designate a process or activity, rather than a category” because, for him, “craft has always meant something like ‘making something well through hand skill,’ no more and no less” (xxiii–xxiv). Adamson is writing in a conventional manner here: he associates “making something well” with expertise, with making something skillfully. But I would like to recast “making something well” in a way that also accommodates “making something in a way that is useful to the maker or making something in a way that is personal, socially, and politically—as well as materially—productive.” Craft, of course, accommodates this kind of “making well,” as I demonstrated in the previous chapter. It can include a solitary artist-craftsperson like Simon Starling working in a workshop; an artist like Matisse studying under several painters, sculptors, designers, and other artists throughout his career; or developers working together from their own remote locations to improve Linux.

While, for Adamson, the rise of craft is intimately tied up in the development of industrial capitalism, DIY is fundamentally associated with noncapitalist production. In the next section, I will turn to an example of early industrial production that wasn’t as straightforwardly capitalist as one might assume. Today, craft production is often opposed to industrial production, signifying a remove from—and a critique of—capitalist enterprise. This example, from nineteenth century Hamilton, Ontario, will help me to reconsider conventional ways of understanding industrialization and its relationship to capitalism. Workers in Hamilton produced more than just factory-made goods: the material and affective interpersonal relations they produced alongside those goods are, I

will argue in the section that follows my discussion of Hamilton, intrinsic components of DIY. This example from the Industrial Revolution begins my discussion of what DIY adds to craft and why DIY is a necessary component of the multimodal writing pedagogy I am developing. Ultimately, it will help me to argue that “making something well” can happen in contexts that look quite pervasively capitalist—even in the context of contemporary college and university writing classrooms. While it does often seem that capitalism has permeated every corner of our personal, civic, workplace, and academic³⁴ lives, it is important to me that we build noncapitalist spaces and noncapitalist subjectivities through DIY craft practice, as I will explain in the final section of this chapter.

Considering “Craft Capitalism”

Historian Robert Kristofferson’s book *Craft Capitalism: Craftworkers and Early Industrialization in Hamilton, Ontario 1840–1872* is a study of mid-nineteenth century Hamilton, a city on the western edge of Lake Ontario. Hamilton underwent “initial industrialization” between the 1830s and 1870s, and by the end of this era, the city was popularly known as the “Birmingham of Canada,” producing enough material goods to be compared to the titan of the Industrial Revolution, Birmingham, England. Prior to industrialization, Hamilton had grown as a center for shipping Canadian wheat and other agricultural goods, but it grew as a site for several industries: clothing and outerwear, hats, shoes and boots, soap and candles, wood and paper products, brushes, furniture, musical instruments, and coaches and carriages. The largest sector in Hamilton by the end of this period was secondary metal works: making steam engines, sewing machines,

³⁴ See Bloom, for example, and Henry Giroux’s work.

industrial tools and machines, etc. (21–38). According to Kristofferson, Hamilton’s workers collectively produced all this and more at an industrial scale, even though most production was still happening on the human scale of the craft workshop. In fact, in 1871, across Ontario, where producers were churning out material goods at an industrial scale, the average industrial enterprise employed fewer than five workers (11). Importantly, this was before the Second Industrial Revolution (roughly dated from the late 1870s to 1914), during which the increasing size and productive capacities of manufacturing technologies increased scales of production and complexified divisions of labor, thereby de-skilling workers necessitating the further consolidation of capital.

Instead, through the 1870s, industry in Hamilton remained “much freer of the economies of scale, integrated markets, capital concentration, strong impetus towards mechanization, and relentless searches for increasing divisions of labour than ... many industries in US or European cities and towns” at that time (12). Hamilton’s industries were “characterized by flexible specialized enterprise functioning in limited markets and tooled for ... product diversification” (11). In other words, during this period, there were proliferating numbers of small workshops employing highly skilled craftspeople who worked with flexible or generalized tools and machines to do smaller-run production of a large variety of specialized objects. The output of these small shops was indeed very high, resulting in “an economic situation in which craft production had undergone appreciable change, but still generally created few of the immiserating effects brought by highly capitalized, mass-production-oriented high competition environments typical of some other major segments of the Western industrial world by this time” (12).

Kristofferson argues that Hamilton's nontraditional path to industrial capitalism enabled this arrangement, explaining that

the buoyant, flexible, and adaptable character of the city's industrialization enabled social practices that had a profound effect on the class experiences of local craftworkers by allowing them continued ownership—or anticipation of ownership—of the means of production. Most local craftworkers actively participated in capitalist institutions but without the alienating aspects of capitalism's material arrangements. With a foot in each of the capitalist and noncapitalist (or craft) worlds, the line between the two was blurred...

Dispossessed craftworkers operating within unambiguously capitalist class relations these were not. (13)

In short, the “craft capitalism” Kristofferson describes was different from but worked in relationship to industrial capitalism. Yes, commodities were exchanged, but workers weren't necessarily alienated from their labor or from their foremen and employers.³⁵

Kristofferson attributes Hamilton's alternate path to industrial capitalism to several specific characteristics of craft labor in Hamilton as it industrialized. He asserts that these characteristics likely aren't necessarily singular to Hamilton, but for a variety

³⁵ The end of the nineteenth and beginning of the twentieth century saw a marked decrease in craft labor in Hamilton: financial collapse, recovery, capital consolidation, and the Second Industrial Revolution helped to transition Hamilton to the kinds of industrial capitalism with which we are much more familiar. But Kristofferson's major project with this book, in addition to adding to historical knowledge about this place and time, is to argue that other historians should look much more carefully at other cities to see if there are overlooked indications that Hamilton's transition to industrialization was more common than we might think. There are other “alternate” paths to industrial capitalism that other cities took, and examining what those paths were and what characterized them is important for further developing our understandings of both capitalism itself and noncapitalist economies.

of reasons, the individuals who lived and worked there in the mid-1800s enacted industrialization in ways that preserved these characteristics through at least the early 1870s. Although Kristofferson identifies several features of craft capitalism in Hamilton, the two that are most important for me include, first, that there were highly skilled workers using flexible or generalized tools and machines (in other words, there was a lack of mechanization in labor processes), and second, that there was social mutuality among workers (a category that included workshop owners).

The first characteristic, highly skilled workers using flexible or generalized tools and machines, indicates that early industrialization did not necessitate the de-skilling of workers. There were small workshops of workers making things—and for the most part, they were using traditional craft tools and technologies. At the same time, there were huge advances in technologies of transportation, communication, etc. As a result, the kinds of things craftworkers were making were changing in many ways. While this had some impact on the tools they worked with, Hamilton’s producers for the most part continued working with more traditional flexible tools and their own highly skilled labor instead of moving to the factory model of mechanization that marginalized skilled workers. This practice provides an early industrial example of the tool and technology use that Richard Sennett advocates in *The Craftsman* and Andrew Feenberg advocates in *Critical Theory of Technology*, as I discussed in Chapter Two.

In the craft workshops of Hamilton, Feenberg might describe workers as not “isolated from objects, but transformed by [their] own technical relation to them. This relation exceeds passive contemplation or external manipulation and involves [workers] as bodily subjects and members of a community in the life of objects” (qtd. in Wysocki

“Openings” 21). As Wysocki points out, this relationship between people and the tools and technologies they work with can counteract the “standardization of our industrial corporate world” (21). And in mid-nineteenth century Hamilton, this relationship worked against the increasing standardization of an increasingly industrialized and capitalized world. In this way, Hamilton’s workers, in Kristofferson’s reading, remained *un*-alienated from their work—both from the act of production and from the objects they produced.

The second characteristic of Hamilton’s “craft capitalism” important to my work is a preservation of what Kristofferson calls “mutuality among workers,” a category that included foremen and shop owners (who, in this case, were very often master craftsmen who had worked their way up from apprentice to shop owners and who continued working alongside their employees). Similarly, apprentices who worked their way up to journeyman and then master craftsman status were often rewarded by becoming foremen or becoming partners in the business or having an opportunity to start their own shop, sometimes with material and other forms of support from their former employer. Additionally, Kristofferson notes the experience of many craftworkers: apprentices frequently worked their way up to owning the means of production while continuing to live in the same neighborhoods and socialize in the same social clubs and circles as their employees. In other words, these craftworkers relied on each other for a variety of material and affective support both inside and outside of work, and there was little social stratification among workers of varying statuses within any one craft.

These lived experiences—the embodied work of carefully crafting individual objects using one’s own well-developed skills and of mutual respect and reliance among workers within the crafts—are just part of what Kristofferson pieced together from

Hamilton's historic records, and what we can learn from the historic record is just part of the lived realities of these workers. The economic geography, formal partnerships, published public speeches and otherwise recorded private speeches, civic and government documents, and newspaper articles Kristofferson uses in his study, however, are highly suggestive of a deeply enmeshed—and frequently articulated—mutuality among workers across rank and ownership status, as well as deep satisfaction and identification with their work.

Craft Tradition and DIY Exuberance

While craftworkers in nineteenth century Hamilton labored very much in the craft tradition I discussed at the opening of this chapter, the salient qualities of their working conditions—work with flexible generalized tools and mutuality among workers—are key components of DIY, albeit in a formal workplace setting (and so not set in DIY's usual environs). Unlike craft, with its origins in ancient production practices and contemporary studio art, DIY has a much less respectable background, tracing its roots from the 1960s counter culture, the back-to-the-land movement, and Stewart Brand's *Whole Earth Catalog* into the 1970s punk and the 1990s Riot Grrrl movements. This is why DIY is so important a component of craft: it amplifies our focus on the relations craft helps to build among makers and users.

In his book *After the Public Turn*, Rhetoric and Composition scholar Frank Farmer tracks zine making—a popular DIY practice of hand-making mini-magazines using low-technologies like paper, markers, appropriated images, tape, and black-and-white photocopiers—back to punk: “The DIY spirit in punk culture was aimed at the primary task of reclaiming, of taking back music from corporate ownership and control.

Anarchic zine culture redirected that same spirit to the primary task of reclaiming from the officially endorsed venues of communication not music but authorship and publication” (48–49). Alison Piepmeier, in *Girl Zines: Making Media, Doing Feminism*, positions zines in relationship to Riot Grrrl and third wave feminism. Piepmeier argues that cynicism

has emerged at this particular historical juncture [the late twentieth and early twenty-first centuries] because of the convergence of a backlash against the social justice movements of the 1960s and 1970s and a late-capitalist, neoliberal, consumption-oriented cultural climate. This climate, explains [bell] hooks, assures us that things can’t ever be substantially better than they are right now, that private sector industries will solve all our problems, and that if we buy the right product, we’ll feel much better. (159)

In *Teaching Community*, hooks calls this a “pedagogy of domination,” which contrasts with a “pedagogy of hope,” a force she wants to put to work inside classrooms. Piepmeier argues that hooks’ pedagogy of hope “is a concept with viability far beyond literal pedagogical spaces,” and so Piepmeier widens those spaces to “encompass the political work of grrrl zines”: they model “process, active criticism, and imagination” to “make political interventions targeted to this late-capitalist cynical culture” (160). Piepmeier’s invocation of hooks helps to explain why DIYers like zine makers are easily written off by the mainstream: they work against large, well-supported political, cultural, and economic ideals. But even though craft plays an increasingly large role in our economy, its DIY dimensions don’t often play nicely with mainstream capitalist economics.

Consider two recent examples: Etsy.com, the high-profile online craft marketplace, and Balcones, a top craft distillery.

Etsy is a website that connects crafters with people who want to buy handmade goods. Launching in 2005, it attempted to replicate online the indie craft fairs that have sprung up around the world in the past fifteen or so years.³⁶ The site has been a huge success: “In May 2006, Etsy recorded sales of \$170,000; in May 2007 its members sold \$1.7 million” (Ryzik). That growth has continued, as in 2014, its “gross merchandise sales reach[ed] \$1.93 billion” (Tabuchi). Etsy’s reputation is rooted in the idea that, just as they can at a craft fair, people can get outside of consumer capitalism and still purchase fun and interesting goods directly from the people who made them. From this perspective, Etsy opened online the kind of noncapitalist space that economic geographers J. K. Gibson-Graham, who I will discuss in more detail in the next section, want us to be more able to see. Etsy’s wholesome ethos is further developed through the popular use of recycled and upcycled³⁷ materials. The website also blurs distinctions

³⁶ While open markets and craft fairs have existed worldwide for *much* longer, indie craft fairs are associated with the late twentieth century/early twenty-first century rise of handicraft connected to Riot Grrrl, *Stitch 'n Bitch* (a 2003 best-selling knitting book by Debbie Stoller that prompted knitting groups of the same name), online craft forums like Craftster.com (started in 2000 by Leah Kramer), knit and crochet-focused social networking platforms like Ravelry.com (started in 2007 by Jessica and Casey Forbes), and websites people use to coordinate gatherings in real life, like the Craft Mafia (started in 2003 in Austin and in thirty cities by 2015). For example, the Renegade Craft Fair started in Chicago in 2003 and by 2015 has spread internationally, running almost twenty events a year. Additionally, cities large and small host other independent craft fairs, such as Milwaukee’s now-defunct Art vs. Craft and still-running Urban Garage Sale. Indie craft, taking a cue from third wave feminism and Riot Grrrl, reclaims traditionally feminine handicrafts and combines them with an aggressively playful feminism. Craftster’s motto: “No tea cozies without irony.”

³⁷ Upcycling is the practice of reclaiming materials from the recycle or trash bin and reworking them into new goods. Examples include using the yarn from discarded sweaters to make a blanket and making old skateboards into stools or earrings.

between producers and consumers: sellers sometimes sell not just finished goods, but also tutorials for making goods like those they sell. Additionally, there's no differentiation between "consumer" and "producer" profiles: any user can be a seller, as long as they conform to Etsy's standards.

But those standards have been at issue for at least two years. In October 2013, the site introduced new guidelines ostensibly designed to help sellers be more transparent about how their goods are made. However, the new guidelines also make it easier for sellers to outsource production: "The change allowed sellers to hire workers or outsource the production to small-scale manufacturers that met a set of labor and ecological criteria... and [as of March 2015] there are already over 5,000 instances of Etsy sellers outsourcing their manufacturing" (Tabuchi). According to Etsy's Town Hall webpage, which features an archived video of Chad Dickerson, CEO, explaining the changes and includes a set of written questions and answers, "Our new policies make plain that every seller of handmade items must demonstrate authorship, responsibility and transparency—that they've designed their item, are knowledgeable and involved in how their items are made, and are willing to be open and honest about that process." Those three key values of authorship, responsibility, and transparency are meant to extend to Etsy's policy on outsourcing: they "explicitly task sellers with finding partners who obey all applicable laws" and "require sellers who partner with outside manufacturers to apply for review and approval before they list their items ... and will be asked to demonstrate a thorough knowledge of their manufacturer's production process and business practices." While laws and their enforcement vary from country to country, the site's own Ethical Expectations specify that sellers who partner with third-party manufacturers should only

partner with manufacturers who follow child/youth and voluntary labor laws and regulations, foster humane working conditions, do not discriminate, and practice environmental sustainability.

While many have questioned Etsy's commitment to handmade, stories like Alicia Shaffer's and her Three Bird Nest Etsy store highlight the bind in which successful crafters find themselves when they develop a large online customer base: her work is so popular, generating up to \$70,000 a month in sales, that Shaffer has employed "up to 25 local seamstresses" to fill orders for the headbands and legwarmers she designs (Tabuchi). Here we see an online marketplace and an individual seller there facing what happens in a contemporary capitalist setting when human-scale production bumps up against industrial-scale expectations for growth and profit. While Shaffer maintains that her design and production processes still fit with Etsy ideals, now-former Etsy seller Grace Dobush points out, "Handmade businesses aren't infinitely scalable, just by the definition of the term" (Tabuchi). And increasing handmade's complexity by raising the question of authenticity, Nicole Burisch, a fellow with the Museum of Fine Arts in Houston comments that "separating the handmade from the manufactured would always be tricky" because "distinguishing handmade items from mass-produced ones has become increasingly difficult, and is in fact a false distinction": "unless you are digging your own clay, weaving your own cloth, raising your own sheep," nothing you make is really made fully by hand (Tabuchi). This seems like a fair point: if you knit a sweater by hand, can you call it handmade if the yarn was mass-produced for an international corporation by low-paid factory workers and sold by low-paid retail workers at Wal-Mart? Craft traditionalists and many DIYers would likely say no.

My second example of DIY-gone-strange in the contemporary economy comes from craft distilling. In 2008, Chip Tate opened the Balcones distillery in Waco, Texas. It was a true DIY operation: “Instead of buying stills from Kentucky or Scotland, which could easily have cost over \$100,000 each, he designed and built his own. He used local blue corn instead of buying in bulk from a commodity grain supplier. He even made his own barrels” (Risen). Tate’s idiosyncratic approach to building the distillery extended to his whiskey recipes, and his own reputation and that of the distillery quickly grew. “From almost the day Mr. Tate opened the distillery ... Balcones grew like a weed, with sales of its corn and malt whiskey doubling each year. But making whiskey is a capital-intensive business, and expanding to meet skyrocketing demand takes significant money,” and so Tate gave up a majority share of his distillery to an investor in exchange for \$8.5 million (Risen). Although the initial plan was for Tate to remain in charge of all distillery operations, the involvement of one investor (and then additional investors by 2013) changed things. There were some predictable disputes about how the business should grow, who should be in charge of what, and how money should be spent. But after growing legal involvement, in December 2014, Tate and his investors “settled on a deal in which the other owners would buy Mr. Tate’s share of the company. While the specific terms are confidential, Mr. Tate was able to whittle a proposed three-year non-compete clause to fifteen months. The next day, the company announced that it had fired Mr. Tate” (Risen). For now, Tate is busy working on other spirits, waiting until he is able to distill whiskey again. Tate’s story is similar to Shaffer’s: human-scale DIY craft production cannot keep up with industrial-scale business models, and those industrial-scale business models cannot fully accommodate DIY craft values. Risen quotes Matthew

Wood, who researches entrepreneurship at Baylor, as explaining, “Research shows that because entrepreneurs often have a strong identification with their businesses, they have a hard time giving up control.... I don’t think the investors fully understood the craft mentality.”

That craft mentality creates a tension between quantity and quality that makes time for production and cost of materials difficult to balance with high standards, and it positions a maker as someone in charge of the making of a whole product, from start to finish—including raising sheep to get the wool or partnering with local farmers to source corn for the whiskey. This is not an approach to production that easily makes sacrifices for efficiencies of time or money. And while many DIY craft entrepreneurs have grown small businesses into medium and large businesses, these tensions remain. To return to my big-box craft store analogy from earlier, authentic DIY craft is quite far removed from both Home Depot and Hobby Lobby, rooted as it is in anticapitalism and, sometimes, anarchic principles. Frank Farmer explains the perspective of zine-making anarchists, who share in the principles of control over their final product—and their own lives—that Tate espoused and Shaffer attempted to sidestep:

... the point is to break free of the almost ceremonial dependencies so integral to the ideology of consumer capitalism. This is why, despite the seeming triviality of learning how to make your own soymilk and paintbrushes and candles [which is what some zines teach people to do], such everyday acts, as they are represented in anarchist zines, are understood to be acts of political resistance.... This is an anarchism borne of historical conditions that require ownership of the means of production *and* consumption, even if wresting these operations from others

requires that one begin with little more than the ordinary, the humdrum, and the casually dismissed. For anarchist zine writers, however, these isolated acts of homespun resistance are charged with much larger significances. For each act of do it yourself, no matter how outwardly trivial, embodies a critique of consumer capitalism and, at the same time, a making of *something else* in addition to those candles and root beer. (48, emphasis in original)

That something else is the creation of an alternative culture, one in which individuals have more control than corporations have. The problem is that alternative culture resides simultaneously with—and in relationship to—the larger contemporary culture, which remains largely shaped by corporations. So what good can DIY actually do?

