The insistent presence of electronic media in our academic lives requires that digital media scholars take the lead in determining what scholarship designed and published in new media should look like. What, for example, should be the place of the visual in academic inquiry and representation? What means are available, and what constraints are imposed, for ethical pedagogical performances in the production of scholarly digital media?

Discussion of a Techrhet listserv exchange from 2003 lays out the nature of the concerns that emerged when scholars tried to incorporate their work in digital media into print-centric job applications. Despite the progress that has been made since then, including the increasing publication of interactive digital media in online peer-edited journals and the on-going revision of institutional promotion and tenure documents to make them more capacious in their definitions of intellectual work and scholarly production, a tension often remains between proponents of traditional textual production and proponents of digital production of multimodal scholarship.

Finally, notes on the design of *Technologies of Wonder* emphasize the intertwining of form, content, and interactivity that are essential and inseparable elements of its argument.
In July 2003, Cheryl Ball, then a PhD candidate in Rhetoric and Technical Communication at Michigan Technological University, asked her colleagues on the TechRhet listserv to comment on six templates she had prepared for a re-design of her website as she readied herself to enter the job market. Ball, an active contributor to Techrhet with significant experience writing and designing digital media texts, asked the group to “take a look at these designs and let me know if any of them might fly with a hiring committee at your school.” She described the job she hoped to find as one “that might somehow combine new media/composition/design/techcomm/creative writing,” but added, “Yeah, right...I know...but, it’s my dream combo” (2003). She also indicated that these designs were “just sketches,” and worried that “quirky designs” might cause a hiring committee to “take one look and write me off.”

I begin with this scenario because the responses Ball received from her colleagues highlight two questions that are at the center of my project: What is/should be the place of the visual in academic inquiry and representation? What means are available, and what constraints are imposed, for ethical pedagogical performances in the production of scholarly digital media? (I define “pedagogical performances” broadly here to include acts of both teaching and scholarship that explicitly communicate scholarly subject matter and argument—to our students and our colleagues—but also implicitly teach social and cultural values embedded in the means and motives of our work.) Certainly these interconnected questions are not new; they have been asked (and variously answered) about other media and other technologies of communication. What makes these questions important to ask now is that we are in an extended moment of remediation from primarily alphabetic academic performance on the page to primarily digital (visual, verbal, and auditory) academic performance on the screen. At this punctum of technological change, the practices and habits of mind associated with old media are called into question as we struggle to devise principles and practices for the new. What makes these questions important to ask again is that points of remediation have in the past been both opportunities for change and occasions for re-inscription of previous practices.
Ball's designs were all for “splash pages,” the first screen on a website before the content-specific pages of the site. Splash pages are often graphics-intensive, and they serve a “branding” function, setting the tone and look of the site that will carry through the subsequent pages. The responses Ball received from her colleagues were generally positive and encouraging. The first few messages expressed a design preference and briefly explained the reason for the preference (#4: “I like the idea of a ‘speaking’ menu”; #4 and #6: “tasteful”); they also made technical recommendations: use style sheets to keep down the file size; develop two designs and allow the
user to choose which to view. Then CJ joined the conversation, positioning herself as a member of the hiring committee doing “a usability run-through.”

Playing devil’s advocate in a “worst-case” analysis, CJ noted that, were she accessing the sites from home on a slow dial-up modem, each design would have taken 30 seconds or more to load, and there were no text-only options. Furthermore, transparent navigability was a problem for several designs that required moving the cursor over an image (e.g. each one of the flamingoes in #4) to see where the links (New Media, Teaching, Archives, and Vita) led. With 200-plus applications on her desk, CJ said, “Rhetorically speaking, as a hiring committee member, I want text.” She continued, “I’d want to see a CV, some sample syllabi, and a sample of your writing at the front end, links to any OWL, WAC, WID, CTE, or other programs for which you’ve created websites, especially content-heavy resources, and I want them linked clearly at the outset, and other stuff farther down.” Finally she noted (again speaking in the persona of a hiring committee member), “We spend a lot of time in our high-tech classrooms trying to emphasize that students have to ‘write’ rather than spend all their time with pretty clip art and pix of their mums and babies.”

CJ’s post illustrates the tensions in English Studies over when, where, and why it is ever appropriate or necessary to produce self-representations and scholarly work in digital media, and if so, what form those representations and scholarly productions should take. While CJ and other members of TechRhet are, as the name of the listserv would suggest, both technologically and rhetorically savvy, CJ expressed a shared concern that English department members outside of the fields of rhetoric and technical communication might dismiss Ball’s website as difficult or confusing to use and Ball herself as lacking in *gravitas*.

