## The Digital Edition and the Digital Humanities

Amy E. Earhart

## Abstract

The legacy of early digital editions and their related scholarship reveals the textual foundation of digital literary studies, a foundation that emphasized form and materiality, in effect a representational rather than interpretative view of text. Early digital editions were formed out of a "whole text" approach, a cohesive print-to-digital model that features interrelated textual materials, often in print book form, rather than an expansive and fragmented representation of text, as is increasingly the case with data-based practices. This article examines the ways in which the digital edition privileges the structure of the book, which is viewed as a self-contained entity with a naturalized means for displaying knowledge and replicated in most aspects of creating digital editions, from display to data treatment.

 ${f I}$ n the early 1990s, literary editorial scholarship was in upheaval. Conflict within, authorial intent versus the social construction of the text, and without, the devaluation of editorial work by the larger discipline, made the field extremely unstable. While textual studies work was considered a central aspect of literary studies during the early to mid century, by the 1990s high literary criticism had driven textual studies to the borders of the field. Post-structuralists rejected the materiality of the text that those invested in editorial work relished, broadening the concept of text to a definition far more amorphous than that embraced within the textual world. Some, such as Derrida, refused the physical constraints attached to text, arguing for "a 'text' that is henceforth no longer a finished corpus of writing, some content enclosed in a book or its margins, but a differential network, a fabric of traces referring endlessly to something other than itself, to other differential traces" (Derrida 1996, 69). Harold Bloom likewise rejected texts; "there are no texts [. . .] but only interpretations" (TANSELLE 1989, 4). While American textual studies scholars bemoaned

<sup>1.</sup> Judith Kennedy (1995) offers a clear and useful summary of the conflict within textual studies.

their increasing distance from the scholarly mainstream, internal tensions were also emerging between Greg-Bowers textual studies critics, such as G. Thomas Tanselle, and those who championed a reevaluation of the theoretical framework of textual studies, such as Jerome McGann, D. F. McKenzie, and David Greetham. In addition to these challenges, the increasing constraints of scholarly publication began to make editors fear that the future of scholarly editions was bleak. By the mid 1990s the scholarly publishing market was already in decline. Peter Shillingsburg recognized that as the scholarly market contracted, the ability to publish textual editions would likewise diminish:

A scholarly edition is a thick book (five hundred to a thousand pages) printed on acid-free paper guaranteed for 350 years, in sturdy bindings, with a list of ten to twenty editors and advisory editors, published by a reputable academic press and costing a minimum of fifty dollars, but more often over one hundred. It contains a Pure Virgin Text or, unironically, a Fully Restored one. Already a thick tome because of the historical and textual introductions and textual apparatus, scholarly editions frequently exclude explanatory annotations because the space they require would add unduly to the cost (already out of the reach of ordinary mortals and nearly out of reach for the ordinary research library).

(Shillingsburg 1996, 23)

Shillingsburg predicted the decline of the scholarly edition based primarily on economics, which was verified by the 2002 MLA Ad Hoc committee on Scholarly Publishing report.<sup>2</sup> The committee report noted that declining subsidies of university presses and decreasing library acquisition funding has caused a substantial decrease of sales while the numbers of faculty who are required to publish a monograph for tenure and promotion has increased, putting undue pressure on the fragile system. The committee noted that scholarly editions, in particular, were under threat because of cost, time of production and NEH funding cuts (MLA AD Hoc COMMIT-TEE 2002, 176.). It was at this bleak moment that what we now call digital

<sup>2.</sup> The scholarly publishing industry has only become less stable since the 2002 MLA report. Scholarly presses, such as Rice, are closing, and those that remain continue to struggle to find a sustainable economic model. Additionally, library funding continues to contract while more and more universities and colleges demand monographs for tenure and promotion.

editing emerged as a potential solution to the increasing pressures on edition production.