DIY Craft Politics and Economics

One way to examine DIY is to consider the roles it can play in individuals' lives. Farmer does this, for example, when he points to the *something else* anarchist zinesters make through producing things for themselves and their friends—and that is, in part, political critique. As Farmer specifies, this is an active critique, one that includes creating alternative political economies (49). Further, Piepmeier demonstrates that grrrl zines (which may or may not be anarchist, but are inherently political) connect political work to individual subjectivity: “Citizens’ media does political work—work that I would characterize as micropolitical—because it alters power structures by strengthening individual subjectivities” (163). She continues, arguing that grrrl zines “break away from linear models through a fluid pedagogy of process. They offer tools for awakening outrage and engaging in protest through pedagogies of active critique. And they invite readers to step into their own citizenship through pedagogies of imagination” (164).

Piepmeyer invites attention to “the local, small-scale, ephemeral ways [that grrrl zines] foster and propagate democracy” through the ways they help to shift how individuals position themselves within their culture.

What I see Piepmeyer and Farmer both pointing to here is a “prefigurative politics,” in which zine makers are building the kinds of worlds they would like to see.³⁸

The term traces back to political theorist Carl Boggs, who coined the term to indicate “the embodiment, within the ongoing political practice of a movement, of those forms of social relations, decision-making, culture, and human experience that are the ultimate goal” (100). Boggs indicates that this kind of political work originated “with the nineteenth century anarchists and includes the syndacalists, council communists, and the New Left” (100). Boggs was interested in using prefigurative politics as a model for building a communism without the problems of authoritarianism and central state control that past communist movements had suffered. While neither Farmer’s nor Piepmeyer’s zine makers are necessarily interested in communism, they *are* interested in building spaces that are alternatives to mainstream capitalism and bourgeois politics. One example of the work a zine maker sees her work doing comes from Janice Radway’s “Zines, Half-Lives, and Afterlives”:

In 2000 the creator of the highly regarded zine *Bamboo Girl*, Sabrina Margarita Alcantara-Tan, published a reflective essay about her zine work “as a queer, mixed-blood Asian girl who confronts issues of racism, sexism, and homophobia in an in-your-face kind of way.” The piece is short, but it reflects substantively on

³⁸ Janice Radway spoke of the “prefigurative politics” of grrrl zines during discussion after her talk, “Riot Grrrl History, Underground Itineraries and Girl Zine Networks: Unruly Subjects in the 1990s and Beyond,” at UWM on March 13, 2015; however, many writing about zines point to this as a role they play, whether or not they use this phrase.

how her effort in her zine to articulate her rage at the stereotyping of Asian women changed her sense of self. Marveling at the many responses she received from those who appreciated her perspective, including white, heterosexual men, she notes, “Then one day I really looked at what I had written and realized that *I’d created my own truths* by printing my zines. Now, finally, there was some validation for myself and other women and men who held similar views.” (147, emphasis added)

Alcantara-Tan articulates her realization of creating truths here, and I’d like to look at that for a moment, as this creation involves taking control not just of her own identity (that of a queer, mixed-blood Asian girl), but also her subjectivity (the fact that she confronted racism, sexism, and homophobia in an in-your-face kind of way—and that she came to understand how her work could shape the thinking of others, including white heterosexual men). Radway calls this changing her sense of self, but I want to emphasize that this change is a shift in Alcantara-Tan’s subjectivity, a change in what she understands herself to be capable of *doing*.

I want to tether the work Alcantara-Tan’s *Bamboo Girl* was able to do, both for herself and her readers, to the DIY work of producing and circulating her zine. I see this as an example of the kind of building “something else” that DIY can offer. A subjectivity shaped by DIY is one that has a nonmainstream relationship to production, consumption, and circulation. In other words, DIY can help us to develop both new ways of being *and* new ways of being together, to develop new communities. How might this work?

Josef Chytry explains in his work on Karl Marx and beauty that Marx believed humans are meant to connect with nature, each other, and production. Marx argued that

individuals are unable to connect to their work in an industrial mode of production because they are not in control of the production of goods from beginning to end. Edward Cormor summarizes the source of workers' alienation: "the worker (or proletarian) does not produce to realize his creative powers—he produces for a wage" (441). Alienation, then, happens *through* production. But it is not merely the use of tools or machines that alienates workers. Cormor later writes, "In reality, the use of everything from knitting needles to computers to a pencil and paper in many instances may further the worker's realization of her self-creative essence. Rather than humanity's essence being denied as a result of using technology, a person's essence is lost when she becomes merely a tool" (445). This echoes Feenberg's argument, described above: tools and machines *can* be shaped to work in ways that allow and encourage workers to exercise their creative powers. But when production is shaped by the needs of capital and machines instead of those of people, workers are unable to manifest—both create and express—their individuality through the creation of objects (Chytry 242). This is when workers become tools. To prevent this, Marx was interested in workers' production of objects that are at once both artisan and civic: in the process of shaping a complete object, he believed that workers were "thinking in terms of the totality of a product," which would "awaken [their] aesthetic perception" (253), and this experience would form the basis of "self-conscious transformative activity, [both] mental and practical" (259–60). Chytry explains that the civic dimension of this work resides in makers' developing relationships with others as they work to fulfill their own and others' material needs (244).

While Marx's later work shifts focus, his early vision of the ways worker-makers shape themselves and their social and civic relations through their work shaping material

objects (articulated here through Chytry's analysis) remains foundational to contemporary thought about craft and DIY. This shaping of self and relations with others is part of the "something else" anarchist zinesters make, the world that can be "prefigured" through DIY craft production and productive relations. Feminist economic geographers Katherine Gibson and Julie Graham, writing together as J.K. Gibson-Graham, for example, argue that DIY social production can cultivate subjects who "desire and inhabit noncapitalist economic spaces" (x). Here Gibson-Graham echo the anarchist zine makers discussed above—and I'd like to take a moment to reflect on why doing so is important.

Gibson-Graham's book *The End of Capitalism (As We Knew It)* argues that we must end the Marxist tradition of thinking about the economy as a capitalist totality.³⁹ They take Judith Butler's work as instructive: Butler disrupts heteronormativity by demonstrating that instead of being biological fact, binary gender is a "regulatory fiction" (2). Gibson-Graham, in turn, seek to disrupt the regulatory fiction that capitalism is how the world now works. Instead, they seek to undermine the idea that the economy is thoroughly capitalist by representing capitalism as specific activities practiced by people positioned in certain ways at specific times (2). As they see it, a pervasive, totalizing vision of capitalist economy needlessly limits the number of subject positions people can embody and enact: employee, boss, owner, unemployed, etc. The relations suggested by these subject positions limit the private and public actions people can undertake, thereby

³⁹ Gibson-Graham make a distinction between *Marx's* thought and *Marxist* thought. The Marxist tradition was built by those who built upon Marx's work; as demonstrated above through my discussion of Marx via Chytry and Cormor, Marx did not see *all* labor and transactions as being absorbed by capitalism.

limiting the kinds of solutions we might devise to answer local, regional, national, and global needs.

More specifically, Gibson-Graham restrict their definition of capitalism to: a system of generalized commodity production structured by (industrial) forces of production and exploitative production relations between capital and labor. Workers, bereft of means of production, sell their labor power for wages and participate in the labor process under capitalist control. Their surplus labor is appropriated by capitalists as surplus value. The capitalist mode of production is animated by the twin imperatives of enterprise competition and capital accumulation which together account for the dynamic tendencies of capitalism to expand and undergo recurring episodes of crisis. (3)

A typical way of talking about the economy today—especially the globalized capitalism supported by neoliberalist politics that sees private sector development as the answer to questions from education to gender equality to environmentalism—is to see capitalist economics pervading all labor and material transactions. And, certainly, the trend for building mobile applications that connect people in a more formalized “sharing economy” (such as ride shares found via the Uber app or houses to stay in via the Air BnB app) and then monetizing them (Uber turning into an unregulated taxi service, Air BnB turning into an unregulated lodging industry) seems to support this way of thinking. This is one of the critiques of the budding sharing and craft economies: websites like Etsy take a cut of makers’ profits while encouraging them to grow beyond human-scale making, and investors help craft businesses leverage a handmade aesthetic while diminishing individuals’ control over their work and the connections they might build

with those who buy (or barter for or otherwise acquire) the things they make. And all the while, labor is increasingly informalized while worker and consumer protections are eroded and safety regulations and taxes are avoided.

However, we can reframe these issues by more specifically defining transactions, labor, and enterprises. Just because these usually exist or are enacted in some kind of *relationship to contemporary capitalism*, Gibson-Graham argue, we should not necessarily understand them as being *subsumed by* capitalism. They point to alternative market and nonmarket transactions (such as fair trade, co-op exchange, gift giving, and gleaning); alternative paid and unpaid wage labor (self-employment, reciprocal labor, family care, and self-provisioning labor); and alternative capitalist and noncapitalist enterprises (state enterprise, nonprofit organization, communal enterprise, independent enterprise) as examples of diverse elements of our economy. “Realizing that in both rich and poor countries [nonmarket transactions, unpaid labor, and noncapitalist enterprise] account for well over 50 percent of economic activity,” Gibson-Graham argue that we do “discursive violence” to the majority of economic activity by assuming that the economy is constituted only by “formal markets, wage labor, and capitalist enterprise” (xii).

In other words, while capitalist enterprises might participate at *different* points in a DIY crafter’s materials (in the factory production of paper that is used by a zine maker), production (using a computer to remix an image), or circulation (driving a car to distribute her work), that does not erase the fact of DIY production, through which a maker might make *something else* in addition to a finished product: making connections with others and, potentially, making a different way of being in the world. This is what can happen through acts of making and through connections made with others through

the distribution and circulation of one's made work. Gibson-Graham describe this process as one that cultivates subjects—including ourselves and others—who can “desire and inhabit noncapitalist economic spaces” (x). In *A Postcapitalist Politics*, Gibson-Graham explain how they have attempted to translate the theory of *The End of Capitalism* into action through projects that attempt to develop on-the-ground diverse economies and diverse communities. These diverse economies and communities aren't off the grid or removed from mainstream culture in the countries and regions where they developed, though. Importantly, Gibson-Graham and their collaborators worked with participants where they were—seemingly immersed in late twentieth and early twenty-first century global capitalism—to open up community discussions about the economy in the Latrobe Valley, a mining and logging region in Victoria, Australia; in the Pioneer Valley, a region with a mixed economy including agriculture, industry, and higher education in Western Massachusetts; and in the southern Philippine islands of Bohol (in the Jagna Municipality) and Mindanao (in the Linamon Municipality), which are both predominantly agricultural.

At each project site, Gibson-Graham recruited local participant researchers to join them and their collaborators to enact participant research projects seeking to open up ways of thinking about the local economy and ways local people open up to each other as collaborators in making the local economy. For example, in both the Australian and American projects, Gibson-Graham and their participants began by forming focus groups that worked to dislodge people's mainstream sense of the economy: “In the focus groups, familiar stories emerged, couched within the anxiety-ridden discourse of development in which every region is found wanting.... The prescription was familiar: attracting ‘good’

jobs by recruiting major capitalist employers, via subsidies and other inducements, to locate in the region” (135). As they discussed how higher employment might change life for people in the Pioneer Valley, Gibson-Graham noted a fear among residents that households with two full-time working parents would not be able to spend as much time on social reproduction. Participants recognized “the insufficiency of the capitalist economy (no matter how developed) to the task of sustaining a community—raising its children, reproducing its sociality” (136). Furthermore, while talking about long-term and recent changes to the local economy, participants were deficit focused, emphasizing the lack of power people felt they had in influencing the economy. “But when they were later asked to consider the strengths of the region and the capacities of the community to cope with change, an unmatched set of stories emerged,” speaking of local individuals’ “artistic ingenuity and enterprise, of contributions made by migrants from non-English-speaking backgrounds and intellectually challenged residents, of the potential to revalue unemployed people as a regional asset” (136–37). Ultimately, Gibson-Graham found that the “economic development practitioners, business people, union officials, and local government functionaries” started speaking from other subject positions—a move that was later mirrored in their project when participant researchers from the area started to document what Gibson-Graham call an “economy of generosity, overflowing with goods, money, and labor” (138, 150).

This economy consists of people of various ages, employment statuses, and social statuses donating time, money, material goods, care, expertise, productive labor, and more to individuals and groups in the region; some of them (like retirees who volunteer time and labor at a local brewery in exchange for lunch and a case of beer) participate in

a market-oriented capitalist enterprise, while others (like a local used bookstore owner whose stock is mostly donations, or the local woman who quilts using donated fabric from scraps and clothing) sell goods and their own labor, while still others (like a woman who takes in and takes care of wayward teenagers, usually high school boys) provide free labor and services to support social reproduction (150–51). Through making this work visible and available for discussion—and for valuing—Gibson-Graham seek to shift people’s affective attachments to the economic activities and actors that surround them. They seek to emphasize the contributions individuals make regardless of the role(s) they might play in a capitalist reading of their local economy and to create “spaces for new identifications and ethical openings” to foster communality among residents of a region (155).

This regional/community self-provisioning is DIY on a grand scale and might be better described as DIT (do-it-together) or DIO (do-it-ourselves), which Matt Ratto and Megan Boler describe in their Introduction to *DIY Citizenship* as “emphasizing the collective and collaborative action of the individual and atomistic invocation of a self that acts” (8). In keeping with craft and DIY traditions, Gibson-Graham and Ratto and Boler return to the individual-in-community as a key unit of thought, affect, and action. Gibson-Graham emphasize ways in which community and diverse economies encourage individuals to see economic interactions as spaces for ethical decision-making. Economic interactions are inherently relational, world-building, and rhetorical because they communicate, to ourselves and to others, the world we understand ourselves to inhabit and the worlds we can imagine and choose to build. Instead of yielding to “the naturalized universal of the capitalist economy” and narratives of economic development

worldwide, DIY practices demonstrate that what seems natural isn't so—and isn't necessarily desirable. A vast number of widely enacted practices tend to devastate local environments and disempower local communities. These include:

import substitution, export base development, direct industry assistance, cluster development, elimination of trade barriers that impeded the global flow of industrial inputs and commodity outputs, deregulation of labor markets so that industrialization can be fueled by cheap labor, deregulation of financial markets so that investment will more readily flow into greenfield areas of industrial development, retraining of labor so that the demands of emerging industries can be met. (Gibson-Graham 166)

These practices encourage local communities to turn to national and global entities for economic solutions (whether those are forthcoming or not) and render them even less able to cope when markets inevitably shift, turning boom times to bust. DIY suggests that these cycles and individuals' status as pawns in multinational capital games are neither natural nor desirable, and Gibson-Graham argue that DIY provides a way to build more steady, more humane economies. They have used DIY to develop several tools for identifying and building diverse community economies, such as needs assessment and asset maps that communities can use to identify the people and practices, local associations and institutions, and business and physical infrastructure that communities want to address and can leverage on their own. These do include capitalist enterprises and market transactions, but they are not limited to them, and they invite communities to imagine alternative ways of using, sharing, and leveraging the resources at their disposal, including time, skills, natural resources, material goods, relationships, and more (165–

96). In sum, DIY offers individuals and groups ways of acting in local, regional, national, and international politics and economies,⁴⁰ often reshaping themselves, as well, along the way.

This, for me, is the key modification that DIY offers to craft. Without sidestepping craft's complex histories and realities, DIY helps us to pay good attention to what is most useful in craft production for multimodal writing pedagogy: processes of production, working with flexible tools and materials, building mutuality among people through productive practices, building relationships with others through the circulation and use of what is produced, holding ourselves accountable to the worlds we build through the things we make, and allowing ourselves to be changed through these processes.

DIY craft offers what Ratto and Boler might call a framework for "critical making," a practice they describe as signaling how the things people make and their processes for making might be "understood as politically transformative activities by individuals and groups," as well as signaling

the integration/simultaneity of processes and practices, the act of *making* "things," and suggests that practices of "making" are potentially linked to critically-infused reflection about aspects of the process itself. Critical making invites reflection on the relationship of the maker to the thing produced, reflection on how elements (whether nuts and bolts, bits and bytes, or breath, blood, flesh, brain, and neurons)

⁴⁰ Gibson-Graham point to unemployed workers in Argentina taking over abandoned factories in the wake of economic crisis in 2001 (xxxv) and the Mondragón cooperative corporation in the Basque region of northern Spain (101–26) as examples of DIY politics and economics with national and international reach.

work together—in short, consideration and awareness of the mediated and direct experiences of interacting with the material world” (3, emphasis in original).

Ratto and Boler examine how practices of producing and circulating critically made objects (both digital and analog) intervene in makers’ own sense of themselves and in the possibilities of public political exchange on scales large (such as during the Arab Spring and Occupy movements which created small social groups and the movements themselves, as well as signs, installations, and new uses of social media) and small (such as after-school programs teaching racially and economically diverse kids to code and sew, through which the students forged new personal, interpersonal, and social identities). Again, through the making of things, people are also making *something else*.

Chapter Four: Making *Something Else*

At this point, I'd like to turn from craft and DIY specifically, to begin considering in more detail why and how they might reshape writing pedagogy. As I discussed in Chapter One, many students come into college writing classes having learned much about writing—for example, that it's a process—but college teachers routinely struggle to help students understand the ways in which that process isn't singular (that there are several ways of drafting, writing, and revising) or linear (that writing often includes recursive activities), and that the choices writers make when they want to communicate with readers are rhetorical (driven by purposes, contexts, and audiences) instead of rule-bound.

This chapter returns to writing instruction. I begin by considering the writing experiences many students bring into FYC courses, which are largely shaped by standardized writing tests. I then consider frameworks that shape college writing instruction, such as the Council of Writing Program Administrators' Outcomes Statement for First-Year Composition. Drawing on my argument in Chapter One that writing instruction often encourages a disembodied understanding of writing processes, movements toward multimodal writing instruction, including the new version of the Outcomes Statement, provide openings for an embodied approach to writing. I then explain how DIY craft might be put to good use in an embodied approach to multimodal writing instruction that emphasizes the materiality of writing (and so highlights the material effects of writing processes and products). This sets up my final chapter, which takes a much closer look at DIY craft multimodal writing pedagogical practice.

Let's turn, then, to the writing experiences many students bring to FYC. Susan Fanetti, Kathy M. Bushrow, and David L. DeWeese articulate what seems like a

commonplace in discussions of students' pre-college school writing experiences in "Closing the Gap between High School Writing Instruction and College Writing Expectations": "secondary teachers feel compelled to teach to the test, and college instructors wish students hadn't learned so well in high school that an essay is five paragraphs and a thesis statement can appear only as the first or last sentence in the first of those five paragraphs" (79). Fanetti, Bushrow, and DeWeese place blame for this squarely on the high-stakes testing environment created by provisions of the No Child Left Behind Act of 2001—although I would add that the teaching loads and class sizes common in secondary education, resulting in teachers who have well over 100 students at a time, are also prohibitive to the number and kinds of writing assignments and assessments we might reasonably expect teachers to undertake. These factors combine to create what they call a "factory model" of writing instruction that uses writing as something to be assessed, as a form of "quality control," instead of as an opportunity to build new knowledge or communicate with other people (80). I see this reflected in some conflicting beliefs about writing that my students and I frequently negotiate: for example, that using the word "I" breaks a rule that writing must be objective or that admitting or working through one's own position regarding an issue makes one biased (and so the way to remove bias is to remove consideration or even mention of oneself and one's context).