As the listserv conversation continued, both web usability and the inclusion of images were debated. New entrants to the discussion of Ball’s designs echoed CJ’s concerns about usability, focusing on issues like loading time and navigability. Others turned toward concerns about the “seriousness” of the designs. Dan invoked the term “professionalism,” which in this context was equated with solely text-based production, and commented that “people I work with would be turned off by flamingoes and playful images.” Several respondents implied the same with references to graphics as “cute” or “geegaws you fanny about the page.”
Ball’s designs are playful, although they work artfully and smartly off visual cues like postcards and the computer desktop metaphor, and so it could be argued that other designs might have been seen as more “professional.” Yet for the better part of the short but energetic discussion, no one suggested “more serious” designs, or noted that these splash pages led to the alphabetic content they were suggesting. For most, the choice for Ball’s job-market audience was clear: words, on the page or on screen, are professional; images are not. As Keith said, “I want the CV first and everything else offa it.” It was not until the end of the discussion, after Nick noted that search committees rely first on the printed documents they receive through the mail, that Jeff, Dean, and others pointed out that the website, as an auxiliary piece, served as a place to “display your talents and abilities” and “show off your specialized skills and knowledge,” thus displaying a balance of print and digital that together provide a picture of a more complicated professional self.

In sum, rather than take advantage of the enhanced visual and organizational properties of webbed texts, Ball was cautioned to omit the graphic and interactive elements of her job-market website, elements that would have allowed her to demonstrate the multimodal spirit of inquiry and creativity that infuse her academic work. Furthermore, she was advised to avoid being “unprofessional” (and therefore intellectually suspect) in her use of images, and instead use only alphabetic, printable texts, thus mapping principles developed for spoken and written argument directly onto multimediated hypertext.

We’ve come a long way since 2003.

Today, most scholars in the humanities are familiar with digital media resources. Even if they themselves use only print to produce and distribute their own work, they are more likely to know both how to use and how to assess the value of online articles, archives, and databases of images, sounds, and texts. In addition, as technologies for digital production have both proliferated and become more accessible, digital media researchers have developed a critical mass of rhetorically sound technological expertise, enabling them to design and produce complex, sophisticated, and intellectually rigorous scholarship in a range of electronic media. In the field of rhetoric and composition, “digital media” appears more and more frequently as a desired research focus or teaching area in the MLA Job Information List, and search committees expect to see examples of digital scholarship and expertise tendered with or as job application materials. In concert with these changes, digital media analysis and production are being taught in composition and rhetoric classrooms at both the undergraduate and graduate level.

More importantly for the future of digital scholarship, there is a growing body of published scholarly work in which research has been conducted and presented in web pages, digital video, Flash animations, audio podcasts, wikis, and other multimediated, multimodal formats. The first issue of *Kairos: A Journal of Rhetoric, Pedagogy and Technology* was published in 1996, and *Computers and Composition Online* was also launched in 1996. (*Computers and Composition*, the signature publication in the field, began as a newsletter in 1983, and has been published as a print journal continuously since 1985.)

Finally, university departments are beginning to craft promotion and tenure documents that recognize work with digital media as legitimate demonstrations of intellectually rigorous scholarship. At The Ohio State University, for example, members of the Digital Media Studies faculty within the English department crafted changes to the departmental Pattern of Administration and Appointments, Promotion, and Tenure documents that removed print-centric language. The AP&T document now specifies the following:
Evidence of scholarship should consist of published scholarship or creative work, singly or collaboratively authored, or, where appropriate, recordings, videotapes, films, and works in electronic or other media, singly or collaboratively produced. Publication and other scholarly and creative activities occur in diverse media (e.g., print and digital format), and the same standard—clear excellence—applies regardless of the medium. (Faculty, 2007, p. 15)

To make this process visible to the field, then-Department Chair Valerie Lee and Cynthia Selfe detailed the review and revision in “Our Capacious Caper” in the ADE Bulletin (2008). Similar initiatives are underway or have been completed in several departments, including Illinois State University, where Cheryl Ball successfully developed a set of practices and procedures for electronic tenure portfolios. In 2010, Ball was granted tenure on the strength of her fully online electronic portfolio, authored in a hypermediated Wordpress blog and containing documents, images, and embedded audio and video media.