As editors searched for ways to create a better edition and to reinsert editing into the core of literary studies, they began to consider digital technologies as a possible helpmate.<sup>3</sup> Experimental digital editions, including The Electronic Beowulf, The Canterbury Tales Project, and The Piers Plowman, adopted a tool-based technology approach to enact best practices in the new environment and launched digital editing, a focus on what the MLA Committee on Scholarly Editions described as "The scholarly edition's basic task"—"to present a reliable text". (MLA COMMITTEE FOR Scholarly Editing 2012). During this period groundbreaking scholarship was published that defined the direction of digital literary studies in English. From Peter Shillingsburg's early Scholarly Editing in the Computer Age to Jerome McGann's later Radiant Textuality, many textual studies scholars professed their investment in technology and the text. Collections, including The Literary Text in the Digital Age (FINNERAN 1996) and Electronic Textual Editing (Burnard, O'Brien O'Keeffe, Unsworth 2006), helped to define digital humanities with a textual studies slant.

Even the most traditional textual scholars recognized the need to confront the digital, whether to embrace, to alter, or to reject the new technology. Richard Finneran would call the digital a "fundamental paradigm shift" (1996, IX) and David Greetham argued that we "will need the facilities of electronic, reader-driven editions to achieve the flexibility and lack of closure that differance observes" (1993, 17). Still other scholars of English literature, among them the aforementioned Shillingsburg and McGann, developed digital tools and editions, and contended that digital work was central to textual studies. G. Thomas Tanselle recognized that the digital was useful to editorial work, though he posited a far more constrained view of the power of digitization: "Computerization is simply the latest chapter in the long story of facilitating the reproduction and alteration of texts; what remains constant is the inseparability of recorded language from the technology that produced it and makes it accessible" (1995, 288). While these scholars did not agree about how the digital would be used

<sup>3.</sup> In this article I focus on those projects that emerge from the textual studies milieu. I exclude discussion of for-profit digitization projects, such as Chadwyck-Healey's *The English Poetry Full-Text Database*, Gale's *Eighteenth Century Collection Online (ECCO)*, and e-text projects developed out of libraries. Both models have different structures and concerns and it would be most beneficial to address these issues elsewhere.

within textual studies, they all acknowledged that the digital would have an impact on scholarship.

The legacy of early digital editions and archival projects and their related scholarship reveals the textual foundation of digital literary studies, a foundation that emphasized form and materiality. In Scholarly Editing in the Computer Age, Peter Shillingsburg notes that "editing is, above all else, a matter of forms, and that the "forms, the details of presentation, are often thought to be the responsibility of editors" (1986, 18). The patterns and structure to which Shillingsburg points are concepts that have transferred into the digital literary studies and are particularly apparent in the way in which interface represents the physical object. For many early edition projects, the digital interface is the book form, with digital design mimicking the traditional book structure including a table of contents, page display and index. The form, however, was a correlation of materiality, not a means of manipulation. In his foreword to Electronic Textual Editing, Tanselle (2006, 3) accepts that the digital is a useful medium in which to publish the edition, but warns that "when the excitement leads to the idea that the computer alters the ontology of texts and makes possible new kinds of reading and analysis, it has gone too far".4 The binary that Tanselle notes—digital as a tool versus the digital as a means to new forms, ontologies, reading or analysis — is a theme replicated across digital textual scholarship and projects. Or, as Speed Hill has written, "I can live with technological change per se, but I fear the more fundamental shift in the aims and purposes of scholarly editing that threatens the work we invest in preserving the artifacts we cherish. Technological change overvalues the new, the computer-hip, the gee-whiz factor, while devaluing editions that appear in the form and format of the traditional code" (2006, 43). David Gants also sees the digital environment as a way to represent "a welldesigned electronic edition" that "can exploit the flexibility of the digital medium and avoid the need to deform the text; it can shift and adapt to the

<sup>4.</sup> David Greetham lambasted the decision to invite Tanselle to write the introduction for the Electronic Textual Editing volume, wondering: "[a]re the contributors aware that many of their arguments and practices are being undercut by the Forward?" (2007, 133). While there is no doubt that Tanselle spent a good portion of his career attacking the textual editors represented in the book, I would argue that there is much in the formulation of textual studies' methods that is replicated in digital humanities work that matches Tanselle's methodologies. However, it is the experimentation in the field, the work that forms new knowledge, that he rejects. Certain kinds of digital editions that resemble print editions would not be challenged by Tanselle.