The ethical questions this kind of rule-bound thinking raises are numerous, and they are joined by additional questions prompted by standardized writing tests. Les Perelman's contribution to the *College Composition and Communication* journal's 2008 Symposium on Assessment, "Information Illiteracy and Mass Market Writing Assessments," points to the questionable relationship standardized writing tests invite

students to build with truth. Perelman explains that the College Board's need to control the testing environment to prevent cheating creates a writing context in which SAT test takers are better off making up information than wasting time trying to remember things they've learned or avoiding using examples that include information they only partly remember. He argues that this encourages "information illiteracy," which "not only makes it more difficult for individuals to find information [when they're writing in contexts in which they can do research at all], but it makes it more difficult for them to differentiate between truth and falsehood. Indeed, information illiteracy often retards the desire to do so, reducing all assertions to the equal status of someone's opinion" (130). Some standardized writing tests do this by not differentiating between kinds of information: if a writer marshals something that could be evidence and positions that as support for an argument—whether or not the evidence is credible—the College Board will reward that writer as having supported an argument with evidence.

As Perelman demonstrates, the argument and the evidence don't necessarily need to make sense to readers of SAT writing samples because they're not reading as readers: they're reading as raters. One of his students, taught to game the SAT's scoring rubric, scored 5 out of 6 possible points for the writing portion of the SAT. While the student used sophisticated sentence constructions and multisyllabic words (128), he also "knew it was badly written and that it did not exhibit mastery of anything" (129). The student's writing misrepresented global and national history and politics, remaking the story of the Great Depression into one about American versus Russian merchants and positioning anti-communist sentiment as pervasive in the US at the time. "He knew that his explanation of the Great Depression was wrong, but he could not remember the correct

facts quickly so he just made them up,” just as SAT test prep coaches encourage students to do (129). Although our expectations of a timed, closed-book/Internet-inaccessible writing test might include making room for some factual mistakes, the complete disregard for political-historical material conditions shown here gives me serious pause. While other writers in other standardized testing (and standardized test preparation) situations might have a less brazen approach to the ethical dimensions of writing about historical facts, I think that Perelman is right to worry over the ways in which the constraints on writing in standardized test situations teaches students that the things they are not focused on in a specific writing context (say, making a strong argument over supporting that argument with evidence based in reality) are simply things that they should disregard when writing.⁴¹

This situation likely encourages students to understand writing as what Chris Anson calls in his contribution to the Symposium, “Closed Systems and Standardized Writing Tests,” a closed system: that is, “one in which the activities admit little variation, are habituated over long periods of time, and are learned through repeated practice” (115). He contrasts this with a more open approach to writing, which is “constantly evolving, contextually mediated, and [involves] contextually determined practices, influenced by social and institutional histories, conventions, and expectations” (114). When teachers help students to see writing as nonunitary, as varied—by “[p]roviding opportunities for students to write in different genres, to show their reasoning as they

⁴¹ And we know that students don’t see the writing they do outside of school (writing for themselves, their friends, for work, etc.) *as writing*. (See Lenhart et al.) When writing is reduced to school writing, that puts students in an awkward position when they seek to do real writing for non-school contexts, like in public life. This is because the school writing experiences students often bring to college are so strongly shaped by standardized test writing.

make certain rhetorical or stylistic decisions in a specific context, or to demonstrate their ability to incorporate actual (not excerpted or artificial) texts into their own original arguments or syntheses”—students can begin to develop more expansive and flexible understandings of what they might use writing to do, and so how their writing experiences in one context might inform what they decide and decide not to do in another writing context (119). But this requires time, space, and attentive response from readers; standardized writing test preparation doesn't allow for any of those.

I would also reiterate that it requires getting away from the model of disembodied writing that I discussed in Chapter One. I believe that one important way to do this is to invite students to compose across multiple modes—something that isn't currently allowed in standardized writing test contexts and so is far less likely to be caught up in the closed system approach to writing that students might bring into college classrooms. Multimodal writing is a useful framework for teaching writing as an open system in part because it opens up the kinds of considerations we might take up as we work: this includes the kinds of considerations that are either taught as rules for writing or that are necessarily ignored by standardized writing tests. To understand how multimodal writing might function as a *framework* for understanding writing, Cheryl Ball and Colin Charlton's definition of multimodal writing is useful:

The New London Group ... outlines five modes through which meaning is made: Linguistic, Aural, Visual, Gestural, and Spatial. Any combination of modes makes a multimodal text, and all texts—every piece of communication that a human composes—use more than one mode. Thus, all writing is multimodal.

For example: a print, all-alphanumeric-text essay uses the linguistic mode because of its use of words. But, of course, those words are typeset in a specific typeface and arranged into paragraphs, perhaps with headings of a different typeface, with certain page margins and printed onto a specific weight and quality of paper, perhaps bound in a publication with a certain kind of cover, which means that the essay also uses visual and spatial modes. A multimodal framework for understanding writing encourages us to take all these modes into consideration. While the aural and gestural might seem outside the traditional realm of composition, consider the last time you listened to an audio recording with poor sound quality or watched a video lecture with *just* a talking head—instead of a more fully embodied presenter and perhaps some illustrative images. You know from experience how important these modes can be to successful compositions. But standardized writing test situations demand that students pay attention only to the linguistic mode: to the grammar of their sentences and the number of syllables in their words. The context of a timed high-stakes standardized writing test makes even the formatting and layout of alphanumeric text a superfluous concern—decoration, at best. And so with a greater number of considerations on the table, it can make greater sense to root the decisions writers make in their rhetorical situation, with clear reference to those complexities that a closed-system approach to writing typically ignores: context, purpose, and audience.

I open this chapter by going after standardized writing tests and their consequences for secondary education curricula not because I think any of this is news to people in the field, but 1) to emphasize the fact that No Child Left Behind (NCLB) and college entrance exams shape much of students' writing experiences before they enter

first-year writing classes, and 2) to begin to question the notion that writing is taught much differently in many first-year writing classrooms.⁴² Despite long-term, widespread critique of standardized writing tests, some FYC programs continue to perpetuate approaches to writing that we critique in secondary education.

For example, in his corpus analysis of 83 scoring rubrics and grade definitions from American public research university writing programs, Dylan Dryer finds at least 227 missed opportunities to emphasize the *situatedness* of the students' writing (i.e., why they might want to write like this and for what ends), the *local nature* of the scoring and grading (i.e., why the readers make the decisions they do and by what authority), and the *specific construct* of the writing valued by the assessment (i.e., what this kind of writing is, why it matters and to whom, and what it is and is not good for). ("Scaling Writing Ability" 27–28, emphasis in original)

These missed opportunities are, in fact, missed chances to engage with writing as an open system: as highly contextual, as useful for engaging different varieties of rhetorical situations, as appropriately taking different forms and doing different work in those different contexts. As Dryer points out, "the language used to assess these traits and performance categories will inevitably wash back into teachers' and students' everyday rhetorical constructions of what counts as good writing and of writing development more generally" (27). And so the practices in these writing classes are unlikely to meaningfully

⁴² I want to emphasize again here that nothing I know about writing instruction in secondary education leads me to believe that teachers themselves are at fault. However, the federal government's continued support for NCLB continues to disempower teachers as professionals. This is compounded by its curtailment of direct support for the National Writing Project, which has contributed to measurable gains in students' writing and empowerment of writing teachers as professionals. (See Dierking and Fox.)

challenge students' previous experience of writing as a closed system. Although some of the rules of college writing in these contexts are likely different from those in students' previous writing contexts, Dryer calls the theoretical construct of writing displayed through these rubrics "overgeneralized and brittle," unsupportive of "adaptive repurposing" (28). Tellingly, the rubrics he analyzed idealize "the conventions of essayistic expository prose," as Dryer points to "the corpus's lack of self-consciousness about the uses, limitations, and site specificity of these conventions may be working against writers' ability to negotiate transitions to other local genres" (28). While Dryer's work here is on assessment rubrics themselves, I want to emphasize the kinds of texts these rubrics seem to overwhelmingly invite—essayistic expository prose—which represents neither what students will write across their academic lives, nor what they will write across their public and workplace lives, as Dryer points out. While I don't expect FYC to fully represent all of those areas, getting away from assigning *just* "English papers," as many students refer to the genre, is a start. If we can represent writing as more multiple, more open, students are more likely to develop the kinds of composing flexibility that will serve them well when they enter new writing contexts.

This shift in representation, for example, has been made in "version 3.0" of the Council of Writing Program Administrators' WPA Outcomes Statement for First-Year Composition (WPA OS), approved by the Executive Board in July 2014. The writers representing the WPA Outcomes Statement Revision Task Force explain that while "former versions approached writing as more a stable act—even among emerging technologies—the new version embraces emerging forms of composing in a world of fluid forms of communication" (Dryer et al. 138). The WPA OS accomplishes this

through a shift in verbs: where there was emphasis on “learning,” “understanding,” “using,” “controlling,” and “writing,” we now see an emphasis on “practicing,” “experiencing,” “choosing/ adapting,” “reflecting,” “questioning,” “reasoning/deciding,” and “composing.” This shift signals a move “primarily from descriptions of learning and controlling known rhetorical situations and stable forms of writing to examining and questioning rhetorical situations and making informed decisions about how to interpret and contribute” (138).

These changes to the WPA OS are discussed as the result of networked digital composing technologies. One of the key changes to version 3.0 of the OS is that the version 2.0 “technology plank”—a separate section from the rest of the OS that dealt with composing technologies—was removed so that considerations of composing technologies could be integrated into each of the areas of the OS, which include Rhetorical Knowledge; Critical Thinking, Reading, and Composing; Processes; and Knowledge of Conventions. In fact, composing itself is now used in the OS to refer to “complex writing processes that are increasingly reliant on the use of digital technologies” (CWPA 144). However, I want to emphasize that what’s new here isn’t the fact that rhetorical situations are in flux or that forms of writing are unstable. Rhetorical situations and our options for creating and responding to them *have always been* in flux. Forms of writing *have never actually been* as stable as the ways we have presented them suggest. These are facts of understanding writing as an open system.⁴³ What does seem new, however, is our attention to these facts and our invitation to students to attend to them, as well. In other

⁴³ This isn’t to say that there aren’t recurring rhetorical situations or forms of writing. But it is to say that we and our students cannot presume to know these whole, ahead of time. And so we cannot always predict what composing choices will be appropriate, effective, and meaningful for writers and their audiences.

words, while it might seem like all of these shifts are necessary due to the changes wrought by networked digital composing technologies, I see them as a response to what we have been slowly realizing *en masse* about writing, but which has long been true. Digital technologies haven't caused these changes to writing;⁴⁴ they have helped us, as a field, to see something about writing to which we had not yet paid enough attention.

Jason Palmeri makes this clear in *Remixing Composition: A History of Multimodal Writing Pedagogy*. Palmeri points to Janet Emig's "call for compositionists to engage in the interdisciplinary study of creative composing" across "visual, aural, and alphabetic" modes in her 1971 *Composing Processes of Twelfth Graders* and to the connections Linda Flower and John Hayes assert between alphabetic writing and fine art as creative cognitive activities in the early 1980s—that, for example, "both alphabetic and visual creativity entail a willingness to intensively explore materials—to 'rearrange' and 'play with alternatives'" (28, 30). Further, Palmeri documents four decades of our "rich multimodal heritage," from the 1960s to the 90s, "in order to reimagine contemporary pedagogical [read: often digital] practices" (149). Bruce Horner points to Palmeri's historical grounding for contemporary multimodal composition in his critique of scholarship that frames multimodal and digital writing as an answer to Rhetoric and Composition's "discourse of need" when he acknowledges that "we might agree with the appropriateness of the activities called for [in multimodal composition] while rejecting

⁴⁴ This is not to discount important differences between digital and nondigital writing, on which much work has been done in the field of Computers and Writing. However, I do disagree with characterizations of nondigital writing as somehow static or inert. Erik Ellis and others have pointed out that we've hardly exhausted the possibilities for essay writing in its original sense, "from Montaigne on" ("Back to the Future?" 37). However, this expansive notion of "the essay" hasn't often translated to students' understanding of the genre. This, again, is where I think that a multimodal writing framework can be useful for shifting our own and students' expectations for essay writing.

the claim that engaging in them somehow constitutes a radical break” (“Rewriting Composition” 469). While there are genuine differences between composing with words and composing with moving images and between composing on paper or film and composing in text editing or video editing software (such as the ways in which drafting and revision might work, the technologies one might work with, the amount of experience many students have with composing in these media in academic contexts, etc.), I want to argue for a fundamental continuity among these composing situations: composers in all cases need to “practice,” “experience,” “choose/adapt,” “reflect,” “question,” and “reason/decide.”

However, I also want to re-emphasize that, because of their prior experiences with writing alphanumeric text, students are more likely to be open to doing this kind of work if their teachers signal in multiple ways that what they are being asked to do in FYC differs in many ways from the kinds of writing they have previously done.⁴⁵ Because many students’ pre-college writing experiences continue to be primarily shaped by standardized writing tests, then the disembodied notion of writing I discussed in Chapter One will continue to need to be met head-on. And some of the most important ways I’ve found of doing that are through helping students to change their ingrained writing

⁴⁵ That said, there are of course some continuities that are worth drawing on, as well. While my focus here is on difference, I want to be mindful of the fact that standardized test writing does not encompass everything students learn about writing before college. Most students come to college with well over a decade of literacy instruction and experience, and I risk discounting valuable aspects of that experience here. Research on transfer, such as Rebecca Nowacek’s *Agents of Integration*, suggests several useful ways to help students identify known writing practices that can leverage in new writing situations. In the course of helping students to try new writing practices, I have found that it does help to ask them to articulate both the connections and differences they see among their past writing experiences and the writing practices I ask them to try. That said, transfer remains outside the focus of this project.

processes so as to help them rethink what their writing might look like or do. In other words, I want to connect the embodied work of writing to writing as an embodied object.

How DIY Craft Can Re-embodiment Writing

The previous two chapters provided historical accounts of craft and DIY and theorized these practices. In this section, I'd like to look more explicitly at how craft and DIY can help us to understand embodiment in ways that will be useful for writing students. To do this, I'd like to start by returning to ideas I introduced in Chapter One, where I considered a few ways in which we understand writing as embodied—both as an embodied activity and as an object itself with its own metaphorical body.

Let's return to two of A. Abby Knoblauch's categories from "Bodies of Knowledge": embodied knowledge, which is "that sense of knowing something *through* the body," and embodied rhetoric, which is "a purposeful decision to include embodied knowledge and social positionalities as forms of meaning making within a text itself" (52, emphasis in original). In Chapter One, I focused specifically on Knoblauch's category of embodied knowledge because that operates at the level of activity: bodily knowledge shapes what we do—and can imagine doing—with our bodies. Embodied knowledge, then, has to do with the activities, practices, and processes that we engage in as we write. Translating embodied knowledge into action occurs at the nexus of *techne* and *poiesis*, and as I argued in Chapter Two, we have typically privileged *techne* over *poiesis* in Rhetoric and Composition. I'd like to reconsider embodied knowledge, then, as something related to action as well as knowledge. However, I want to complicate what counts as *bodily* in Knoblauch's formulation by extending the limits of the body beyond the physical self.

Embodied Knowledge

Doing so is not, of course, new: recall from Chapter Two that in the Homeric myths, a tool, or *organon*, is characterized as both an instrument to be manipulated and an extension of one's own body. Contemporary accounts of this phenomenon refer to it as distributed cognition, and there are some accounts of this that are central to the discussion in Rhetoric and Composition. Margaret Syverson's Introduction to *The Wealth of Reality*, for example, recounts Edwin Hutchins' study of navy navigators in *Cognition in the Wild*:

In this study, Hutchins describes a navy navigation team guiding a ship into San Diego Harbor. On each side of the ship, seamen using an optical instrument called a *pelorus* are positioned to spot landmarks and determine their position relative to the ship. Their readings are recorded in a bearing record log by a third seaman and then relayed by telephone to the navigator, who places a one-armed protractor on a chart, indicating the ship's position relative to the landmark. A series of three bearings is taken, and the navigator inscribes a line on the chart for each one, producing a small triangle that signifies the ship's location. The navigator then calculates the projected path of the ship at its present rate and direction of travel and issues instructions for the time and landmarks for the next reading. This process is repeated at least every three minutes until the ship is safely at anchor or secured to a pier. (8)

Syverson asks us to consider who on the team is writing and goes on to suggest that the writing happens through interactions among people, landmarks, instruments, and other objects—through the ecologies in which they are working. But this example also suggests

ways in which the navigators' own cognition is extended through their bodies and through the things they manipulate. N. Katherine Hayles in *How We Became Posthuman* connects distributed cognition to action when she writes that "modern humans are capable of more sophisticated cognition than cavemen not because moderns are smarter, ... but because they have constructed smarter environments in which to work" (289). Indeed, in "Being Linked to the Matrix," Marilyn Cooper recounts students pulling together several environmental and technological elements to make a documentary video project investigating the Paulding light, a mysterious phenomenon in Michigan's Upper Peninsula:

Their research involves a trip to the site, where, using their cell phones and a GPS unit, they establish that the light comes from headlights on a highway in the distance, and they use a video camera to record their observations and commentary. Although their teacher might be tempted to exclaim at their cleverness in using all that technology, for them the cell phones, GPS unit, and video camera simply come to hand as part of the already-established consensual domain of these extensively mediated and technologized students.... (19)

Removed from the full context of Cooper's work, this passage poses the danger of perpetuating the "digital native" myth about how naturally or automatically contemporary young people make good use of digital technologies. This myth, of course, has been debunked⁴⁶—and Cooper reveals one reason why, by recounting Tim Ingold's story in *The Perception of the Environment* about how Telefol women in central New Guinea and male weaverbirds each learn to weave: "Just as children and young birds babble sounds

⁴⁶ See Kirtley, Selber, and Thomas.

as a prelude to speaking and singing, Telefol girls and young male weaverbirds play with fibers to develop their facility with them” (Cooper 23). Young weaverbirds that were prevented in experiments from practicing manipulating materials were—unsurprisingly—later unable to build the tools or nests their peers could. Similarly, Telefol girls, and Ingold and his colleagues, learn to weave only through practice, through trial and error, through getting a feeling for it: while following instructions and using diagrams might have helped Ingold’s team conceptualize how weaving worked, they didn’t learn how to weave until their perception and movements were attuned through doing.

Cooper explains that skill “in any kind of production whatsoever” is “an interactive achievement of organisms and their environments rather than as a flash of genius” gained through “playing around with stuff (pieces of wire or grass, string, words, cell phones, computer programs)” and finding out how different kinds of interactions produce different kinds of results (24). And this is true of alphabetic writing as much as it is true of multimodal composing and other kinds of making: “As concrete objects that can be manipulated and can store information, tools and words extend cognitive processes beyond the individual brain. Other beings can also be recruited in the same way, as dogs extend the abilities of shepherds to control sheep and editors extend the abilities of writers to consider other perspectives” (18). The environments our cognition can be distributed through aren’t just electronic digital environments—Hutchins’ navy navigators, Cooper’s students, weaving humans and birds, and the environments and tools they worked with—although digital technologies might well be one of the bodily extensions with and through which writers work.

So the notion of bodily knowledge that I want to work with here isn't limited to what's felt in the gut, although that's included. Keeping in mind this extended sense of the body that reaches through the tools and environments we work with and in, I'd like to return to Sennett's example of architects working with computer-aided drafting (CAD) software from Chapter Two. Sennett points out that working in CAD prevented the architects of Peachtree Center from understanding what the built space would actually be like for people who used it. In other words, he identifies this use of CAD as one in which architects' cognition did *not* extend to the built environment they were designing because neither the software nor anything else in the architects' design practices gave them the opportunity to adequately consider what that space would feel like for bodies in it—they failed to account for how a sea of parked cars looks to the eyes, how the Atlanta sun feels on bodies, and how exactingly calculated spaces discourage spontaneity of thought and action (42–43). Peachtree Center is an example of people *not* thinking through their tools and materials to the contexts in which what's being made will be used, as craftspeople do.

