

Lisa Dush  
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### **Three Frames for Teaching Digital Composition**

A teaching question motivates this paper: how to design and teach a digital composition course that fits in the context of an English department and/or composition program (hereafter referred to as “English studies”). By “digital composition” I mean a quite specific sort of course, one in the spirit of the Digital Storytelling class that my colleague Casey Burton and I have taught twice here at UMass, in which students create texts out of digitized media such as still images, audio, text and video using “prosumer”<sup>1</sup> editing software like Photoshop, PowerPoint, Audacity, Flash and iMovie. This combination of materials and methods I call “digital composition,” a term that I’ve chosen over others, like new media writing, multimedia writing and multimodal composition, because it accounts for composition done with anything that’s been digitized (e.g. the materials need not be “new”; the projects need not utilize multiple modes). What I want to stress by separating digital composition from the more comprehensive categories of “computers and writing,” or the analogous term, “digital writing,” coined by the Writing in Digital Environments (WIDE) Collective at Michigan State (2006), is that I’m addressing a particular practice, digital composition, within a larger field, computers and writing.

Over the last five years, English studies journals have published increasingly more accounts of digital composition courses (e.g. Anderson, 2004; Lunsford, 2006; Meeks & Ilyasova, 2003; Sorapure, 2005), so I am concerned less with making a case that digital composition courses should be taught – they already are and there seems to be momentum for this to continue – than I am in exploring *how* these courses might be taught. There is a practical dimension to this word “how” – what books to use, what kind of assignments to do – which I will address, but more important to the field at this moment is the articulation of big-picture, conceptual framings for such a course. Put

more concretely, teachers of digital composition must be able to give a coherent answer to a Renaissance studies or creative writing colleague, who may suspect that digital composition is just a well-funded fad, on why exactly they're doing the business of English in their digital composition course. And if said skeptical colleague points across campus, to the film studies, media studies, communication, comparative literature, art or journalism department, where classes in digital composition are also taught, and says *why don't you just let them teach this stuff*, a digital composition teacher should be prepared to answer. She must have a sense of how English studies instructors can *frame* digital composition within the existing traditions and practices of their field.

The research presented in this paper argues for three prevailing, available conceptual frames for teaching digital composition. By “frame,” used here as a noun, I mean a coherent theoretical/scholarly position, authorized by the traditions and history of English studies, which will guide a teacher’s decisions about what and how to teach. There are rich lines of scholarship already in our field from literacy studies, history of the book scholarship, composition, and media/textual theory, all of which provide compelling, though different ways to conceptualize digital composition. The three frames I describe – the digital arts, new literacies and material/writing technology frames – are “imagined” in the sense that they do not exist as generally-accepted organizational categories; however, like any naming project, the frames can help to map a diverse set of practices. This paper is largely in the service of defining the theoretical dimensions of each frame and discussing for each basic classroom implications.

Why do this kind of categorizing and mapping? As a teacher, there are few but widely-varied models available for digital composition classes. To teach a coherent fifteen-week course, you must make decisions, but without a conceptual map these decisions are difficult. Here are just a few questions that have come up in my experiences of teaching digital composition: Should I be content to expose students to a broad variety of new media and software, or do I aspire to make them highly

functional with one or two modes and applications? Is it important to spend time addressing the distribution of final projects, which takes time and is fairly dull? Should I talk about print media, and if so, how? Should I leave project topics open, as in a typical creative writing course, or should I have highly focused critical assignments, like Selber's "redesign projects" (p. 222)? What do I show as models – aesthetically pleasing texts like "This American Life," which are, despite the digital methods used in their compositions, really quite traditional, or experimental pieces that seem more thoroughly "new media"? What, if anything, is on the reading list? In short, even after narrowing a computers and writing course to focus on digital composition, there are many, many ways to design the course. The three frames I propose aim to help teachers think through possibilities and options in a more coherent way.