And yet . . . scholars who compose with and in digital media must still grapple with a worrisome tension in their departments between proponents of traditional textual production of knowledge in print journals and monographs, and proponents of digital production of multimodal scholarship that is composed, distributed, and accessed on computers or other media readers. I would argue, however, that deciding between the two is a false choice; both have significant value and make important contributions to the academy. In fact, the emergence of digital scholarship, coupled with changes in scholarly publishing, creates a unique opportunity for the strengthening of old and flowering of new expressions of intellectual achievement in English Studies and the humanities in general.
Some Notes on Design

In “Arts of the Contact Zone,” Mary Louise Pratt (1991) comments on a letter discovered in Copenhagen in the early twentieth century. Written in 1613 by Felipe Guaman Poma de Ayala and addressed to the king of Spain, it was either ignored or lost, and did not resurface for almost 300 years. The letter’s 800 pages of text are written in Spanish and Quechuan, and the 400 full-page drawings are European in style but “deploy specifically Andean systems of spatial symbolism that express Andean values and aspirations” (p. 36). The document is a tour de force of transcultural communication, yet its radical hybridity made it seem “anomalous or chaotic,” rather than simply heterogeneous, to scholars who examined it in 1912. Pratt asserts that the letter is a product of the “contact zone” between Incan and Spanish culture, and defines such zones as “social spaces where cultures meet, clash, and grapple with each other, often in contexts of highly asymmetrical relations of power, such as colonialism, slavery, or their aftermaths as they are lived out in many parts of the world today” (p. 34).

In thinking about how to characterize both the form and content of Technologies of Wonder, and what they require of the reader, I thought first of Pratt’s contact-zone metaphor. My project certainly exists in a liminal space between print and new media culture, and it may not satisfy either readers who prize above all coherent, unambiguous linear text of impeccable lineage, or viewers who desire a categorical break from traditional print demonstrations of intellectual work. But “contact zone” seems too harsh a comparison, suggesting a divisive, bipolar antagonism between “the book” and new media where none exists, and never did. Alan Liu (2008)

P.2 Felipe Guaman Poma de Ayala, the author, accompanied by his son Don Francisco de Ayala, begins his journey to Lima to present his account to the king’s representative, 1613. Guaman Poma, an indigenous member of the Quechua people at the time of the Spanish occupation of Peru, was literate in both Spanish and his native language. His 1,189-page “letter” to King Phillip III critiquing the Spanish colonial occupation (New Chronicle and Good Government) was written in Spanish and Quechua and included 400 full-page illustrations.
points out that the line between print and digital has by now been “so breached by shared technological, communicational, and computational protocols that we might best think in terms of an encounter,” evoking a borderland rather than a border, a shared place where some residual tensions and disconnects may exist, but the primary disposition is one of active interest in exploring the ever-changing synergy between old and new. Liu proposes that “imagination is a more capacious term than narrative for what is involved,” as such encounters take place in “whole imaginative environments. . . . borderlands of surmise.” Instead of a fractious contact zone, “we want a way of imagining our encounter with new media that surprises us out of the ‘us’ we thought we knew” (n.p.).

*Technologies of Wonder* stages just such an encounter. I have deep and satisfying roots in print culture; but I have an equally intense and long-standing enchantment with digital media and visual rhetoric, and I believe that hybrid forms of interactive multimedia have a capacity for robust imaginings and knowledge production that is qualitatively different from that which traditional print forms can manage on their own.

I am not arguing that new media are superior, but rather that they afford new perspectives and processes that are unavailable in more traditional forms. I designed this project as a hybrid print/digital object for two reasons: to provide a book-length examination of theoretical and pedagogical arguments for the design and production of interactive multimodal digital scholarship, and to demonstrate, through the content and design of *Technologies of Wonder* itself, one way in which this might be done.

I began with the premise that form and content cannot be separated, and that the visual, structural, and interactive design of my project would always already be an inextricable part of its meaning. In the spirit of my claim that the canon of arrangement, re-imagined as a visual practice, can function as a *techné* of imaginative inquiry, the images and interactive movies and demonstrations are paired with textual discussions, but in many cases, I let them stand on their own without textual explanations, leaving it to the reader to determine the significance of the juxtaposition. In addition, although the format is “book-like,” and superficially resembles a conventional print text, the chapters are divided into short sections that resemble (and I hope will be navigated as) the nodes of a hypermediated document; they make their visual and verbal argument through association and accumulation as much as through linear propositional logic. This is consistent with my final claim, that interactive digital media, through a nodal and networked structure in which multiple perspectives and voices circulate, touch, cohere, or disperse, are sites where scholarship can focus on process, rather than product; on inquiry, rather than proof; on the “slow hunch” (Johnson, 2010; see also Ulmer, 1994), rather than the retrospectively reconstructed flash of (always provisional) insight.

Although I could have created a more dynamic, interactive, web-like project in Adobe Flash, I chose to design in Adobe InDesign and publish in Adobe PDF because, at this point in the evolution of interactive digital media, PDF offers the most accessible format for the largest number of readers/viewers to experience the project in the medium for which it was designed.