While Sennett argues that the architects seem to know CAD software too well (in that they did not think outside of the frameworks of understanding provided by the software), since the affordances of CAD shaped their plans and the points of view from which they shared and evaluated those plans, I might also point out that they don't know it well enough because they failed to account for what the software wasn't making apparent. This dimension of thinking through tools is also emphasized in Stuart Selber's taxonomy of computer literacies in *Multiliteracies for a Digital Age*. While functional literacy positions students as technology users who can effectively use computers, critical

and rhetorical literacies push students in the direction of understanding and acting on a computer or program's limits: critical literacy positions students to question and critique the technologies they're working with, and rhetorical literacy positions students as producers who can shape those technologies (25). Selber's critical and rhetorical literacies require a certain degree of sensitivity to what Cooper calls the "matrix": while functional literacy positions students as actors able to execute their will in a software program, critical and rhetorical literacies position writing as "not just autonomous social action but always an interaction with other beings and objects in our surroundings, an ongoing process of stimulus and response that we habitually misconceive as autonomous planned action" (Cooper 20).

When we encounter a series of similar or repeating patterns of stimulus, our responses to them can become habituated, and in "Rhetorical Agency as Emergent and Enacted," published the year after "Being Linked to the Matrix," Cooper identifies feedback loops at different orders of magnitude (from an individual's nervous system to actors within complex activity systems). This is how bodily knowledge—what Knoblauch identifies as being felt "in the gut"—can also be felt through the fingers or through a complex of interactions among composer, words, paper, ink, computer, software, digital networks, previous writing experiences, and assignment. But that habituated response, based on bodily knowledge, isn't always going to be an appropriate or successful one; rhetorical agency doesn't ensure rhetorical success.⁴⁷ And as David Bartholomae explains, first-year college writers must "dare to speak [various academic languages] or to carry off the bluff, since speaking and writing will most certainly be

⁴⁷ To be sure, "learning" is the final step in the "neurodynamic intentional arc" Cooper discusses (428–29).

required long before the skill is ‘learned’” (624). But the sensitivities we develop to the tools and materials and beings and environments we work with/in are in response to practice, to “playing around with stuff” and seeing what happens. And I think that play is most likely to happen when students recognize *bodily* that the composing matrix of FYC is different from that of previous writing experiences and that it therefore invites different composing actions, activities, processes, and outcomes.

Following the research on transfer and writing about writing discussed above, I believe that it *is* important to discuss with students those differences. But because I think that an important shift for FYC composing environments is that they should explicitly be multimodal—taking into account the multiple modes of writing and inviting non-essayistic-prose composing that might happen through a variety of media—I also assert that composing environments themselves need to change in order to help trigger the kinds of bodily responses that will help students to think, work, play, and create new texts in new ways.⁴⁸ In part, the change I’m advocating is to make FYC composing environments explicitly multimodal writing environments. And in a matrix that emphasizes multiple modes and media, students will need more than words to help them make this transition. Recall what Peter Dormer said about thinking in the crafts in Chapter Two: that it “gives the artist a mental, conceptual and imaginative grasp of what can be done with and through [a particular] media” but can only be gained through “the physical processes involving the physical handling of the medium [in which one is working]” (31, 24). In other words, the particular qualities of FYC composing environments must encourage

⁴⁸ This assertion tracks with Christina Haas’ findings in *Writing Technology*, James Inman’s study of writers at work in *Computers and Writing*, and Roz Ivanič’s research on literacy practices in *Writing and Identity*.

students to take the time and space they need to experimentally practice working with new modes and media, to learn new embodied knowledge. Composing environments shaped by DIY craft practice can help students to be more willing and able to approach writing in FYC as in many ways different from the standardized test-driven writing they are most likely most familiar with when they come to college, and to help them learn to distribute their cognition through new environments. This is because of DIY craft's implications for rethinking Knoblauch's embodied rhetoric, as I will explain below.

Embodied Rhetoric

As “the purposeful effort by an author to represent aspects of embodiment within the text he or she is shaping” by evoking “gender, race, class, sexual orientation, politics,” and other relevant aspects of identity, embodied rhetoric for Knoblauch fights against an inherently “white, male, and privileged” idea that bodies do not matter, that academic or intellectual pursuits “transcend material matters” (58, 59). This privileged stance is one that many FYC students have been encouraged to take in their previous writing experiences. As students repeatedly tell me, they have been schooled to believe that using first-person pronouns, connecting their interpretation or analysis of a text or idea to their own lived experience or position in the world, and rooting what they have to say in their embodied experiences are all examples of bias in writing. Further, they believe that making embodied rhetorical moves would turn what could otherwise be solid arguments into the kinds of “opinions” to which standardized writing tests reduce all positions, as Perelman argues. In other words, that “disembodied view from nowhere” critiqued by

Knoblauch and the writers she cites⁴⁹ “assumes ... that each body is equally constructed, equally accepted, and equally provided for in this society,” while, of course this isn’t actually the reality experienced by anyone (59). Knoblauch argues that, while embodied rhetoric isn’t an appropriate choice for all writing contexts, bringing “attention to embodied knowledge—specific material conditions, lived experiences, positionalities, and/or standpoints—can highlight difference instead of erasing it in favor of an assumed privileged discourse” (62). Doing so will help to connect the personal to larger political and social issues. This is a version of the idea that the personal is political in its full sense: the personal is caught up in networks of material conditions that we are used to ignoring or marginalizing, but bringing those conditions to the center helps us to see the many ways in which different people are positioned differently—and the many different ways in which people experience and understand those different positions.

Although Knoblauch’s focus in this article is on academics’ professional writing contexts, I think that her notions of embodied knowledge and rhetoric are useful for teaching FYC (which is, of course, one of the professional contexts in which academics in Rhetoric and Composition work) because of the ways they can help us to address some common approaches to writing that students bring into FYC. However, as with embodied knowledge, I want to extend the notion of embodied rhetoric beyond the alphanumeric writing Knoblauch seems to assume in “Bodies of Knowledge.” Just as word choices are rhetorical, so are other mode and media-related choices, and I want multimodal writing students to gain experience wading through those rhetorical choices, as well.

⁴⁹ In this section, Knoblauch is working with Jane Hindman, Jacqueline Jones Royster, William Banks, Susan Bordo, and bell hooks.

One useful example of the embodied rhetoric of design is Anne Wysocki's in "The Sticky Embrace of Beauty," an essay that takes up some problems of teaching visual design. Wysocki's central claim is that popular methods for teaching students how to analyze the visual aspects of texts "are incomplete and, in fact, may work against helping students acquire critical and thoughtful agency with the visual" (149).⁵⁰ The problem Wysocki identifies is that the way visual design is commonly discussed and taught leads to a separation of form from content so that a well-designed (and so pleasurable-to-look-at) composition can also treat particular kinds of bodies as just another form instead of as a particular person who can communicate reciprocally with the viewer (and so is anger-inducing-to-look-at) (149). The object of Wysocki's critique is an advertisement in an issue of the *New Yorker*, promoting a book called *Peek: Photographs from the Kinsey Institute*. The text of the ad features the word "Peek" (and also includes a short description of the book, information on essay contributors, and information for purchasing the book), but viewers' eyes are more likely to be paying attention to the photograph in the background of the words: it's a striking black and white image of a woman's mostly-naked body (posed in a way to be *New Yorker*-titillating-but-appropriate). The lighting and contrast draw viewers' eyes to the profile view of the woman's hips and buttocks, while her feet, legs, arms, and hands are covered in black (in what looks like leather boots and silk gloves). Her gloved hands obscure the lower half of her face. Wysocki explains that this ad makes good use of the design principles described

⁵⁰ I should note that in the original, the words from "incomplete" to "visual" are highlighted in grey, and the right margin of the page for the full sentence this excerpt is taken from extends half an inch beyond the regular right margin. Wysocki wants to make sure we don't miss this.

in popular design books. But no analysis that is shaped only by these principles is able to account for what makes the ad troubling for some viewers.

Wysocki explains that design principles are neither neutral nor timeless, just like the “disembodied view from nowhere” in language that Knoblauch and others critique. In the case of the *Peek* ad, Wysocki explains that common design principles (like contrast, repetition, alignment, and proximity) allow us to ignore the person-hood of the woman in the ad: “We are not encouraged to ask about the woman in the ad as a woman, only as a shape” (152). This is because of the particular histories of perception and aesthetic judgment that have shaped Western design. And this history lands us in a contemporary situation in which we can take pleasure in formal aesthetics but also feel anger at seeing just another layout “in the endless pile of painted, photographed, and drawn representations of women shown as only sexual and also now used for selling,” pushing men and women alike “see women only as sexual objects, as objects serving as the means to the ends of others” (168). And while contemporary design principles don’t help us to understand that anger, Wysocki’s history of aesthetics does, explaining how “this objectification—and the violence against women that can follow from it—[is] inseparable from the formal approaches we have learned for analyzing and making visual presentations of all kinds” because it asks us to separate form from content and to see beauty—to take pleasure—only in universalized form (168).

Wysocki argues, then, for a more particularized approach to beauty, as a quality that “we construct together” as a way to “reciprocally share with each other the pleasures of being with in the world together, of appreciating what is particular about our lives” (170). By approaching visual design as a way to work with viewers, students can learn to

critically use and *misuse* common design principles in their own work in order to build reciprocal relationships with their viewers, through which they can help to reshape the worlds they and their viewers inhabit.

So to step back from this example, we can see Wysocki arguing for an approach to design that re-embodies both designers and viewers, that encourages students to take an ethical stance toward their own bodies and the bodies of their audiences through the visual and spatial decisions they make in their work. This extends Knoblauch's notion of embodied rhetoric from the linguistic mode to two other modes. And given what I've written about multimodality and craft so far, you will not be surprised that I want, following people like Jody Shipka, to further extend these considerations to aural and gestural modes, as well as to media beyond the page or screen, which aren't usually considered in writing or design in FYC (including cloth, plastic, cardboard, wood, and bodies themselves). Recall *Shedboatshed*, the found wooden structure that Simon Starling paddled along the Rhine River and then re-erected in a museum: this work doesn't *work* if it's not made of a wooden shed that had been located in a forest and was used to paddle down a river. Similarly, DIY zine-makers' work typically doesn't *work* if it's produced using professional design software, printed on a high-end color printer, and distributed through a big-box bookstore. Frank Farmer's zine-makers whom I discussed in Chapter Three seek to give their work certain kinds of space and texture and heft and aesthetic qualities, certain kinds of bodies. And so those zines are often filled with embodied rhetoric in Knoblauch's narrow sense (as writers identify their own bodies' characteristics and discuss how those characteristics position them in different facets of their lives), as well as in the wider sense that I'm arguing for here.

Materiality, Embodied Knowledge, and Embodied Rhetoric

So how do we encourage students to be open to experimenting with developing new kinds of embodied knowledge and to use new kinds of embodied rhetoric? I believe that asking them to work in composing environments that are different from those they are used to while working with tools and materials that are different from those they are used to is an important way to help them practice new composing activities and taking on new composing challenges.⁵¹ One way to do this is to configure classroom spaces that accommodate and encourage interactions with unfamiliar writing tools, materials, and people. Doing so might mean having students compose in arrangements they're not used to, such as sitting at large tables that allow students to spread all of their writing materials in front of them or having everyone get comfortable on the floor or working in a nontraditional classroom space (like in a common area of the music building or in a campus gallery space). These changes encourage students both to see the places they choose to work in as choices and to reconsider the kinds of work different composing spaces enable or encourage. This can help students to make more informed decisions about the environments in which they might choose to work. And it might help students

⁵¹ I do not assume that the category “students” or “FYC students” is constituted by a homogeneous, unified mass of people, much less a group of people that all needs the same thing (especially from a writing class). Similarly, a certain kind of valuing new for the sake of new-ness itself echoes through this paragraph, but on both counts, I hope that the writing I’ve done above and what comes below helps to frame all this in a way that makes clear to you that I am trying to steer away from these discourses. I do, however, want to acknowledge that there are things about writing that many FYC students don’t know or haven’t put to work in school writing situations, and that part of the value I see in the project of FYC is to ask students to take on composing tasks that they likely haven’t taken on before, such as enacting an expansive notion of embodied rhetoric through a project.

make new connections among the ideas they're working with in class and those from other classes and other parts of their lives.

We should also ask students to pay what might be new kinds of attention to the tools and materials with which they compose. Selber's multiliteracies framework for digital writing (computers and software) and Wysocki's approach to visual design (pairing textbook design principles with an emphasis on reciprocal communication) offer two examples of this. I often ask students who are writing essays on computers to print their drafts and work on further developing and revising their work using pen and paper. Although almost every student resents having to use paper and printer ink, many of my students have found that the different material interaction with their work allows them to do things with their text that they would not have done working on-screen. But as these examples are very visually focused, giving primacy to alphanumeric text and images, I would also like to consider ways of thinking, being, and relating that can happen through non-electronic and non-print media. Doing so can help us to consider what it might mean to pay attention to what might be new tools and materials for composing. In the next paragraphs, then, I consider several different non-textual materials. Although I will be considering materials that will likely never appear in writing classrooms, I hope that this discussion suggests why working with different materials can be so rich for those who include words among their materials.

The first material I would like to consider is metal. Jane Bennett, a political philosopher, argues in her book *Vibrant Matter* that the "machine model of nature, with its figure of inert matter, is no longer even scientific. It has been challenged by systems theory, complexity theory, chaos theory, fluid dynamics, as well as by... earlier

biophilosophies of flow...” (91). She develops a theory of “vibrant matter” through several anecdotes, considering the actions of garbage in the street and of electricity flows in a mysterious regional power outage, as well as one regarding metal. Here she turns to Cyril Smith’s *A History of Metallurgy*, explaining that metal is “always metallurgical, always an alloy of the endeavors of many bodies, always something worked on by geological, biological, and often human agencies. And human metalworkers are themselves emergent effects of the vital materiality they work” (60). Smith is interested in metalworkers because they discovered the polycrystalline structure of nonorganic matter before scientists did.

She contends that they were able to do so because of the kinds of interactions each group usually has with the material: metalworkers work *with* metals, while scientists perform experiments *on* them, doing things *to* them. Bennett explains, “The desire of the craftsperson to see what a metal can *do*, rather than the desire of the scientist to know what a metal *is*, enabled the former to discern *a life* in metal and thus, eventually, to collaborate more productively *with* it” (60). In other words, the varieties of interactions metalworkers have with metal—extracting and purifying elements, mixing alloys, and working with them at various temperatures to fashion them into finished products—allowed them to get to know the character of metals in ways that scientists couldn’t. Or, at least, didn’t. Scientists were focused on asking and answering questions and so only interacted with metals in ways that they thought would yield answers, instead of in the varieties of ways that would help them get to know the character of the material. And while there is potentially a very small difference in emphasis in these two approaches, as Smith notes, metalworkers did discover the structure of nonorganic matter first.

A second example concerns stone. In “Regarding the History of Objects,” craft theorist M. Anna Fariello explains that in H. W. Janson’s widely-used *History of Art* textbook, Janson employs what she calls a “postproduction analysis methodology” to analyze art objects. This methodology focuses on the aesthetics of an object, and Fariello demonstrates that this focus on aesthetics obscures other dimensions, such as materials and production, by analyzing his discussion of the Palette of Narmer. Palettes date back to predynastic Egypt and were used to grind and apply cosmetics, as well as for decorative or ceremonial purposes. The Narmer Palette, which is on display at the Egyptian Museum in Cairo, dates from about the thirty-first century BCE and contains some of the earliest hieroglyphic inscriptions ever found. The palette, shown below in Figure Four, is made of slate that has been carved at low relief. It measures about 17 x 25 inches, and has a depression at the center, which would have been used as the space to grind cosmetic ingredients in “working” palettes. The back side of the Narmer Palette features King Narmer wielding a mace at an enemy. Lying below him are two already-dead foes, and along the top there are two human-faced cow heads. Those human-cow faces reappear on the front side, and below them and at the bottom are other scenes with the king. At the center of the front, there are two animals with their long necks intertwined, forming a circle almost at the center of the palette.



Figure 4: “Palette of King Narmer” by Steven Zucker, www.flickr.com. Posted 15 November 2014. No changes were made to this image. <<https://creativecommons.org/licenses/by-nc-sa/2.0/>>

Although the Narmer Palette apparently displays several classic conventions of Egyptian art of the period, Janson finds the presence of the two long-necked animals framing the depression in the center of the palette to be a mystery. He writes that “the center section fails to convey an explicit meaning; the two long-necked beasts have no identifying attributes and may well be a carry-over from earlier, purely ornamental palettes” (99–100, qtd. in Fariello 4). Fariello points out that Janson’s focus on aesthetics doesn’t account for what the palette is made of—and that he therefore cannot develop a sound understanding of the object. She explains,

The depression in the center of the palette *requires* material reinforcement to avoid inherent structural weaknesses. Obviously, its maker met this challenge;

appropriate reinforcement was supplied by surrounding the thinner, interior portion of the palette with a built-up circular rim (the long necks) that strengthens an otherwise weak point in the construction. (4, emphasis in original)

Fariello demonstrates that a material understanding of slate is key to understanding the Narmer Palette, and a working knowledge of that material would have obviously been central to its making (and to its surviving all those centuries in one piece).

My third example concerns crocheted yarn, and it begins with a geometric mystery: “For two thousand years, mathematicians from Euclid on had tried to prove that [hyperbolic] space was essentially impossible. It was only in the nineteenth century that mathematicians have realized that it *was* possible—in fact it was logically necessary. But it seemed a purely abstract thing” (Wertheim 279). In an interview with Maria Elena Buzek for *Extra/Ordinary*, science writer and cultural historian Margaret Wertheim explains that in 1997, Dr. Daina Taimina, a Cornell math professor, “figured out that you could make models of this geometry using crochet.⁵² ... So this woman comes along, who grew up doing handicrafts in Latvia, and she said, ‘Well, you know, I *can* make models of this type of space using crochet’” (279). Here’s how it works: “by simply increasing the number of stitches in each row,” which creates frilling (277). Wertheim explains,

The resulting, warped surface of the crocheted object accommodates lines that violate Euclid’s fifth postulate [that “there is no more than one line I can draw through any point that will never meet the original line” (276)]—a fact that is

⁵² Interestingly (if you’re a crafter), Taimina had originally tried knit a model, but because of how knitting works, it meant getting too many needles on the stitches to be manageable. Because crochet uses a single hook, it makes creating these free-form models much easier.

easily demonstrated by sewing stitched lines onto its surface to “verify materially the manifest untruth of Euclid’s axiom.” These forms are also seen in nature, in ways that mathematicians are now starting to understand, in lettuces and kelps and corals, and the frills of other reef-dwelling sea creatures. (277)

So we have here a mathematician’s familiarity with craft allowing her to produce a tactile, three-dimensional model of something that had only ever been represented by mathematic symbols. And once Taimina produced that model, mathematicians and scientists realized that this geometric structure is everywhere, found particularly commonly in marine plants and animals. Wertheim argues that this project “had many ramifications, from higher mathematics, and the discovery of one of the most abstract forms of geometry, to physics, where this non-Euclidian geometry is the mathematics that underlies general relativity and our universe may be a hyperbolic structure,” linking physics—a hugely male-dominated field—and questions about the structure of the cosmos to a very traditional feminine activity (279).