Roughly speaking, the digital arts frame aligns best with the kind of belletristic crafting of texts now done in creative writing courses and the humanistic discussions that have long been a part of literature scholarship and classrooms. The new literacies frame is grounded in the theories of functional and critical literacies familiar to both education and composition. The material/writing technologies frame is closest to the work done in history of the book and cultural studies scholarship. I will begin my discussion with the digital arts frame, which seems to me the least complicated of the three. The second and third frames, literacy and material/writing technologies have some overlap, in that each is more socially grounded than the digital arts, but the two are still different enough to constitute separate frames.

### **Frame 1: Digital Arts**

Many of the earliest arguments for computer-based composition in English studies were made in what I call a digital arts frame. This frame, which remains a popular one among teachers of digital composition, imagines digital materials as the new stuff of art, and thus sees composing,

reading and thinking about digital texts as a new way to explore fundamental humanistic questions. Questions of “truth and beauty” – What is it to be human? What is the purpose of art? Who can make art? – have long been central to the work done in English studies, and some say that writing on computers and reading computer-created texts might fruitfully extend these questions. If, for example, digital composing is changing creativity to be of the “remix” variety (Lessig, 2004), or if hypertext empowers readers in new ways (Landow, 1997), then these are important shifts in the history of art that English studies should be involved in theorizing.

Because the digital arts frame asks these ‘timeless’ human and artistic questions, those who theorize digital composition within this frame often situate it as the latest in a long line of serious artistic innovations achieved by great artists or in the course of great artistic movements. Such theorists, therefore, tend to ground their discussions in a historical review of fine art and literature. To make her arguments for the validity of digital composition, Murray (1997), in her book’s title, juxtaposes Shakespeare’s famous tortured hero with a Star Trek gizmo, the holodeck, and she references the aesthetic theories of T.S. Eliot, describing how the computer can create “objective correlatives for thinking about the many systems we participate in, observe, and imagine” (p. 93). Lanham (1993), in his wide-ranging *The electronic word: Democracy, technology, and the arts*, frames his introduction of computers through contemporary art, using the aesthetic experiments of contemporary visual artists like Duchamp, Christo and Lichtenstein as his entrée into the kinds of artistic explorations that the computer makes possible. Bolter and Grusin (1999) similarly establish their theories of immediacy and hypermediacy through a discussion of the innovations of modernist art. And Geoff Sirc (2004) describes what he calls the “box logic” composition possible on computers through an extended discussion of Joseph Cornell’s tiny box dioramas. In a similar way, a digital composition course conceived in the digital arts frame might make use of a wide variety of

artistic texts – print, fine arts and musical – as models for students’ compositions and as discussion texts in the course.

If English studies is in the business of teaching people to both read *and* create texts that will help us see what it means to be human, as is argued by Scholes (1998), then the field can make sense of digital composition classes by imagining them much like creative writing classes: as complements to and even antidotes for the constant reading and critical writing about published texts that happens in literature classes, as a place where students make their own texts to explore these humanistic questions. The difference, though, is that the materials students use are digital. Why, though, bring machines and foreign materials, like sound and images, into creative writing courses?

First is the argument, expressed best by Lanham (1993), that print is a limited modality that will eventually be supplanted by computer-composed texts, texts which, through their use of sound, image, and word, allow for a “full range of expressivity” (p. 78). English studies is destined to become anachronistic, implies Lanham, if it does not expand its purview to account for these new modalities. Why not challenge ourselves to describe the aesthetic powers and the compositional rules that guide modalities other than print? Formalistic study of texts, though out of fashion in some English studies departments, is still an important practice in the discipline. In a digital composition course, students untrained in producing certain artistic materials, like music or visual art, can nonetheless compose with these materials using computers, and thus conversations about how texts are powerful and beautiful can expand to cross modes. Digital composition courses might, then, take as their focus an exploration of how narrative changes when it’s told in print, image or sound. Or students might be asked to extract the building blocks of meaning in different modalities: if a Dylan Thomas poem is categorized as an alphabetic text that uses techniques like line breaks, alliteration and repetition to make meaning, what happens when we digitize the poem and add other meaning-making possibilities, like changes in font size and style and the addition of images? Are

poets like Emily Dickinson, with her curious capitalization, presaging these techniques but constrained by the limitations of a print world? These are the kinds of questions you might ask in a digital arts-framed digital composition course.