Bennett’s vibrant matter, Fariello’s production analysis, and Taimina’s crocheted model of hyperbolic space offer important examples of the insights craft practices can offer to our understandings of nondigital media. While I wouldn’t necessarily expect students working within a DIY craft multimodal writing course to discover new properties of materials,⁵³ I do think that the material understandings they can build through attention to composing materials are likely to serve students in making significant rhetorically embodied connections and choices in their work. And just as with any craft, getting to know those materials, media, and modes does involve quite a bit of

⁵³ Bennett’s metalworkers certainly spent more than a semester or two—or even four years—at their work.

playing, of mucking about with fiber, paper and ink, software and hardware. But this isn't play in an idle sense—recall the new verbs emphasized in the WPA's Outcome Statement version 3.0: “practicing,” “experiencing,” “choosing/ adapting,” “reflecting,” “questioning,” “reasoning/deciding,” and “composing.” And consider the verbs Marilyn Cooper uses to describe the work of writing, which she says “is not a matter of autonomously intended action on the world, but more like monitoring, nudging, adapting, adjusting—in short, responding to the world” (“Matrix” 16). These are all questioning verbs, which are at the root of play, which is a way of interacting with one's surroundings with one question at the forefront: *What can I make of this?*

I want to emphasize, then, the ways in which attention to the activities and processes of composing are forms of *playing with*: playing with ideas and words, but potentially also with software and hardware and paper and plastic and fiber, and with other people and more. In a less playful way, *playing with* is what's at the center of Jody Shipka's mediated activity-based multimodal framework in *Toward a Composition Made Whole*. Shipka has argued that “keeping mediated action at the center of our attention and granting primacy to individual(s)-acting-with-mediational-means” (51) provides us the opportunity to overcome a tendency Syverson identifies as treating “readers, writers, and texts as independent objects” (186, qtd. in Shipka 51). To better understand how readers, writers, and texts are interrelated, we need to see them as immersed in the matrix, in an ecology of vibrant matter. FYC teachers would also need to be willing *and able* to place greater attention on process in proportion to our attention on product than we have frequently done—or, in many cases, been able to do, given the ways in which programmatic assessment requirements often draw attention only to the products of

students' work. Shipka's mediated activity-based multimodal framework draws instructors' and students' sustained, systematic attention to process and to all of the people, materials, tools, technologies—everything in their writing ecologies—that they worked with in the production of their texts.

Shipka describes asking students to produce two kinds of sketched representations of their composing processes: first, to “depict the primary space or spaces in which they worked on a text,” and second, to “focus on the overall process of composing that text from start to finish” (58). In two studies involving these process sketches,⁵⁴ Shipka notes finding that the first sketch usually consisted of a writer alone at a desk working on a computer—even when the final product was a performance—while the second one often told “a much different, messier, but ultimately richer story about what composing can an often does involve” (58). For many writers, the second sketch included multiple people (like instructors, classmates, friends, family, and entertainers), locations (classrooms, dorm rooms, libraries, gyms, and stores), activities (sitting, reading, typing, writing by hand, talking on the phone, running, dancing, and watching television), and objects (computers, phones, desks, markers, clothing, toys, and paper) (58–64). Acknowledging the ways in which all of these factors might influence the shaping of a text, Shipka assigns a statement of goals and choices (SOGC) for each text her students produce. This document is meant to make clear the rhetorical, technological, and methodological choices students made as they worked (113). While the questions vary depending on the assignment, Shipka has four core questions in the SOGC:

⁵⁴ Shipka conducted the first study with Paul Prior, while the second was on her own.

- 1) What, specifically, is this piece trying to accomplish—above and beyond satisfying the basic requirements outlined in the task description [assignment]? In other words, what work does, or might, this piece do? For whom? In what contexts?
- 2) What specific rhetorical, material, methodological, and technological choices did you make in service of accomplishing the goal(s) articulated above? Catalog, as well, choices that you might not have consciously made, those that were made for you when you opted to work with certain genres, materials, and technologies.
- 3) Why did you end up pursuing this plan as opposed to the others you came up with? How did the various choices listed above allow you to accomplish things that other sets or combinations of choices would not have?
- 4) [Who and what are] ... all the actors, human and nonhuman, that played a role in helping [you] accomplish [this task]? (114)

Through these four questions, Shipka encourages students to connect the activities and processes they undertook as they worked with specific “genres, materials, and technologies” to the product of their work and how it might be put to use. I find Shipka’s mediated-process focus to be a useful starting point for thinking about how tools, materials, and processes might be more meaningfully engaged in multimodal composition. Craft practice suggests how we might push this further.

Although *Shedboatshed*’s interest resides in its maker’s process of transforming a found structure from woodcraft to a watercraft and back to woodcraft, the project resulted in a wooden structure installed in a museum. Other craft examples, however, point to

even more process-oriented possibilities. Consider the story Paula Owen tells at the beginning of “Fabrication and Encounter: When Content is a Verb”:

A few years ago, as I approached the rural home and studio of the sculptor Mara Adamitz Scrupe, I spied her small figure digging a trench high in the riverbank along her property. Her intention was to create a solar-powered, illuminated work incised in the contour of the surrounding wooded hillside, which would glow for those crossing the bridge below. For her, the phenomenal and conceptual dimensions of this enterprise were profoundly intertwined with the process of manually digging the trench, much as they were for Chris Burden in his *Honest Labor* (1979), in which he dug a trench by hand in order to question the roles of mental and manual processes in art. (83)

Owen believes that part of what is important to craftspeople like Adamitz Scrupe and Burden is the participation of viewers in the fabrication process:

Reframing the relationship between artist, object, and viewer expands the opportunities to find relationships and artistic significance in and among many art forms, including craft objects and practices. In contrast to the fetishism of technical virtuosity which sometimes engulfs this field, the content of many craft objects and practices today can be understood as investigations of interactivity, sensuality, material, culture, and/or process. (84)

This tracks with the craft tradition’s attention to process, which Owen points out has to do with both “fabrication and encounter—maintaining that content and meaning emerge during use, as well as from the materials themselves and the traditional methods of fabrication that are rich in social and cultural history” (90–92).

Let's take a look at another example that Owen discusses: Josiah McElheny's blown glass collection called *From an Historical Anecdote about Fashion*. This multipiece work is comprised of several blown glass objects that replicate the vases Paolo Venini, an important figure in mid-twentieth century design, contributed to the 1952 Venice Biennale. Venini's colorful vases replicated the "New Look" of post-World War II women's fashion, debuted in Christian Dior's Spring–Summer 1947 runway, which emphasized an hourglass figure and used lots of fabric to make very full mid-calf-length skirts. Owen explains that McElheny, who has "mastered the technical aspects of the medium," uses that medium to "call into question the mechanisms and assumptions of glass-making traditions, art history, and social class" (90). McElheny's recreation of Venini's work creates conceptual distance for audiences—mirrored by the vases' home inside a glass case in the Whitney Museum in New York—that emphasizes the restrictiveness of both 1950s women's fashion and femininity. Here, while Owen points out that "the process of fabrication cannot be separated from the significance of the work," I also find that the *distance* between artist, glass, and audience in the display of the work is part of its significance, as well (90).

Much like the trench in Adamitz Scrupe's yard, the glass vases in McElheny's *Historical Anecdote*, and Starling's *Shedboatshed*, craft work that's labeled *art* rarely ends up in the hands, homes, and everyday life of regular people. But craft itself, particularly as DIY, is not only meant to be used by everyday people, but also to be produced by and circulated among us. Recall that the implicit—and often explicit—message of many zines is just that: *You can do this! Go make a zine (or clothing or culture or whatever else) yourself!*

Turning to back to fibercraft, I'd like to examine yarnbombing as a form of multimodal public rhetoric that is often produced collaboratively. It is a form of craftivism (craft-activism), a term coined by Betsy Greer in 2003 to describe “a way of looking at life where voicing opinions through creativity makes your voice stronger, your compassion deeper and your quest for justice more infinite.” Yarnbombing started in 2005 in Houston, TX, with Magda Sayeg and a friend—going by PolyCotN and AKrylik—who started what became Knitta Please (or Knitta, for short). Yarn graffiti, as it's also called, covers things all around the world: trees, rocks, doorknobs, benches, lampposts, chain-link fences, and bridges, crocheted or knit signs and pothole filling, and free-form three-dimensional objects like flowers and mushrooms. See Figures Five through Seven below for examples.



Figure 5: “Yarnbombs in Helsinki” by Sarah Stierch. www.flickr.com Posted 16 Sep. 2012. Image was cropped. <<https://creativecommons.org/licenses/by/2.0/>>



Figure 6: "Yarn Bomb" by Daniel Lugo. www.flickr.com Posted 10 Aug. 2011. No changes were made to this image. <<https://creativecommons.org/licenses/by-nc-nd/2.0/>>



Figure 7: "Downtown San Mateo Yarnbombs" by Lorna Watt. www.flickr.com Posted 19 Apr. 2013. No changes were made to this image. <<https://creativecommons.org/licenses/by-nc-nd/2.0/>>

In an interview with Jo Waterhouse for *Indie Craft*, Sayeg explained that she sees yarnbombing is a way of “adding warmth” to urban spaces while questioning mass production (because of the one-off nature of yarn “tags”):

The goal I started with, and the goal that continues to drive me, is making this world more beautiful and interesting. But this ties into another element of my motivation: awareness of our urban environment; our urban furniture. My knit graffiti crafting started from a desire to make the steel and concrete urban world prettier. Although it’s developed to be much more than that, this desire remains at the core of every project I do. It’s about increasing the aesthetic value of our surroundings and initiating a dialogue about art in public spaces and challenging the expectations of a passerby regarding what art can or should be [or what public urban spaces should be]. (Waterhouse 50)

Yarnbombers might seek to beautify eyesores, bring attention to often-overlooked elements of the landscape, soften the hard edges of cities, add color to a monotone palette, or draw attention to a message included in or evoked by the tag. One iconic example comes from Copenhagen in 2006, when knitters and crocheters covered a WWII-era tank set in front of the Nikolaj Contemporary Art Center in Copenhagen with over 4,000 6 x 6 inch squares in various shades of pink in protest of war in Iraq. At the end of the tank’s gun, dangling from several inches of string, was a ball of pink yarn that both gestured to and critiqued the tank’s intended use. During the Wisconsin protests in Madison in 2011, knitters covered benches in slogans often-heard in chants around the capitol building, like “This is what democracy looks like!” and “People united will never be defeated!” (Komai). During the 2012 student strike in Québec, strikers knit and

crocheted hundreds of red squares as a symbol of protest against rising university fees, joining them into a red quilt and using them to cover surfaces around campuses and the city (Yarn Bombing Montréal). And that same year, the Hillcrest AIDS Centre near Durban, South Africa, and Woza Moya (their program for people affected by HIV/AIDS to learn craft skills and items through their online store) yarnbombed a “tree of life” in colorful granny squares to raise funds for World AIDS Day (Hillcrest AIDS Centre Trust 23).

In each of these cases, the materials (knit or crocheted yarn in meaningful colors) and processes of production (hours of hand-done work by individuals in collaboration for a common cause) contribute to the rhetorical force of the tags: the fact that yarn crafts are feminine, soft, warm, familiar, and hand-produced contribute in each case to the work each tag is doing, whether that is to question, condemn, promote, make familiar, inspire, or something else (or all those things at once). The materials and production that went into making and placing the tags are necessarily part of what those tags mean—the tags call attention to those aspects of themselves. These tags are an example of Wysocki’s new media texts: they draw viewers’ attention to their own making while embodying the values they seek to communicate.

This is the kind of work I want multimodal composing students to be able to do. As I illustrated through in Chapters Two and Three, traditions and practices associated with craft and DIY encourage makers to take on the material, technical, rhetorical, economic, and social dimensions of production that I outlined in Chapter One. These dimensions are key to the significance of yarnbombing, but they are also factors that shape the work new media texts can do. So while some digital texts absolutely do the

work of new media texts, I find it important not to limit multimodal writing to the digital. Too often, digitally-produced texts elide their own materiality, production, and values. More specifically, as I discussed in Chapter One regarding ePortfolio and other templated web design applications, the standards to which we typically hold digital texts demand that they do so. In order to help students avoid that covering-up, and in order to help them think more expansively about what kinds of worlds they might want to build through their texts and what kinds of selves they want to create, I think that we should be asking students to play with lots of possible materials, tools, and production methods. Instead of foreclosing the material and technical dimensions multimodal writers might engage (and consequently shaping the rhetorical, economic, and social dimensions writers might attend to), I want to encourage students to experiment more broadly and even play with how their ideas might take shape in—and be shaped by—the media with which they work.

Media decisions affect how writers' texts are able to function, the audiences those texts are able to engage, and the subjectivities that are enacted through producing those texts. I have demonstrated this through examples of craft and DIY projects including pottery, woodcraft, painting, grabbing words from Twitter and moving them around via Kinect, making zines, building community economies, and yarnbombing urban spaces. I think that we should be asking students to think carefully about the values their composing choices will embody, the subjectivities they develop for themselves, and the worlds they build to share with others. More importantly, we should be providing students with opportunities for experimenting with these choices and experiencing for themselves the subjectivities and worlds they might create. DIY craft provides a

framework for doing so, and in Chapter Five I will dig into what it might look like to enact this pedagogy.

Chapter Five: A DIY Craft Pedagogy Enacted

It is November 2015, and you are visiting what you thought was a college composition classroom. However, something seems to be amiss. In one corner, a group of students pass around a long wooden cylinder that they constructed using a lathe (they were able to get help from a professor in the Art department to gain access to the equipment). In another corner, a group huddles around a 3D printer as a strange looking blue plastic object emerges (it looks like a helmet). You find out from the professor ... that a third group is not present; they are across campus working with a group of architecture students and blowing glass. This happens a lot in this particular class....

Your unease is increased when you learn that this composition classroom is actually focused on public rhetoric, specifically, environmental rhetoric. Part of what throws visitors and colleagues alike is that the class is not about the objects; the objects under composition are part of the class (they are what the students work on, of course), but, more importantly, the objects are also what the students work with. As you move through the room, you hear students discussing the features of the objects they are working with: you see the first group run their hands over the smooth surface of the cylinder and the second group probe the grooves inside of the “helmet.” You soon learn that these objects each have a specific object or purpose. The objects are all interactive arguments built to engage audiences in object-oriented environmentalism: objects designed to confront audiences (who are now also users) with the strange withdrawal of nonhumans that possess their own ontological weight and rhetorical agency.

For example, the blue object is not, in fact, a helmet, but a puzzle. The grooves on the inside of the sphere allow users to place and re-place dividers to create a series of self-contained compartments on the inside of the sphere. Users are first asked to pour a certain amount of water into the sphere (proportionally representing the amount of fresh water in the world). The challenge is to evenly apportion the water in all of the compartments by sliding open and close the dividers inside the sphere. The object of the object is to foreground water itself as a political actor. Aside from the human intention to fairly distribute fresh water (which might or might not be present), the puzzle presents water as an object with its own purposes and features, both of which make it difficult to control. Through this object, environmental rhetoric becomes something other than the task of shaping human hearts and minds to “save the world,” and instead becomes something more akin to the recognition that the “world itself” is likewise populated by a plethora of nonhuman political actors.

In addition to the design and production of the sphere, students develop the means to distribute it: creating packaging, writing instructions, and developing advertisements, tasks themselves rendered in terms of ecology. This range of compositions enacted ecologically introduces students to a multiplicity of composing skills, moves them to many scholarly activities across campus, weaves in an object-oriented approach, and positions rhetoric not simply as humans changing the minds of other humans, but as the work of relations, relations that remain strange and sometimes strained. (Brown and Rivers 33–34)

This is how James J. Brown, Jr. and Nathaniel Rivers imagine a writing classroom shaped by rhetorical carpentry might look. In “Composing the Carpenter’s Workshop,” the two adapt object-oriented ontology to multimodal Rhetoric and Composition by repurposing Ian Bogost’s philosophical carpentry, a philosophical practice and a non-human-centered way of understanding how objects shape one another. Here’s how Bogost defines philosophical carpentry:

First, it extends the ordinary sense of woodcraft to any material whatsoever—to do carpentry is to make anything, but to make it in earnest, with one’s own hands, like a cabinetmaker. Second, it folds into this act of construction Graham Harman’s philosophical sense of “the carpentry of things,” an idea Harman borrowed in turn from Alphonso Lingis. Both Lingis and Harman use that phrase to refer to the ways things fashion one another and the world at large. Blending these two notions, carpentry entails making things that explain how things make their world. Like scientific experiments and engineering prototypes, the stuffs produced by carpentry are not mere accidents, waypoints on the way to something else. Instead, they are themselves earnest entries into a philosophical discourse. (90–91)

To reconstruct philosophical carpentry as rhetorical carpentry, Brown and Rivers extend Bogost’s work “one step further, suggesting that such making can be undertaken in an effort to *do rhetoric*” by making objects and building conversations among them in order to tease out the interactions that objects among us might be having (29, emphasis in original). Object-oriented ontology is a philosophical approach developed by Harman that seeks to flatten relations among objects, including humans. OOO, as it’s often

shortened, rejects anthropocentrism and asks us to pay close attention to objects while not losing sight of the fact that their worlds are not limited to what we can know about them.⁵⁵ In its attention to the lives of things, ooo is similar to new materialism.⁵⁶

In ooo's parlance, *everything* is an object—which those of us who think of objects as things to be manipulated likely find objectionable. But recall from Chapter One the various specialized uses of the terms *thing* and *object*: in ooo, an object is always autonomous. Quoting Harman's *Guerilla Objects*, Brown and Rivers explain,

“Contrary to the usual view,” Harman argues, “what we really want is to be *objects*—not as means to an end like paper or oil, but in the sense that we want to be like the Grand Canyon or a guitar hero or a piece of silver: distinct forces to be reckoned with.” Furthermore, he writes, “An object cannot be fully translated or paraphrased; it simply is what it is, and no other object can replace or adequately mirror it.” (30, emphasis in original)

Objectifying others, then, in *this* system is a highly ethical action: “Bogost's carpentry calls for us to create machines that simulate the experience of another,” which could include the experiences of “both humans and nonhumans, presenting a unique site of persuasion and perhaps even identification” with those others (30). Presumably, when

⁵⁵ Harman calls this withdrawal: objects have a reality that exceeds what we can know, and that reality is withdrawn from us. (See Harman 44–45.)

⁵⁶ See my discussion of Jane Bennett's new materialist work, for example, in Chapter Four. More specifically, object-oriented ontology (developed by philosopher Graham Harman and by scholars like Levi Bryant in philosophy, Timothy Morton in literature, and Ian Bogost in video games, among others) displaces humans and human subjectivity from their central place in philosophy in order to more fully understand the realities of objects and their relations to other objects. New materialism (coined by philosophers Manuel DeLanda and Rosi Braidotti and further developed by physicist Karen Barad and political theorists Jane Bennett, Diana Coole, and Samantha Frost, among others) displaces the mind-body divide in order to better understand the materiality of mind and the vibrancy of matter.

those others are people who can tell us something of their experience, practitioners of philosophical and rhetorical carpentry will privilege those people's own representations, understandings, and interpretations of their experiences over their own.

Thus Brown and Rivers find Rhetoric and Composition to be well-suited to working with the incomplete knowledge suggested by ooo, as we, for example, are used to addressing and invoking audiences while acknowledging that they are never fully knowable (to invoke Ede and Lunsford). Further, through ecologies of writing and multimodal composition, we have brought together “the work of making and relating, while keeping in place the withdrawn actuality of all objects” (30). They find a suggestive example of what this might look like in Collin Brooke's rhetoric of new media, *Lingua Fracta*. Brooke's project directs our rhetorical attention away from already-produced texts in favor of the interface:

A turn toward the interface as our unit of analysis would be an acknowledgement that it is not necessary that these processes culminate in products (which can then be decoupled from the contexts of their production), but rather that what we think of as products (books, articles, essays) are but special, stabilized instances of an ongoing process conducted at the level of interface. (25)

With our attention on the conceptual space and materials of production, Brown and Rivers explain that Brooke develops a rhetoric that works “not to impose or discover meaning within some (new media) text (as object), but to *invent* new ways of producing meaning through an attunement to the constraints and affordances of new media” (31, emphasis in original). Production, then, is key:

As with Bogost's philosophical carpenter, who works with things rather than observing them, an actionary rhetorician cobbles together strategies, practices, and tactics in order to address engagements to come. Rather than a focus on critique.... Brooke emphasizes the making at the heart of rhetoric. Brooke shows us that the way to theorize new media is not to pin/pen them down (through either critical theory or close reading) but to *make* with new media.... (31, emphasis added)

Although Brooke's use of the phrase *new media* is meant to indicate digital information and communication technologies, Brown and Rivers rightly point out that there's no necessity in restricting our own or our students' work with media to the digital. In Brooke's reformulation the trivium (grammar, rhetoric, and logic) becomes code, practice, and culture. But code, like grammar, can be metaphorically extended. Both grammar and code refer to structural rules of media: spoken or written language, visual design, computer-readable instructions, etc. Stretched to other media, we could consider the grammars or codes of knitting or crocheting with yarn, shaping clay pottery, forging metal, or sketching on paper. Brooke writes that a rhetoric of new media should "prepare us as writers to make our own choices," instead of "examining the choices that have already been made by writers" (15). Indeed, over the course of the past four chapters, I have argued that a multimodal approach to composing should do the same—and that DIY craft can assist us in this work.

From Rhetorical Carpentry to DIY Craft Multimodal Writing Pedagogy

In Chapter One, I suggested that FYC teachers should ask students to spend significant portions of class time composing in order to foreground the activities and actions

involved in composing by actively doing this work together, just as teachers and students do in fine and studio arts classes. Of course, writing workshops are nothing new in Rhetoric and Composition, although the amount of time I dedicate to them and the ways I run them are unlike the peer review time to which in-class workshops are often dedicated. Instead, this studio time is meant to work more like Brown and Rivers' rhetorical carpentry workshop: students spend class time experimenting, making, testing, and reflecting primarily on their own and in small groups. But while Brown and Rivers imagine a writing course focused on an object-oriented environmentalism in which humans are considered on equal footing with all other objects, I think that a vision for Rhetoric and Composition, and for FYC in particular, needs to be more flexible. I think that a DIY craft pedagogy offers much of what is attractive about rhetorical carpentry without fully displacing humans (more specifically, *students*) as a key concern. Following Marilyn Cooper ("Rhetorical Agency") and Laura Micciche ("Writing Bodies"), I want to stop before making a full turn to ooo, to keep humans and their activities near the center of our own and our students' radars. After all, it is my students and the work they produce with which I am most concerned, although I do believe that inviting an ecological understanding of writing can help them to do that work well. And I do want them to take other objects (again, objects in the ooo sense) rather seriously. But as I hope I have suggested so far and will further clarify below, I see DIY craft usefully bringing these and other composing issues together.

So What Might All This Look Like in Practice?

In order to try my own hand at shaping a multimodal composition course using DIY craft, for the Spring 2012 semester I developed a 200-level course on rhetoric, writing, and

culture that was focused on do-it-yourself craft (or DIY), with the hope that I could import lessons from this class into my FYC and other writing classes.⁵⁷ The general description for the course states that it should address “major concerns in cultural criticism, including race, gender, class, cultural identity, technology, and ideology; and examine how rhetoric, writing, and media influence our thinking about these concerns.” My class, subtitled *DIY Culture: Making, Writing, and Digital Technologies*, asked students to take a sustained look at DIY movements in popular culture and the university, including things like indie craft (think knitting baby blankets or making or modifying clothing or building furniture or robots), rogue cultural production (home-made movies and music, fan fiction, gaming mods, and Photoshop memes), radical homemaking (urban gardening, composting, and freecycling), and DIY education (OpenCourseWare, serious games, and edupunk). For their major course projects, I asked students to participate in these movements by making digital and traditional craft projects. They also needed to analyze and reflect on the things they made, and consider connections between the DIY craft work of making and the work of writing in my class.

In terms of fairly traditional writing assignments, I asked students to compose reading notes; rhetorical analyses; reflections on readings, class discussions, and their

⁵⁷ While there are several pedagogical practices I discuss in this section that I have used in FYC classes, there are some that I haven't yet because of programmatic and institutional constraints. The work that FYC students at my institution produce and how it will be assessed are dictated by the shared course goals and outcomes for each course in the sequence. However, instructors have a good bit of leeway in our assignment sequences and in-class activities, those are normed to a large degree by standard assignment sequences that new instructors are required to use (and that go a good way in shaping how instructors interpret the kinds of student work that will be assessed positively using the goals and outcomes), by the histories of those course goals and assignment sequences, and, as you'll see below, by the physical spaces in which FYC classes typically meet.

own and each other's craft work; and project proposals, reports, and reflections. Students' DIY crafts included crocheted scarves, cross-stitch, origami sculptures, manga (and a gallery website to share this work), a cosplay costume, analog and digital music recordings, a small welded metal sculpture, all-natural personal care products, wheat paste graffiti, a family blog network, a digital scrapbook, a music video, a victory garden and gardening tips blog, and a book-to-movie/movie-to-book review website. Many of the DIY crafts included writing: the cross-stitch, the manga gallery website, the wheat paste graffiti, the family blog network, the digital scrapbook, the gardening tips blog, and the review website all included very carefully chosen words, and some of those projects look like *mostly* words, despite all of the other materials involved.

As I thought they might, students struggled most with the class writing that felt most like normal academic writing: rhetorical analyses, class responses, reflective blogging, etc. For example, almost none of my students reported having ever done a rhetorical analysis of a text before, and so I gave them some examples of what rhetorical analysis might look like, shared several resources about rhetorical analysis, and provided explicit guidance on the kinds of questions I wanted them to answer as they wrote their analyses. While there aren't necessarily right and wrong rhetorical analyses, there are certainly stronger and weaker ones or those that account for more or less of what's going on in a text. For a student just getting started with rhetorical analysis, I am looking for something that hangs together and that works to be responsible to the text it analyzes. But overall, it seemed like students just wouldn't believe me: this writing was meant to correctly express a Platonic ideal, not be an idea or physical object (words on screen) with which to do work.

This stands in stark contrast to students' work on their DIY projects: some of them reported spending dozens of hours on their major projects. And some of this work was really frustrating—after all, I required students to make things they hadn't made before, and for many of their projects, I wasn't able to offer more support than helping them find guidance. Several people had to start their projects from scratch a few times when their initial attempts didn't seem to work. But the miracle was that they kept at it. And continued to be excited about it. When they ended up with a crappy version of the thing they were trying to make, students were able to explain the value in the work they'd done: students articulated the things they learned along the way and what they would do differently next time. They did so in their project reports and reflections, which asked adapted versions of Shipka's key questions from the statement of goals and choices I discussed in the previous chapter. As you'll recall, these questions include:

- 1) What, specifically, is this piece trying to accomplish—above and beyond satisfying the basic requirements outlined in the task description [assignment]? In other words, what work does, or might, this piece do? For whom? In what contexts?
- 2) What specific rhetorical, material, methodological, and technological choices did you make in service of accomplishing the goal(s) articulated above? Catalog, as well, choices that you might not have consciously made, those that were made for you when you opted to work with certain genres, materials, and technologies.
- 3) Why did you end up pursuing this plan as opposed to the others you came up with? How did the various choices listed above allow you to accomplish things that other sets or combinations of choices would not have?

- 4) [Who and what are] ... all the actors, human and nonhuman, that played a role in helping [you] accomplish [this task]? (114)

Complicating factors here are rhetorical, material, methodological, and technological choices. Because this course both served as a lab for developing some practices for my DIY craft pedagogy and had as its focus DIY craft rhetoric and practices, two of the major projects I assigned were shaped first by media/material and second (and sometimes tenuously) by rhetorical considerations. I asked students to decide what to do for their projects by considering, in part, what they would like to be able to make but didn't yet know how. In the midterm craft project proposal and justification assignment, I asked students to do two things:

- 1) Propose a craft project that you want to make, in as much detail as possible. You should consider what, exactly, you want to make, the materials and tools needed and how you will acquire them, the time you're guessing is involved (don't take on a project that is easily done in a couple of hours, but it also shouldn't take over your life!), the skills or techniques you will need to use, etc. Include sketches, images, or specifications if applicable.
- 2) Justify your proposed craft project. You should explain how this project is in some ways a risk for you: what you will have to learn in order to complete it, how it is different from or more difficult than other similar projects you have done (if any), etc. Additionally, you should justify what you're proposing as something useful or productive: what you plan to learn from making your project and what you plan to do with the finished object. And finally, you should justify the tools

and materials you're using: how and why your project should be understood as "handmade."

This framework asked students to pick an end product produced through a craft skill they would have to learn, and craft production techniques are fundamentally shaped by the materials with which one works. While I didn't assign students, exactly, what to do (as in, "write an essay"), I did ask them to choose their work primarily to answer a skilled-work situation, and not a rhetorical situation. While this, I think, was appropriate to the course itself, I don't think that it transfers well to the multimodal writing courses on which this dissertation is more widely focused. And David M. Sheridan, Jim Ridolfo, and Anthony J. Michel argue in *The Available Means of Persuasion* that this framework for assignments in writing courses is a problem:

To put it as bluntly as possible: assignments that begin with the teacher's directive "write a paper" are already broken.... Many new media assignments are broken in the same way. An assignment that begins "make a video" or "make a website" is just as limiting as an assignment that begins "write a paper" because it does not allow the rhetor to select modes, media, and genres, and therefore does not allow the rhetor to engage in the complex processes of invention that are informed by the radically simultaneous constellation of factors such as available infrastructural resources, audience, exigency, etc. In short, it does not allow rhetors to experience the richness of *rhetoric-as-point-of-articulation*. (109, emphasis in original)

Broadly, I agree with them. Although Brown and Rivers don't specify in "Composing in the Carpenter's Workshop" what assignments prompt students' work in their imagined rhetorical carpentry classroom, their focus on answering exigencies indicates that they

would also agree with Sheridan, Ridolfo, and Michel. While my DIY Culture course rooted invention in the craft skills students wanted to develop, I think that the FYC courses I have taught at my institution lend themselves really nicely to inviting students to compose with rhetoric as the point of articulation.

For example, the final course in UWM's 100-level FYC sequence, College Research and Writing, requires that, by the end of the semester, students produce an inquiry-based research project that does the work of approximately ten pages of academic writing (*A Student's Guide to First-Year Writing at UWM, 2014–2015*). More specifically, students' research projects must do the following:

- Maintain a controlling purpose that...
 - emerges from a clearly defined central research question that reflects your concerns and interests.
 - responds ethically to what matters or is at stake for others who are addressed or affected by the research project.
 - creates and maintains coherence and clarity for the intended audience(s) through arrangement and design.
- Engage in critical inquiry in ways that support your purpose by...
 - making appropriate use of sources, including scholarly sources.
 - going beyond summary to position yourself and your ideas in relation to the ideas of others by engaging sources through interpretation, analysis, or critique.
 - developing knowledge, insight, or perspective about the matter being researched.

- using sources to frame or critically question other sources or issues.
- situating your sources relative to each other and the broader discourse—both academic and nonacademic—on the matter being researched.
- Follow writing conventions appropriate to the rhetorical situation of the writing by...
 - providing relevant context for the project’s audience(s) such as background information, examples, definitions, etc.
 - integrating the ideas of others accurately and fairly through summary, paraphrase, and quotation.
 - documenting all sources with in-text citations and a bibliography following current MLA, APA, or Chicago Manual of Style guidelines.
 - demonstrating an ability to meet expectations for grammar and mechanics appropriate for the purpose and intended audience(s) of the project. (*A Student’s Guide* 7)

The course goals and outcomes for College Research and Writing constrain the kinds of rhetorical situations students might decide to address by directing their attention to conversations happening in scholarly research. In practice, students’ projects are further limited by the kinds of research they can reasonably do in a fifteen-week semester in a 100-level composition course housed in the English Department and delivered overwhelmingly by instructors with humanities backgrounds. FYC courses at UWM, then, do not come with access to the labs that students interested in the physical and social sciences would need in order to do some of the research that is most valued in those fields. Sheridan, Ridolfo, and Michel might critique these constraints, as such

constraints turn students toward issues and discussions that are deemed worthy of investigation within the academy: the subtitle of their book is *Mapping a Theory and Pedagogy of Multimodal Public Rhetoric*.⁵⁸ But as students in my College Research and Writing classes and I have found, scholarly research writing has much more breadth than we typically give it credit for. Recently, for example, I taught a research writing student who was interested in superhero comic books and was surprised to find out that there are several fields that provide relevant scholarly research, including Art, Literature, Sociology, Anthropology, Cultural Studies, Gender Studies, and Disability Studies. Similarly, students who want to take on high-profile issues that are explicitly public issues, like police violence, find that those issues are covered not only by news outlets, but also by much more slowly-produced scholarship in History, Sociology, Criminal Justice, Law, Cultural Studies, and other fields. In short, while students are required to work with scholarly research in their projects, students are encouraged to—and do—start from a more general rhetorical stance: What issues seem important to themselves and others? What questions do they have about those issues? What would they like to learn?

With those questions in mind, I ask research writing students to start doing scholarly and non-scholarly research. I ask them to rhetorically engage the sources they find: in addition to asking what a source has to say about a topic, we consider what perspectives, values, and frameworks their sources encourage readers to take on: we ask what those sources are also de-emphasizing or cutting out of the conversation, how those sources seek to shape their audiences, and what those choices can tell us about how those

⁵⁸ Sheridan, Ridolfo, and Michel, of course, aren't the only ones calling for a public turn in Rhetoric and Composition. See, for example, Ackerman and Coogan, Butler, Farmer, Rivers and Weber, and Welch.

sources' authors see the world and the audiences they're seeking to engage. Although the scholarly research my students work with predominantly comes in the form of academic press books and peer-reviewed journal articles, it often also includes whitepapers, reports, websites, interviews, and videos. Additionally, I encourage students to consider perspectives that aren't sanctioned by the academy, including those presented in news reports, long-form reporting, blogs, podcasts, social media, documentaries, movies, television shows, music, fiction, poetry, theater, art, physical spaces—whatever seems appropriate to their projects. For example, one of my students interested in representations of people with physical disabilities read published research from Medicine, Cultural Studies, and Disability Studies. But she also interviewed a friend with documented learning and physical disabilities and the person who programs activities at our institution's recreation center, analyzed our Accessibility Resource Center's website and the services they offer, and interpreted several of the physical spaces and accessibility-related signs on campus.

The focus on inquiry-based research in College Writing and Research encourages students to use their research to question their own preconceived ideas about the issues or topics in which they are interested. Typically, this includes being open to the ways in which those topics are more complex than students had originally thought and learning how those issues affect different stakeholders differently. This provides an opportunity—and a very real challenge—for students to reconsider what they thought they knew and to start feeling their way through the ethical relations they must necessarily build with audiences through their projects. In this way, even though this course doesn't explicitly encourage students to engage public issues in the ways that Sheridan, Ridolfo, and

Michel would like, it asks students to hold themselves accountable to others—to their sources, to those who have a stake in the outcomes of their research, to those who are affected by the issues they're working on—who might not be included in the primary audience for their projects but who are very real and who are often part of a wider public that doesn't fit squarely into the academic realm.

Once students in College Research and Writing have a good sense of the scholarly and non-scholarly conversations about their topics, I ask them to enter into those conversations, to start to respond to what their sources have to say and to address an audience. This is typically where FYC students would start writing an essay, but the goals and outcomes specify that the product students are meant to produce is a *project*, not an essay. So how might students decide what that project should be? What should it look like? What should it be made of? Here, I find it useful to ask students to consider what materials and media are going to allow them and their projects to do the work they need to do. These questions position students as crafters who need to make something that's going to function for users. Wysocki describes this kind of approach to writing as being “tied to the development of useful (instead of readable) objects,” which “tends to foster a more concrete and bodily sense of audience, purpose, and context” (qtd. in Cooper “Matrix” 27). Many are surprised when they realize that there are some things they might want their projects to do that an alphanumeric print essay simply won't accommodate. But then what?

This is when I find it helpful to turn to serious, close considerations of media. In “Towards a Mediological Method,” Melinda Turnley offers a systematic seven-dimension framework for analyzing media, including the technological, social, economic,

archival, aesthetic, subjective, and epistemological (131). Turnley’s framework is adapted from French philosopher, journalist, government advisor, and academic Régis Debray’s mediology “as a means for framing problems and conducting research about relationships among culture, media, and the transmission of ideas” (127). Turnley summarizes the concerns of mediological analysis in a table that I think works well as a starting place for helping students have a systematic conversation about composing materials. (See Table Two below.)

Key to the value I see in Turnley’s media analysis is that it is built in part to help us and our students “examine how our representations of the world are transformative and have lived consequences,” based in Debray’s own belief that the texts people make also produce something beyond the text (128). In other words, when we make texts, we also make the *something else* that I discussed in Chapter Four. Media analysis provides a fairly systematic way to begin thoughtfully and critically working through what else we might be making when we work with particular materials, whether those materials are digital or not.

Dimension	Elaboration	Issues to Consider
Technological	Technical components or processes necessary in the functioning of a medium (e.g., papyrus, moveable type, vacuum tubes, fiber optic cable, GUI's, etc.)	A medium's technological development is neither linear nor inevitable. Certain technologies may support certain structures and practices, but technological forms do not wholly determine media's uses. Technological proficiency is necessary for digital literacy but must also be articulated with critical, rhetorical literacies.
Social	Metaphors, images, and narratives that circulate in relation to a medium (e.g., print as the catalyst for Western democratic individualism, the World Wide Web as an inclusive global network, etc.) as well as patterns of individual and group association that develop vis-à-vis a medium	A medium's relationship with its milieu is co-constructive. The political and social imaginaries of a particular period influence and are influenced by culturally dominant media. The social spaces that develop in and through media are not neutral and function in relation to cultural hierarchies of power and privilege.
Economic	Systems for production and the channeling of resources which support the development, distribution, and maintenance of a medium (e.g., American television was technically possible by the 1930s but did not spread until it was supported by the 1950s postwar economy; print and networked media posit different models of ownership, originality, and authorship)	A medium is involved in exchange fiscally and discursively as part of a functioning economy of exchange, supply, and demand. For a medium to "work," it must have recognizable value, and value is contextual rather than intrinsic. Access to media resources are differently distributed in relation to cultural formations such as race, class, gender, education, and language; these different conditions of access impact whether or not people can effectively develop media literacies.
Archival	Material and conceptual components for the reception, accumulation, distribution, and retrieval of information and discursive traces (e.g., human memory, paper, tape, film, disks, etc.)	A medium supports and is supported by particular assumptions about memory, information structures, and access. The ways in which a medium frames the storage of and access to information have significant legal, political, institutional, and ethical consequences. The spatialization of text through digital networks and mobile technologies is shifting how information is structured and used.