Focusing on the aesthetic powers of different modalities is the first step in a digital-arts framed course. A second step would be to introduce ideas by those who have theorized the unique nature of digital media. There is much scholarship on the “principles” fundamental to any digitized text – as many have pointed out, a digitized Beethoven symphony and a scanned Picasso painting are fundamentally similar, in that each is now a series of binary ones and zeroes. All digitized materials therefore have features in common. Manovich (2001), in *The language of new media*, identifies five principles of such “new media”: numerical representation, modularity, automation, variability and transcoding. These principles allow for the creation of texts that look very unlike what English studies people, raised on the aesthetics of the book and paintings hung in galleries, might consider themselves able to theorize, such as texts that change with each viewing, or texts that allow users to determine their final shape. Murray (1997), speaking of narrative environments created out of digital texts as an alternative to the static forms of presentation in books and movies, names the “four essential properties of digital environments”: they are procedural, participatory, spatial, and encyclopedic (pp. 71-89). A digital arts-framed digital composition course might ask students to compose texts that explore these kinds of fundamental digital principles. The problem here, however, is that the computer expertise required to make these sorts of texts is high, perhaps too high at present to expect from the sort of students typically enrolling in English studies classes. While the computer may make this problem of insufficient expertise on the part of students seem new, the gap between what teachers see as the greatest accomplishments in literary forms and what students can produce in the limited time of a fifteen-week semester has always been a hurdle: we know students aren’t going to turn in *Paradise lost* in their poetry writing workshops, but we still try

to find ways to help them approximate and understand the grand possibilities of print texts. In the same way, a digital arts-framed digital composition course might aim to give students a taste of digital possibilities by having them create short texts exploring the properties of digitized media, and discuss more radical possibilities by analyzing professional examples (Wardrip-Fruin & Montfort, 2003).

In summary, the digital arts frame authorizes digital composition in the following way: digitized materials are legitimate ones from which to create artistic texts, and therefore doing digital composition can help students explore some of the fundamental questions that artists have always tried to explore, questions related to the nature of both art and human beings. The frame asks that a teacher structure her class so that much time is spent composing texts and discussing these questions of art and humanity, with less attention to issues like distribution of finished texts or audience-appropriate communication. Because such a craft-centered attitude tends to be grounded in the veneration of great texts and great artists, a teacher operating a class from this frame might aim to reward/nurture talent, rather than to bring all students to some basic level of proficiency.

## **Frame 2: New Literacies**

The digital arts frame, with its reverence for aesthetics and high art, may not be entirely palatable for many in English studies. Framing multimedia composition as “literacy” work can be an appealing alternative. Expressed most clearly in the claim by the New London Group (Cope & Kalantzis, 2000) that “literacy pedagogy now must account for the burgeoning variety of text forms associated with information and multimedia technologies” (p. 9), a new literacies frame situates digital composition as a way to learn essential new methods of composing and reading; for example, how to compose and read texts in which images rather than words carry the burden of meaning.

New literacies, or proficiency encoding and decoding semiotic systems other than print, are seen as essential for educational, work and civic success.

Even though composition and education scholars have richly expanded the definition of literacy since the mid-1980s, when work like Street's (1984) on the ideological nature of literacy were published, the word "literacy" still has a neutral, functional connotation even to many within English studies: to be literate is to be a competent user of either a semiotic system or a technology. A system wherein English studies teachers are teaching their students functional literacies should sound familiar, and as such a functional literacy frame is an easy way to authorize digital composition. As with print, however, a functional approach to digital literacy can strip the social dimension from composition and result in an aimless digital composition course, where teachers feel that simply getting students on computers, using technologies that seem to have a wider use – like PowerPoint and Photoshop – is good practice. Selber (2004), in his discussion of three broad types of literacy for the digital age, does not have a problem with the phrase "functional literacy," but insists that functionality not be reduced to a set of software skills. By naming not modes or software that students should learn, but rather both operational skills *and* knowledge of the social conventions and specialized discourses necessary to effectively deploy these skills (p. 45), Selber invokes a way of thinking that is necessary for literacy to be a productive frame for digital composition. A digital composition course framed by new literacies thinking might, for example, offer students some early skills training in a number of software programs, but then establish communicative tasks to be accomplished, leaving students to select the modes and software they feel are most appropriate to these tasks. Literacy involves learning skills, but also having a sense of how to appropriately deploy these skills to get things you want; that is, literacy must equate functionality with the ability to use skills appropriately in social settings.