Aesthetic	Conventions and expectations for form, formatting, design, and content associated with a medium (e.g., print is read from left to right, TV programs generally are 30–60 minutes long, blue underlining indicated a link in early web page designs, etc.)	A medium often is most recognized by the normalized conventions which govern the construction and evaluation of its artifacts. Once aesthetic conventions are normalized, they can become seemingly invisible in their regulation of credibility, literacy, and expertise. Conventions can encourage standardization, but they do not automatically forestall innovation or creativity.
Subjective	Patterns and expectations related to subject formation, the nature of the self, and the positionality of users/audiences (e.g. print hierarchies posit stable, unified readers, non-linear hypertexts assume decentered, more fragmentary selves, computer interfaces often presume English speakers, etc.)	A medium offers allowable or expected ranges of action for users. Rather than being neutral or universal, such roles are embedded in cultural assumptions about difference. Users of media also participate in self-representation and identity construction; individual agency in these processes must be negotiated in relation to larger cultural formations.
Epistemological	Assumptions concerning the nature of knowledge, information, truth, intelligence, and literacy (e.g., traditional correspondence between fluency with the print medium, intellectual ability, and social affluence; digital media’s distribution of knowledge and support of collaborative knowledge construction)	A medium can support certain worldviews and validate particular ways of learning and knowing. When a medium is associated (positively or negatively) with certain abilities and opportunities, it can reinscribe hierarchies which privilege certain groups and exclude others.

Table 2: Melinda Turnley’s Dimensions of a Medium

I can imagine that readers who have taught full FYC classes before are wondering how all of this might work in a full classroom with 25 or more students—and so far I have suggested that these students should be not just encouraged but required to take on vastly different projects that vary in terms of focus field, scope, purpose, audience, and now media. How is that all supposed to happen in one semester, especially when most

FYC instructors are graduate students or non-tenure-track faculty? These instructors are structurally discouraged from making what could be a lot of additional work for themselves when streamlining moves like giving a course a theme and beginning assignments with “Write an essay that ...” are widely accepted in FYC and winnow down the potential range of composing-related issues they and their students will need to engage. So how do I imagine this can work?

As I have explained with this illustration of my College Research and Writing class, I ask these students to begin the semester by identifying issues they want to research, doing that research, and then learning what they can about what others have to say about their issues. During this phase of the course, I have found it useful to group students into research teams composed of people focused on similar or overlapping issues. This early part of the semester can then be followed by a phase during which our focus is on media: the media their sources use, the media they’re interested in working with, etc. At this point, research groups have seen and discussed the sources their group mates are working with, and we can start to generalize about various kinds of media their sources consistently work in, as well as take note of surprising or seemingly strange cases. By then, students have often started to develop a sense of how they want to enter into the conversations they see being conducted among their sources: they have started to develop a sense of the rhetorical situations that they want to address, and in thinking through how they want to address those situations, I ask students to consider what their projects might usefully be made of, what they might look like, what media they might work with to address their situations.

Of course, as the goals and outcomes above make clear (although students, who need to pass this course to graduate, are far from likely to forget), part of the context students are working in *is* an FYC class in a university. At least some of the sources they are working with are also essays written by scholars working in an academic context and addressing academic audiences, and as I discussed in the previous chapter, a majority of college students are well-schooled into understanding as the coin of this realm essayistic prose that privileges alphanumeric text. But as I also detailed in that chapter, students aren't often well prepared to do writing that addresses a rhetorical situation that's not shaped by standardized writing tests.

This is where I see an opening for students who are convinced that essayistic prose is the only safe choice for their projects. While there are certainly things students know about writing that can serve them in developing their inquiry-based research projects, there are lots of writing moves that they aren't yet comfortable making that they would need to learn in the course of writing an essay for their projects. And if a print-based essay is *not* the media that will serve their projects best, then it is important to take on another media that will do so. And in that case, the moves that students learn through working with other media will be worthwhile because of the outcomes for their projects (and not because of some ideal list of things they need to learn to do with writing). This is important because it demonstrates to students that they'll never know *everything* they need to know about composing in any particular rhetorical situation. Further, it can hopefully provide them with a positive experience of figuring out what they need to do in order to learn what they need to learn so that they can work with a medium in answer to a rhetorical situation. And so when I ask students to consider in some detail what media

they will need to work with to produce their inquiry-based research projects, I hope that the framework Turnley offers helps students not just for the purposes of my class, but in composing situations across the university and beyond the confines of academia.

To consider how a mediological analysis might help students make decisions about the materials with which they will make and deliver their work, I'd like to turn to a much-questioned example of student media choice: the pink ballet slippers with which Jody Shipka opens *Toward a Composition Made Whole*. Here's the story: Shipka was running a workshop on using multimodal writing to learn, as part of a series of workshops on writing across the curriculum and writing in the disciplines (WAC/WID), with participants coming from disciplines across her campus. She had brought several examples of multimodal student work to help instructors get a sense of the kinds of composing tasks they might assign in their courses—and to see examples of the work students might produce in response to those tasks. When she shared with the group the ballet slippers, on which a student had hand-written the text of a research-based essay, someone wryly asked where the writer put her footnotes. Shipka writes,

This was certainly not the first time the shoes received this kind of reaction, nor would it be the last. Whether implicitly, as was the case here, or explicitly stated, some of the questions lurking behind the reaction seem to be, “How is *that* college-level academic writing?,” “How can *that* possibly be rigorous?,” or “How can allowing students to do *that* possibly prepare them for the writing they will do in their other courses?” (2, emphasis in original)

This example is echoed in Shipka's conclusion, where she explains another encounter with a skeptical academic audience. Shipka had shared with her audience a student's

research project that “took the form of a board game modeled after Trivial Pursuit,” and an audience member said, “I see how this gets students thinking creatively, but where is the writing? When and what, exactly, are students expected to write?” (140). While Shipka points to *lots* of writing (on the game board, the question and answer cards, directions, an advertisement for the game that doubled as a works cited page), she explains that the audience member “was not asking about writing per se; rather, her concern had to do with when, if at all, students were required to stop being creative and begin doing *academic* work” (140).

Shipka’s own analysis of these student-made objects centers on perspective: she was focused on the student’s *process* of making them, the decisions that went into creating them—while the snarky questioner was focused on the final *product*, something that likely looked nothing like what he was familiar with as academic writing. But Shipka’s statement of goals and choices (SOGC) assignment should have provided her with articulable reasons for her students’ material choices. My experience suggests, however, that without the kind of highly-structured framework Turnley offers, students are unlikely to articulate their material choices—and the rhetorical effects they intended for those choices to have—in ways that could be stated in a few sentences and go beyond fairly un-rhetorically-convincing reasons, such as personal preference. To consider the ballet slippers, if Shipka’s student were given an opportunity to work through the technological, social, economic, archival, aesthetic, subjective, and epistemological reasons that her project was necessarily embodied in pink ballet slippers written on with a black permanent marker—and to work through why her project wouldn’t do what it needs to do, couldn’t function rhetorically in the ways that it needs to, if it were

embodied by a typed and printed essay, a hand-coded or WYSIWYG editor-built website, a papier maché sculpture or an embroidered and framed pillow case—then I think that Shipka would have been better able to articulate to skeptics why the slippers themselves were a smart and necessary choice.

In order to articulate all those dimensions of material choices, students will need to do a bit of materials and media research. I would encourage students to start a mediological analysis by considering their own and their classmates' associations with media, as well as their own senses of the histories of those media. With those ideas articulated, I would then encourage students to conduct a broad Internet search. And for this kind of search, I think Wikipedia would be a perfectly useful starting point. For example, Wikipedia articles about networked computers, the World Wide Web, and the Internet will necessarily point students to the US Department of Defense's Defense Advanced Research Projects Agency (DARPA) and its Advanced Research Projects Agency Network (ARPANET), which laid the technological foundation for the World Wide Web and Internet. For a student interested in critiquing US military action, a website potentially becomes an interesting choice of medium. A third step would be to conduct a more academic search about media: scholarship from Art, Art History, Craft Studies, Design, History, Media Studies, Materials Science and Engineering, and Rhetoric and Composition are all potentially useful fields for students to look into, depending on their own backgrounds, interests, and research project areas. Depending on who is developing that project on US military action, and that student's sense of her own audience, context, and purpose for her work, a website might actually be for her a fundamentally untenable choice of medium because of digital networks' roots in the

Department of Defense. She therefore might choose instead to develop a yarnbombing project like the one I discussed above that covered the WWII-era tank in Denmark.

My sense is that, having worked through a mediological analysis, students could usefully be surprised by the media that they decide will be most appropriate to their projects. In order to support them through working in media that are potentially new to them, I find it useful to form a second set of groups for students to work in, groups formed not around their research areas but instead around the media in which they are working. While chances are good that groups will have at least one person who is experienced with—or at least comfortable learning—the media they and their group mates are working with, the more important function of the media groups is to give students a readymade set of people they can turn to when they need people who will understand their media-related frustrations and who are well-positioned to help them think through practical solutions to composing problems posed by that media. This ranges from figuring out how to deal with a laptop that's on the brink of burning out (like setting up a schedule for group mates to borrow one member's laptop, figuring out the logistics of using a lab computer on campus, or suggesting a good place in town that can fix a laptop on a student's budget) to sharing how-to resources (including those found in the school or public library; on Lynda.com, which students enrolled at my university have full access to; on YouTube.com or Instructables.com; or that someone owns or has borrowed from a friend or family member) to students lending their own knowledge or skills to helping group mates do something they've been trying to figure out (like getting HTML code to do something in particular, getting a certain kind of crochet stitch right, or wording a sentence in just the right way).

Students' research and media groups form the foundation of the in-class time I've described as studio time. This time is also often spent with students working individually on their own projects, either in relative quiet isolation or with everyone working on something specific about their project that I've asked them to pay particular attention to, in which case students are working on their own together. As students' projects develop, I less frequently ask them to actually get into their research or media groups, but students often continue to naturally gravitate toward those group mates when they have a quick question or need some perspective. This is something that I highly value. Recall from Chapter Four that mutuality among members of a community is a key dimension DIY (as I articulated through Kristofferson's study of craft industry during the Industrial Revolution and through Gibson-Graham's projects building community economies).⁵⁹ I see mutuality being expressed through students' work together to trouble-shoot and offer feedback on each other's work, as well as through instances in which students turn to each other to pose and answer questions as often as they turn to me.⁶⁰

Studio time, then, is time spent making together, which sometimes includes chatting informally and trading questions, answers, stories of triumph and failure. This helps to develop classroom systems of mutual affective and material support, and it helps

⁵⁹ Rhetoric and Composition scholarship has run the gamut on whether or not we should figure our classrooms as communities, but given the production-focused bonds that I've seen students form with each other, for the limited purposes of what we do in my classrooms, I believe it is accurate to call these groups communities. I wouldn't generalize this term to all classrooms or assert that the communities my students and I form are the same as other kinds of communities, but I do think the term fits.

⁶⁰ Obviously, there are several kinds of questions that I am the right person to ask: I'm still the instructor and responsible for important aspects of the class. But when it comes to drafting and revising their work, I believe that my feedback cannot and should not be the only response that matters to my students. I am a particular kind of audience member—and a structurally important one given the context—but my perspective alone is necessarily too limited to be useful to students in every instance.

to make failure a more routine part of both making and learning. While this time might be derided by advocates of so-called rigor in the curriculum, I believe that this time is extremely well-spent, as it allows students to talk about and show each other different ways to use and repurpose the tools and technologies they're working with. It also opens space for students to form mutual affective bonds that, yes, allow for transmission of knowledge, but also support knowledge-making and forming subjectivities influenced in important ways by craft—by thoughtful, engaged, social work. While perhaps seemingly small, these kinds of gestures help to show me that students in these classes are building noncapitalist subjectivities through the work they're doing in and for class. Leveraging DIY can help us to address the structural relations of writing classes: DIY is all about identifying one's needs and meeting them through making. It's about the pleasure of making, but it's also about the self-sufficiency of a maker working within a community of makers. DIY helps us to take seriously Bruce Horner's argument in *Terms of Work for Composition* that students shouldn't be alienated from the labor of writing or from the product of their writing. He believes that we can structure courses to invite nonalienated labor from students by encouraging them to do work that has *use value* for them—and while this use value's existence doesn't mean that student writing won't also have *exchange value* (yes, for grades, graduation credit, etc.), it does mean that students are expected to do work that is actually of use to themselves (perhaps by helping them to join in a conversation about something they believe is important and to push that conversation forward). My hope is that the *something else* that gets made through DIY craft—the community-building that happens in my classes and the prefiguring of other worlds that my students might help to build—will be powerful and useful for students.

DIY Craft Subjectivity

While Rhetoric and Composition has paid a lot of attention to identity, I believe that a more useful focus—one addressed by DIY craft pedagogy—is on subjectivity. The identities our students bring into our classes, those they develop over the course of semesters and years, and the ways in which their identities shape the work they do in our classes are of course important. In my experience, students' identities are often expressed through the kinds of projects they want to develop. Race, gender, class, ability, cultural heritage, geographic origin, major, life experiences: all of these dimensions of students' identities (and, of course, other dimensions that I can't see or students don't articulate or don't quite understand themselves) help to shape what seems most important to students when I ask them to articulate the issues that interest them.

But those identity markers don't account for what students can *do*, and rhetorical practice and DIY craft alike are in the doing. As Dormer explains,

What counts is what we do. The moral principle within craft is that each action shows that we are what we know. Each action might also show how much we care and what we care about. And although the nineteenth century's philosophy of the arts and crafts movement cannot be applied uncritically or without considerable adjustment to modern technological culture, nonetheless the attractiveness of such a philosophy is more than mere nostalgia, it is a recognition of how its fundamental precepts such as honesty and integrity in work as well as "truth to materials" are expressions of the morality of practice. (64)

Although Dormer's invocation of morality might harken back to Lynn Z. Bloom's critique of "Freshman Composition as a Middle-Class Enterprise," I want to emphasize

the ethical dimension of rhetorical practice and the importance of ethical relations with others built through shared material ecologies. This is not a morality of middle-class decorum; it is a moral ethic of doing well by others. A DIY craft subjectivity is one willing to undertake what craft theorist and practitioner David Pye called the “workmanship of risk”: that is, “workmanship using any kind of technique or apparatus, in which the quality of the result is not predetermined, but depends on the judgment, dexterity and care which the maker exercises as he works” (341–42). Pye contrasts the workmanship of risk with that of certainty, which is “always to be found in quantity production, and found in its pure state in full automation” (342). While Pye is quite literally writing about craft work—he discusses a wood plane and hand-cast bolts—I see his workmanship of risk as being a useful concept both for students taking on multimodal composing and for their instructors. Lest anyone think that a DIY craft pedagogy is going to produce any kinds of economic efficiencies for FYC, Pye assures us, no: “It is obvious that the workmanship of risk is not always or necessarily valuable. In many contexts it is an utter waste of time. It can produce things of the worst imaginable quality. It is often expensive” (343). But what a workmanship of risk *does* produce is a fairly wide-open field of possibility, discovery, and engaged learning: “Free workmanship is one of the main sources of diversity. To achieve diversity in all its possible manifestations is the chief reason for continuing the workmanship of risk as a productive undertaking: in other words for perpetuating craftsmanship” (352). The material, technical, rhetorical, economic, and social perspectives that DIY craft offers to a pedagogical framework for multimodal writing (see Table One) encourage a “workmanship of risk” in the classroom for instructors and students alike.

In closing, then, I'd like to turn to Byron Hawk's *A Counter-History of Composition*, which also closes with an extended consideration of pedagogical practice. The studio time that shapes my own and my students' time in class together is composed, I believe, of a series of decisions shaped by risk in the ways Pye describes. Pye's concern, again, is with practical, physical, traditional craft skills, but I believe they do well when ported over to pedagogical workmanship. This workmanship involves a well-developed sensitivity to what's happening within and among students throughout the course of a semester. Working with Paul Kameen's *Writing/Teaching: Essays Toward a Rhetoric of Pedagogy*, Hawk describes a moment of pedagogical workmanship:

Possibilities lie in that moment between the palcing of a question in the air and the occurrence of some muddled and/or insightful response. This is the moment of teaching and the moment of invention. Though Kameen's focus on the personal may be misread as expressivist, his focus on method is rhetorical and his approach becomes much clearer when read from the perspective of a complex vitalist paradigm: he is working to find a pedagogical method that enters into the ecology of the classroom and utilizes its complexity for rhetorical production. (225)

Kameen is seeking to build a corrective to critical pedagogy like that developed by Berlin, to get away from the prescriptive positions instructors and students are likely to take when social issues are foregrounded. Hawk believes that Kameen is going "after a change in knowledge, in a person's way of thinking," but he does so not through a critical pedagogical approach.⁶¹ Extending this work, Hawk turns to Gregory Ulmer's "mystory" method of invention, which begins with students' personal experiences and identities:

⁶¹ See Berlin.

“Students will resist accepting marginalized positions in their own consciousness, in part because it actually reduces their sense of agency. In some cases, affirmative forgetting of one’s marginalized position may be precisely what individuals need to spur them to further action,” and so “[r]ather than change consciousness [as Berlin tries to do], Ulmer’s method taps into local student embodiment first,” seeking personal affective connections on which to build inquiry and analysis” (245). This mirrors the first set of questions that I ask my College Writing and Research students to take on when it’s time to start working on their inquiry-based research projects. But as Hawk suggests, this line of questioning also sets students up to continue to recognize throughout the semester their own embodied positioning—and, hopefully, to be open to listening to others who are differently embodied and positioned. So I hope that, throughout the course of my work with them, students will develop DIY craft subjectivities that are open to experimentation and failure, that are resilient in the face of the problems that inevitably creep up through the work of composing, and that are sensitive to the material relations they develop with others through the texts they make. Hawk describes this as a “complex vitalist hope” that “students come to understand their situatedness and learn to develop ethical connections that will lead to productive acts and texts” (258). Following Hawk, I believe that this hope cannot be located only in humans but must also engage with “complex ecologies we actively develop [through our classrooms] but can never fully control” (258). This is a materially enmeshed, vibrantly mattered, DIY crafted risky pedagogy.

At one point in *Counter-History*, Hawk asks, “Here is a set of texts, theories, arguments, ideas, technologies, contexts, desires, forces, subjectivities: what can the student make with them? What can the body do?” (219). In addition to the multimodal

texts that students might make, I want to ask, What *something else*—what subjectivities, politics, economies, lives—could our bodies make?

Conclusion

I would like to begin concluding this project by returning to the two epigraphs I included at the beginning of Chapter One. First, I want to consider the sheer rhapsody of Grigar's description of her seduction into working with digital technologies:⁶²

But it was Roland Barthes that got to me, that led—no—seduced me into understanding that new media offered rhetoric the chance to comprehend the breadth of textuality, and rhetoric offered new media the mechanism for putting our experience with text into words.... Putting it more simply—in a world whirling so fast and so knotted together as it is, traditional approaches to text net us little in the way of understanding in what it means to be human today. (214, 216)

Grigar's text is itself seductive. In a section describing her own immersion in digital composing technologies, she delights in all of the ways in which digital technologies, connected across networks, can transport bodies and consciousnesses:

So for myself, what new media has to offer is a way of seeing that allows for vistas beyond the print artifact and beyond the orator's podium. It provides a landscape where I can bring together my body and mind with various prostheses, to use Hayles' term, like computers, but also video cams, motion tracking technology, LCD projectors, and video screens, to a place where I as a new hybrid being can embody, telebody, and take my consciousness (and perhaps the consciousness of others) to a state of sublimity, of Bartheian "bliss." (216)

⁶² Grigar's use of the term *new media* does not track with the definition from Wysocki that I have used throughout this dissertation, which defines *new media texts* as those that call attention to their own meaningful use of the particular media from which they are made. Instead, Grigar is referring specifically to digital media.

The opportunities for composing and circulating writing presented by networked digital technologies are dazzling. The times when I have taken up some of those opportunities have been some of the most interesting and provocative experiences in my own graduate education in Rhetoric and Composition. But at many turns, those experiences also encouraged me to turn back to what, in this context, seem like old media: paper and ink and other familiar analog technologies. And in this return, what had seemed mundane often became much more interesting.