This rich, social definition of multiple literacies is articulated well in a number of computers and writing publications. The sociolinguist James Gee's (2003) discussion of video games and 'what they can teach us about learning and literacy,' says, "In the modern world, print literacy is not enough. People need to be literate in a great variety of different semiotic domains" (p. 18). Kress (2003) makes a similar argument: "We have moved from literacy as an enterprise founded on language to textmaking as a matter of design, an enterprise founded on a variety of forms of representation and communication" (p. 105). For both Kress and Gee, the communicative landscape is much more complex than in the era dominated by print. In a print world with a dominant semiotic system, it was fair to expect students to gain competence with that dominant system. Today, with multimodal texts proliferating, with the splintering of the communicative landscape into Gee's "semiotic domains," Kress says it is not competency with print, but a sense of design, a flexible ability to combine multiple modalities in the service of "textmaking," that composers need. They must size up the task to be accomplished, in all its social complexity, and use the semiotic system(s) appropriate to the task.

This is, in effect, a rhetorical view of communication, where a writer makes decisions based on her evaluation of an audience's needs, and digital composition courses that claim to be teaching new literacies will often draw on language and concepts from rhetoric to frame the work they do in their classes. Lunsford (2006), who describes in a reprint of her keynote address to the 2005 Computers and Writing conference the effort at Stanford to establish a second-level, universally-required writing course with technology at its center, argues that the neglected fifth canon of rhetoric, "delivery," is a way of structuring the digital composition that students do. In a world where print texts are losing their privileged status, students "must think critically and carefully about how to deliver the knowledge they produce" (p. 170). Thus the appropriate mode of delivery – print? video? PowerPoint? –becomes one of the writer's rhetorical decisions. Yancey (2004) pushes

this a bit further to say that material factors are at play in all five of the rhetorical canons – invention, arrangement, style, memory and delivery – and that a writer needs to consider new modes and materials involved in her process and how these are ‘inventing’ her as a writer during each stage. Ultimately, courses operating from the digital arts frame and the new literacies frame might both spend time discussing the unique properties of different modalities; however, in a new literacies-framed course this work would be conceptualized less as in the service of training the writer’s aesthetic sensibility than it would be as building a toolkit for effective communication.

A final dimension to digital composition conceived from a new literacies frame is that it might consider not just encoding and decoding semiotic systems, but also what Buckingham (2003) calls “critical literacy”: a “broader understanding of the social, economic and institutional contexts of communication, and how these affect people’s experiences and practices” (p. 38). In this iteration, literacy is not just about being able to compose with and read various semiotic systems, but also understanding cultural and economic factors that might privilege certain modalities or prescribe certain uses of technologies. Including this critical literacy in a new literacies-framed course helps address Wysocki and Johnson-Eiola’s (1999) critique of the word “literacy,” which they say has come to mean a set of skills that, once learned, will automatically improve the learner’s social or economic prospects. Because literacy is conceived as a cure-all, we can put too much stake in it, forgetting or overlooking “the economic and social and political structures that work to keep people in their places” (p. 355). Students might, then, be asked to confront these structures, considering, as does Selfe (1999), whether the government’s interest in promoting the technology industry has had a major role in bringing computers into schools. They might be asked to not just grin and bear compatibility problems, but to look for economic and political reasons for why certain software might not work with other software, or why certain digital files will not open and thus cannot be used in the composition process. As an example, a common problem in digital composition courses

is that iTunes-purchased files won't open in Apple's own audio editing program, GarageBand. While a teacher working in the digital arts frame might cultivate a hacker's spirit toward this problem – let's try to outsmart the evil Apple and figure out a way to open this damn file – a teacher working in the new literacies frame, because part of her mandate is to help students think about how social, economic and political factors determine who gets to write and how, could use the occasion of the unopenable iTunes file to start a discussion on why Apple might protect copyrighted files this way, and then lead students to some of the impressive music and art sharing communities, such as Creative Commons, that are thriving on the web now in response to restrictive copyright laws.

In summary, the new literacies frame, if it is operating from a rich definition of literacy, will ask students to acquire the computer skills necessary to enter a variety of semiotic domains, plus the social awareness of how to size up a situation and read or write in a way appropriate to this domain, *plus* the large-scale critical awareness of social, economic and political factors that determine what literacies get privileged, why, and at what cost. A teacher operating in this frame would aim to set 'real life' tasks and audiences for students' projects, and to interrupt students throughout the process, asking them questions about their rhetorical choices and how larger forces might be influencing these choices. A new literacies-framed digital composition teacher may not seek out and mentor those students who display 'talent,' as might a digital arts-framed teacher; she would aim instead to empower all students to be better equipped for educational, work and civic success.

### **Frame 3: Material/Writing Technologies**

In the mid-late 1990s, likely in response to the many dramatic predictions for how computers had or would revolutionize communication and society, the strain of scholarship which forms the basis for what I call a material/writing technologies frame emerged. Works like Baron's (1999) "From pencils to pixels: The stages of literacy technologies," Dugid's (1996) "Material

matters: 'The past and futurology of the book,' Bolter's (1991) *Writing space*, and Bolter and Grusin's (1999) *Remediation* all argued a similar point: every new writing technology, the computer included, follows a similar trajectory and is limited from becoming truly revolutionary because technologies are social; new technologies must always fit into existing social and economic structures. These scholarly texts, which drew on ideas about production from cultural studies and 'circuits of communication' from book history, had a double effect: first, renewed focus was put on composition as materially enabled and constrained; second, focus was taken off the moment of composition as the primary site of meaning-making, with more attention paid to how texts gain value (or not) by the ways that they circulate. A digital composition course framed by a material/writing technologies approach would aim to get students thinking about both of these factors: the material factors that come to bear at the moment of composition with various technologies of writing *and* how to enter or perhaps alter the larger cultural systems in which writing circulates.

Let me first explain the role of material factors at the moment of composition. One very simple, practical example of how to focus on the materials of writing comes from Wysocki et al. (2004, p. 27): students write an assignment with a crayon, and then reflect on how the process of composing, as both a cognitive and a physical act, felt different than writing on a keyboard. From here, a discussion might shift to how certain software programs affect the kind of composition a writer can do. Having students subvert the intended purposes of these technologies, for example, using PowerPoint not to create deadly bulleted-list presentations, but rather to follow the lead of the artist/musician David Byrne and create art texts with this business-oriented software, is a way to call attention to how technologies, in both their design and their culturally-dominant uses, may affect the ideas one has or expresses, and how selecting technologies appropriate to your task or using technologies in creative ways might allow a wider range of expression. Ong's (1988) seminal work

on how writing allowed new kinds of thinking to emerge that were not possible in oral societies, Kress' (2003) discussion of how writers using print must make different "epistemological commitments" (p. 57) than writers using images, and Haas' (1996) study of how writing on the computer might "both constrain and enable acts of mind" (p. 27), all provide theoretical starting points for thinking about how material technologies may affect an individual's composition process.

DeVoss, Cushman & Grabill (2005) interestingly expand the discussion of material factors that affect composition beyond just the writer and the material they write with by coining the term "infrastructures," which are the "material, technical, discursive, institutional, and cultural conditions" (p. 23) that come to bear during composition with new media. Their discussion is worth calling attention to here, as it details a digital composition course like I'm describing and explores how the "breakdowns" that occurred in the class – crashing computers, disappearing student folders – revealed the infrastructures that underlie digital composition. In the class the authors describe, infrastructures were hidden – the user-friendly, though opaque interface of the video editing software did not reveal how the projects were created or saved. Combined with these opaque interfaces, the university's network policies, including how much server memory students were allotted and where projects could be saved (not in the most stable place, on the desktop, because students couldn't be trusted not to download problematic files to desktops and infect the computers with viruses), were causing awful problems during the composition process. In a classroom where the material/writing technologies frame was in operation, these moments of breakdown would be occasions for the class to uncover the infrastructures underlying composition. In a digital arts or new literacies frame, such occasions might be seen as irritating 'computer problems,' a matter for the teacher and the university's technology office to resolve without the students being aware or involved.