For example, in 2008, I attended a graduate seminar meeting in Second Life, an online virtual world. In order to prepare for this seminar meeting (in addition to my usual reading and note-taking and other preparations), I had to access a computer that could run the software necessary to use Second Life, create an account, build an avatar, figure out how to navigate around the Second Life world, and get to the place in that world where my class was going to meet. Building my avatar was particularly engaging: I used this opportunity to play with as many avatar features as new users could access and eventually decided to represent myself as a squat, bald, blue human-robot-bubble creature with a fox tail. I also gave myself a retro-futuristic user name, KristiTron2k8 Weinbaum. Once I arrived at our meeting, I saw my professor's and classmates' avatars sitting, standing, bobbing, and floating together in a grassy area near a large tree. Not everyone in our class was able to use audio (for example, I was using a desktop computer without a connected microphone input or speaker output), so we had to conduct full-group and small-group conversations using the group chat function in Second Life. While our readings for the week had prepared us for a discussion about Second Life and other online virtual worlds, the experience of trying to conduct a graduate seminar meeting in

the kind of space we had been reading about added a layer of immediacy to the issues that I hadn't—perhaps naïvely—expected. But because of the many kinds of problems that can pull our attention out of immersive virtual worlds (like slow Internet connections or software crashes) and because almost twenty people were trying to communicate without the visual cues we were used to seeing in our classroom, actually having the conversations we wanted to have proved immensely difficult. When we returned to our classroom the following week for our next seminar meeting, I was relieved to be able to return to the familiar patterns of face-to-face discussion.

This example is not meant to privilege brick-and-mortar classrooms over those online. There were several factors contributing to the difficulty of my experience in Second Life—and, of course, that world wasn't built to replicate classrooms. It would be a mistake to fault Second Life or any other digital technology for not replicating analog technologies: what we find exciting about them are the ways in which they help us to do things that nondigital technologies cannot do. But that experience in Second Life helped me to enter into my seminar's usual classroom with a renewed appreciation for what I had taken for granted. While that room was by no means perfectly suited to the work we needed to do during seminar meetings, it was much better suited to that work than Second Life. Until then, I hadn't noticed many of the things about classrooms that we often take for granted. (For example, in many classrooms, desks or tables and chairs can be moved into different configurations, depending on the kind of interpersonal interactions that are best suited to the class' work. Additionally, there usually aren't obstructions in the room that keep people from seeing each other's bodies or hearing each other's remarks.)

With this renewed interest in familiar media in mind, I want to turn to the second epigraph with which I began Chapter One. Risatti's ode to traditional craft tools and materials functions as a counterpoint to Grigar's digital rhapsody:

[T]he sensual characteristics of specific materials; the regulation imposed by specialized tools when properly employed; the sociopolitical connotations of the figure of the artisan; and even the literal limits of time and space ... all provide a kind of friction that keep pressing questions of form, category, and identity open for further investigation. (5–6)

Without discounting the sensual characteristics of the digital (the sleek sexiness of new tablets, the visual and auditory richness of video art), Risatti encourages us to remember that we have by no means exhausted all we might do with so-called old media. Despite what Grigar might suggest, nondigital materials and technologies engage bodies and consciousnesses just as much as digital ones do. These engagements necessarily work differently, and they are likely experienced differently by different people. But I believe that it is a mistake to suggest that, just because some of us might have become bored or disenchanted with print text or other nondigital media, we or our students have exhausted their possibilities.⁶³ Further, Risatti reminds us that all tools and materials have their own histories, evoke their own sociocultural connotations, and help us to make and embody our own shifting identities in their own specific ways. Although there are several varieties of digital media, they are all connected through the histories and connotations of computers and digital networks. Any work done with digital media necessarily engages with those histories and connotations, whether to celebrate them, critique them, or

⁶³ This tracks with Ellis' argument, which I discussed in a footnote above in Chapter Four.

attempt to elide them. Similarly, there are several kinds of identities we might build through them, but those identities are always in some way fundamentally tethered to the historical developments and sociocultural positions associated with digital technologies and networks. And importantly, those identities do not—can not—exhaust the possibilities for human identity.

More specifically, for those of us in Rhetoric and Composition, Risatti's reminder echoes Horner's call in "Rewriting Composition" not to forget the importance of seemingly-mundane work in composition classrooms:

I am suggesting that in the familiar forms of ordinary work in composition, represented in, for example, a composition course in which students produce seemingly insignificant writing circulating only within the confines of that course, work of real, if always contingent, use-value can take place, and that the material social conditions typical of the site of such a course make possible academic intellectual work that cannot take place elsewhere, outside such conditions. (473)

The conditions in which this work can take place include, in part, classrooms in which questions about media, mode, and material remain open "for composition students and their teachers to work on and with" (470). Keeping these questions open in FYC classrooms necessarily means accounting for the varieties of materials and technologies with which writers might work—from ordinary ones like words and paper to dazzling ones like visual design and web design applications to perhaps unfamiliar ones like thread, fabric, and needles. As I have suggested through the body of this dissertation (and argued in Chapter Four in particular), to take multimodal writing seriously is to take seriously the idea that media, mode, and material matter deeply to the kinds of identities

writers are able to take on, the kinds of worlds writers are able to build through their work, and the ways in which writers can engage their audiences in those worlds. Horner reminds us that FYC classes might open up for students to experiment with those materials, identities, and worlds, and I believe that doing so can provide students with expansive opportunities for experiencing and learning to embrace and manage the moments of exhilaration, experimentation, anxiety, frustration, reflection, and connection that come with and through writing.

This discussion of Chapter One's epigraphs helps me to begin to bring together some of the major themes of my project. With those themes in mind, I will use the rest of this chapter to review the main points I make in this dissertation and to consider further questions that arise from it.

Chapter One begins by critiquing approaches to composition that render the tools and materials of writing invisible. Although the multimodality of writing isn't really anything new—which Ball and Charlton, Horner (“Rewriting Composition”), and Palmeri and make clear—the attention we are invited to pay by multimodal writing to media, modes, and materials help us attend to that multimodality in important ways. Because of the specific histories of print and of digital writing, multimodal writing has been most enthusiastically taken up by Rhetoric and Composition scholars who are closely affiliated with the subfield of Computers and Writing. Those who carefully attend to the ways in which writing and writers are shaped by the tools and materials they work with quickly noticed that the late twentieth century transition from composing on paper (by hand or with a typewriter) to composing on screen held many important implications for the processes and products of writing. These implications necessarily have carried

over into changes in writing classrooms. More importantly, the so-called digital revolution helped those of us in Rhetoric and Composition to see more readily the ways in which the tools and materials of writing—which necessarily carry along with them specific histories and sociocultural implications—shape the ranges of things a writer might do with and through a text. In short, digital technologies helped us to see and then examine the values embodied through nondigital composing technologies, which we had previously treated as largely invisible and neutral.

Because of this seeming invisibility and neutrality, writing has often been taught as a disembodied process of telegraphing ideas from brains onto paper. But with our attention turned to tools and materials, I believe that it makes sense to pay close attention to those brains as embodied and to how those bodies interact with them (“practicing,” “experiencing,” “choosing/adapting,” “reflecting,” “questioning,” “reasoning/deciding,” and “composing,” to use the new verbs from the WPA’s new version of the Outcomes Statement). This makes use of what we know about the science of cognition (that it is distributed throughout bodies and across the things bodies work with) and helps us attend to some of the most difficult things for students to learn in writing classes: how to manage the actual activities and practices that constitute composing.

Writing instruction, then, must explicitly engage writing as both verb and noun. Finding Rhetoric and Composition’s process and postprocess movements inadequate to the former and our typical slippage from multimodal writing to digital writing inadequate to the latter,⁶⁴ I turn to two productive practices that, together, provide a coherent

⁶⁴ This slippage is common in Rhetoric and Composition: for example, in *On Multimodality: New Media in Composition Studies*, Jonathan Alexander and Jacqueline Rhodes spend considerable time early in the book making arguments similar to mine

framework for better engaging these dimensions of writing. As Table One in Chapter One indicates, craft and DIY engage the material, the technical, the rhetorical, the economic, and the social in ways that can shape our theories, pedagogies, and practical activities in composition. Chapters Two and Three focus on craft and DIY, respectively.

Chapter Two begins by considering craft's *techne* tradition, which is central to the history of rhetoric. *Techne* has a long and complex history, but the ways in which *techne* is typically taken up tend to focus on its status as knowledge instead of on its status as a *productive* knowledge that must necessarily be enacted. I argue that this emphasis on knowledge over production has prevented us from developing approaches to writing activities and processes that would be most helpful to students. I then turn to ancient and then more contemporary cases of craftspeople at work in order to begin detailing the kinds of actions and practices that they undertake in the necessarily messy processes of production. Craftwork is often messy because of the materials that many craftworkers engage with, but more importantly, it is messy because of the recursivity of engaging thoughtfully with materials. In order to produce the kind of quality work associated with craft, craftworkers working across all media use tools that will help them find and address problems with the things they create as they make them. As Sennett explains, this means that craftworkers have long shaped their own tools and work environments in order to accommodate the work they want to do. Similarly, extending Feenberg's

about multimodal and digital writing. But as they work through examples of multimodal writing they and their students have done, those examples are overwhelmingly of digitally-produced projects that are then either circulated over digital networks or printed on paper. They do not, however, spend significant time on work that isn't produced using a computer. My reading of Alexander and Rhodes's book suggests that this slippage was unintentional on their part, mostly an effect of the kinds of classes they teach and kinds of work they enjoy producing on their own. Still, this is typical of scholarship on multimodal writing.

argument about digital technologies, I think that writers working in nondigital and digital media alike need to be able to shape the tools and materials with which they work and the environments in which they work in ways that help them compose toward their own ends (and so not toward the ends of, say, multinational technology corporations).

Further, as Risatti points out in the epigraph I discussed above, there is “friction” when we manipulate materials: they push back. Craftworkers who know their materials well know what kinds of friction to expect: sculptors know how a particular kind of rock will likely cleave when chiseled, crocheters know how particular yarns will likely stretch, and digital writers know how Microsoft Word will likely reposition images after they have been inserted. Importantly, in the course of learning a craft, craftworkers also learn how to cope when materials don’t respond as anticipated. This is just one of the reasons I find it important to pay close attention to composing activities and how students enact them during in-class writing studios: I want to help students take pleasure in their work, and the workshop atmosphere of a classroom writing studio can encourage them to do so. In its traditional craft sense as a workspace, a workshop can also encourage students to take greater ownership over their work because of the kinds of collaboration that a workshop accommodates. Sennett argues that, despite some of the more rigid hierarchical practices associated with medieval workshops under the guild system,

... we should not give up on the workshop as a social space. Workshops present and past have glued people together through work rituals, whether these be a shared cup of tea or the urban parade; through mentoring, whether the formal surrogate parenting of medieval times or informal advising on the worksite; through face-to-face sharing of information. (73)

The informal rituals, mentoring, and advising to which all participants in a workshop can contribute to creating additional positive affective bonds among participants and with writing.

These themes continue in Chapter Three, which explores how DIY is distinct from but usefully modifies craft. Focused as it is on producing subjectivities that value and enjoy self-provisioning acts of production, DIY has a distinctly anticapitalist streak. Along that line, this chapter examines what it might mean to open up noncapitalist economic spaces and to develop noncapitalist subjectivities. I use J. K. Gibson-Graham's work to sketch out how noncapitalist economies can function in concert with, surrounded by, and even immersed in our current economic formation: by shifting our focus from the big economic picture to specific social interactions, seeing the economic value of those that don't necessarily enact capitalist relations, and appreciating that the sheer volume of noncapitalist social relations suggests that there is nothing futile about them. This is where we can begin to appreciate the ways in which DIY is often, as Ratto and Boler point out, actually "do it together." Gibson-Graham help me to connect the work of individual zine makers (who, through their work, reshape their own and some of their readers' subjectivities) to large-scale undertakings like cooperative businesses and community economies. DIY, in other words, encourages people to work together to reshape their social and economic spheres so as to work toward more humane and more democratic ends. Subjective personal and communal goods constitute the *something else* that DIY produces.

But DIY performs these grand gestures by taking a how-to approach to production. Developing noncapitalist subjectivities and building community economies

often begins with assessing what people know how to do and what they know how to make, and then asking them to share their knowledge and skills with those around them. This is why the zines Farmer and Piepmeier examine so often include instructions: we can't build noncapitalist pockets of culture if we can't produce the things that will constitute those pockets. DIY is frequently associated with a punk aesthetic because punk shamelessly celebrates amateur work. While FYC classes are often expected to teach students how to produce polished prose, we know that whenever writers attempt to do new things with their writing, they have to work through a learning curve.⁶⁵ Although I value revision and want students to have the experience of producing at least some work that is very refined, DIY usefully reminds us and our students that it is fine for drafts and other writing experiments to look amateurish, to be unpolished. This can help students accept the fact that early work is necessarily unfinished and that, ultimately, excellent work happens only through revision. These, then, are additional reasons that I find writing studios to be such a compelling part of DIY craft pedagogy: they provide time and space for students to ask questions and figure out solutions to nuts-and-bolts questions about the processes and products of composing and revising. Writing studios also accommodate the other two major DIY craft pedagogical practices that I extrapolate from DIY craft, working with flexible tools and building mutuality.

As Chapters Two and Three suggest, DIY craft encourages us to stretch beyond the bounds of most multimodal composition scholarship the varieties of materials with which composers might work. Doing so helps us to make composing environments and materials as visible and tangible as possible—and this is important because of the ways in

⁶⁵ Those in Rhetoric and Composition who study transfer are, fundamentally, asking how we can help students work through that learning curve more deliberately.

which this encourages writers to attend to the embodied dimensions of doing writing. Additionally, as Chapter Four argues, refusing to limit the tools and materials composers might take up allows us to step beyond form and content to emphasize relationships among material, rhetorical, technical, and social ends. I return in this chapter to Knoblauch's embodied knowledge and embodied rhetoric from Chapter One, and here I extend both: the former through distributed cognition and ecologies of writing, and the latter through the material and design choices composers might make. I work through several examples of craftworkers and DIYers working with varied materials in order to highlight the ways in which working with nontraditional media for composing can yield specific and specialized kinds of knowledge and surprising relations among composers, materials, and audiences. I don't expect FYC students to make any scientific discoveries, but I do expect that broadening the range of tools and materials they might use to compose and working with them through the reasons they might work with any specific tools and materials will help them to make more meaningful decisions as they work. Ultimately, I believe that doing so can help students produce work that more fully embodies the values they want to enact, the identities they want to take on, and the relations they want to build. Following the lead of Chapters Two and Three, Chapter Four considers the material, technical, economic, and social perspectives that DIY craft brings to our attention, but Chapter Four also brings into focus the rhetorical work that made objects might perform.

Chapter Five continues this emphasis as it provides a nuts-and-bolts look at DIY craft pedagogy in action in two courses: a DIY craft-themed 200-level course in Writing, Rhetoric, and Culture, and a 100-level FYC course in College Writing and Research.

Also like Chapter Four, this chapter evaluates some formal frameworks (including course outcomes, assignments, and handouts) that can help instructors to structure students' attention as they negotiate the difficulties posed by an expansive approach to multimodal composing in classrooms often structured as writing studios or workshop spaces. This chapter considers other practical dimensions of the classroom, such as the work invited through assignments and in-class activities and describing how that work has sometimes been enacted in my own classes. I identify ways in which a DIY craft pedagogy might create classroom spaces and dynamics that seem disorganized to instructors and students used to other kinds of writing pedagogies. But I argue that this disorganization does necessary work: just as the messiness of craft and DIY practice open up spaces for making and becoming, the classrooms I run seek to open up spaces where students can encounter ideas, materials, tools, technologies, media, modes, and each other in ways that can help them make *something else*. I turn to Hawk and his work with Kameen to imagine the ways in which our material encounters might help instructors and students alike work in more expansive partnerships to do the work of making, building, connecting, becoming, and—yes—writing.

While the work of writing and revising this dissertation has helped me to answer several questions I had at the outset, it has generated further questions. Some of those questions might seem silly, but they actually point to fundamental questions of multimodal writing. For example, in my experience, toward the end of the semester in every graduate course in rhetoric, someone asks, “Isn’t everything rhetoric?” and someone answers, “If everything is rhetoric, then nothing is rhetoric.” While these questions overly simplify complexity, I do wonder if it is worth asking the same question

of multimodal composition: Can all modes, media, and materials do the work that writing needs to do? Are there any tools or materials outside the bounds of DIY craft composing (which I have defined in this dissertation through the kinds of work they do instead of through the things that they are)?

Other questions are more practical: How might a DIY craft pedagogy be implemented across an entire writing program (with all of the varied backgrounds, pedagogies, values, and interests of those teaching in programs large and small)? If that program uses a final portfolio assessment system (as my own writing program does), what are the best methods for making students' production processes visible to assessors? Perhaps more importantly, given the confines of a semester, how might a program balance these competing interests in producing well with those in producing a polished final product?

From another perspective, my experience teaching the 200-level course in Writing, Rhetoric, and Culture suggests to me that while students enjoy composing multimodal texts that don't look like essays following print conventions, they have a difficult time articulating the ways in which those texts do academic work. My discussion of Shipka's and Turnley's work in Chapter Five provide some frameworks for doing so, but how might we reconcile those with students' deep sense, given their previous composing experiences, that academic work has to look like an MLA- or APA-formatted print essay? Doing so can help students to more deliberately transfer what they learn in DIY craft FYC courses to other writing contexts.

Finally, my dissertation argues that handmade objects do material, technical, rhetorical, economic, and social work in the world and that the processes of making those

objects can reshape those who produce them. But my focus throughout has returned to the classroom. What role might DIY craft usefully play in service learning and other projects that reach outside the university to the community at large? I would argue that DIY craft has much to offer, if we are willing to take up the messy work of embodied production.

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Awards

Distinguished Dissertation Fellowship, UWM, 2013–14

James A. Sappenfield Fellowship, UWM, 2008–09

Recent National Presentations and Workshops

“Handcrafted Rhetorics: DIY and the Public Power of Made Things” pre-conference workshop with Marilee Brooks-Gillies, Frank Farmer, Jason Luther, Chelsea Murdock, Martha Webber, and Patrick Williams. Conference on College Composition and Communication, Tampa, FL. March 2015.

“Rhetorical Remediation: A Multimodal Consideration of Audience.” Conference on College Composition and Communication. Tampa, FL. March 2015.

“Convoluting (or at least Complicating) the Idea of ‘Good Design.’” Computers & Writing. Pullman, WA. June 2014.

“Writing on the Border between Idea & Thing.” Rhetoric Society of America Conference. San Antonio, TX. May 2014.

“‘But what does that mean for us?’ Negotiating Agency in an Agential Materialist World.” Conference on College Composition and Communication. Indianapolis, IN. March 2014.

Graduate Teaching Experience, 2008–2015

English 095: Fundamentals of Composition

English 101: Introduction to College Writing

English 102: College Writing & Research

English 205: Business Writing

English 214: Writing & Social Media for Careers

English 240: DIY Culture: Making, Writing, and Digital Technologies

Administrative Experience

English 101 Coordinator, First-Year Writing Program Administration team
Fall 2011–Spring 2013

English 101 Mentor, First-Year Writing Program Administration team
Fall 2010–Spring 2011

Digital English Project Assistant
Spring 2009–Spring 2011

University of Wisconsin–Milwaukee Writing Project (UWMWP) Writing Project Assistant
Spring 2008

Professional and University Service

Assistant Editor, *Kairos: A Journal of Rhetoric, Technology, and Pedagogy*
February 2013–present

Steering Committee and Founding Member, Graduate School Advisory Council,
Graduate School, UWM
Fall 2011–Spring 2013