A material/writing technologies approach to digital composition offers interesting potential, as DeVoss et al.'s (2005) work begins to suggest, to discuss larger social, political and economic structures that enable the production and consumption of writing. John Trimbur (2000) has done thoughtful work centered on the concept of "circulation." His essay both identifies the "limited circuit of the classroom" (p. 195) in which most school-based writing is stuck and suggests that composition theory might begin with concepts articulated by cultural studies to start exploring how texts gain meaning and value not just at the moment of their composition, but also in the ways that they circulate through culture. Trimbur's classroom examples, from a "Writing About Disease and Public Health" course, mainly ask students to "reconstruct the systems of distribution and exchange through which messages [...] circulate" (p. 213); what Yancey (2004) realizes in her uptake of Trimbur is that this discussion of circulation can be much less speculative and abstract in a digital composition course. Students can interfere in corporate circulation systems by, for example, creating spoof videos that mock an official movie trailer, and then actually putting these texts into the circulation system of the web. They can design products that the teacher requires they post on their blog, which may then have a dual (or split) purpose – to satisfy the teacher's course requirements and to share their projects with friends and family. To encourage reflection on circulation, however, digital composition teachers must be sure to make distributing projects part of the class, perhaps by requiring that students set up a publicly-accessible blog on which to post their work.

A focus truly on material/writing technologies would likely require some theoretical reading; what really brings the concept of writing technologies to life are readings that reveal the social systems built up around the familiar technology of the book. Texts like Adams and Barker's (1993) "A new model for the study of the book," which articulates a "socio-economic conjuncture" (p. 14) that includes the circuits through which books move (publication, manufacture, distribution, reception, and survival), as well as social factors that come to bear on this circuit (political, legal and

religious influences, commercial pressures, social behavior and taste and intellectual influences), can clarify the somewhat foreign notion that *all* modes of writing – whether of the book or the computer – are socially-embedded technologies. Computers can also become more compelling if considered in the context of the history of writing and the evolution of writing technologies (Robinson, 1995). For this reason, I can imagine an interesting upper-level undergraduate or graduate-level class that combines digital composition with theoretical readings on writing technologies. In an undergraduate course, however, it seems that while aspects of the material/writing technologies frame – like requirements to enter real-world circulation systems on the web – might be possible, it may be difficult to structure an entire course in this frame.

### **Teaching from Multiple Frames**

Theory/practice books written by important scholars in the field of digital composition, like Wysocki, Johnson-Eiola, Selfe and Sirc's (2004) *Writing new media: Theory and applications for expanding the teaching of composition*, admit that there are a multitude of approaches to teaching digital composition. Without some kind of frame to help organize a teacher's ideas, however, a statement like this one from their preface: "we hope that one of our approaches – or some mix – provides you with directions of thought and theoretic groundings that spark how you work" (p. vii) may be more overwhelming than helpful. As I hope this discussion has demonstrated, these three frames, while all *familiar* to those in English studies, are nonetheless dramatically different. If a teacher designs a course that draws indiscriminately on a number of these frames, the result will likely be an incoherent and unsuccessful class.

## Notes

1. “Prosumer” is a word with two similar meanings. The first meaning comes from combining the words “professional” and “consumer – by this definition, “prosumer” refers to hardware or software that is cheaper than that used by audio/video professionals but which is sophisticated enough so that with it consumers can achieve professional-looking products. Canon, for example, makes a line of “prosumer” video cameras that can be used either by professional videographers on a budget or consumers with a decent amount of money to spend. The second definition combines the words “producer” and “consumer”; this form of “prosumer” refers to genres, like movies, that in the past limited ordinary people to the role of consumer but now, because cheap hardware and software are available, allow non-professionals to occupy the role of producer.

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