needs of the individual user, encouraging us, as Tanselle notes, to become collaborators" (1998, 275). In each of these representations of digital editing the goal remains the same—"to avoid the need to deform the text" (cfr. McGann 1985). Even those who are some of the staunchest supporters of digital innovation recognize that early digital editions did little more than replicate print structures. Peter Robinson, for one, acknowledges the imitative qualities of early textual studies projects: "The first missing aspect is that up to now, almost without exception, no scholarly electronic edition has presented material which could not have been presented in book form, nor indeed presented this material in a manner significantly different from that which could have been managed in print" (2004). It is the digital edition's apparent similarity to print that reassuringly runs through early digital editorial work; the hallmark of the early digital edition is the sense of stability and the reassurance of forms that look like a print text.

And while those forms might remain stable, the digital allows for the creation of better-than-print editions. For example, the Electronic Beowulf project collects dispersed materials to allow scholars to view and manipulate easily otherwise fragile materials. The focus of the edition interface is on the physical format of the primary manuscript source. In truth, the digital Beowulf resembles the book, in the best of the print tradition, that medievalist editors dream of — Beowulf collected and collated in its ancient form, rather than dispersed across multiple libraries and countries. Pages are laid out side by side, and the tools are designed to manipulate the bookbased image, rather than to deconstruct, separate, or treat blocks of text as data sets. Traditionally philological in its approach, Electronic Beowulf includes the images of multiple manuscripts, transcriptions, and other types of support materials, effectively becoming a highly enriched facsimile edition. This method is reinforced by the editor Kevin Kiernan's stated desire "to draw attention back to the manuscript, not to provide definitive solutions to problems that exist in the manuscript [...]. The edition and its glossary also draw attention to their source in the manuscript by providing citations to folios, folio-lines, and verse-lines" ([2008] 2011). Joe Viscomi, one of the editors of the Blake Archive, similarly sees the digital environment as a way to resolve problems found in a traditional print edition. In the case of the Blake Archive this has meant even how to represent details such as the variations in the hand-colored poems. When previously faced with the limitations of print, editors either developed a text only edition, which was inexpensive, or monochromatic reproductions, which left out the details of the original, or published hand-colored collotypes, often prohibitively expensive (Viscomi 2002, 30). The Blake Archive has developed

protocols to replicate the uniqueness of the individual texts in the digital environment, producing a stunning and groundbreaking archive. The end result is an edition that is as close to the printed original(s) as possible. The project was awarded the 2003 MLA Prize for a Distinguished Scholarly Edition, an honor rightly bestowed on the edition for its use of the digital to make an accurate edition. At the same time, the success of the Blake Archive depends in large part on a recognizable association to print form that bridges the gap between printed editions and digital humanities.

While editors have seen the digital as a tool to produce ideally expanded facsimile editions, they have continued, in this period, to bemoan the seemingly unstable environment of the digital. Beyond the problems with the digital per se, where the files seem fragile, upgrades are unsteady and interoperability is unsure, textual studies scholars are hesitant about the way by which the digital leaves the text malleable. It is no surprise that early forms of digital editions were issued in CD forms. Like a book, a CD could be published, distributed, and owned. It could be placed on a shelf, taken down and perused when needed. Digital editions tried to create a representation that was as close to the original as possible, often centering the edition on a high quality image such as is the case with the Blake archive. Peter Shillingsburg notes: "just as a researcher in a library requesting the first edition of a work would reject a transcription of that edition as a basis for research, so a researcher using an electronic edition should also reject a transcript. An image is, after all, as close as one can get, electronically, to the original. The transcript becomes a convenience for searching, while the original (or a good image of it) continues to be used as the real thing" (Shillingsburg 2009). Notice here that Shillingsburg privileges the image over the editorial transcription, rejecting the transcription as not good enough or not authentic enough, in effect using the digital to produce a high-quality facsimile. Projects of the mid- to late 1990s like the Walt Whitman Archive or Rossetti Archive are not imagined as mere facsimiles, but fluid and malleable textual materials, often treated, at the code level, as data sets, a view that clearly made editors like Speed Hill uncomfortable. Hill rejected McGann's digital work which, he says, embraces "a device designed for and dedicated to the de-materialization—for that's what the term 'digitization' really means—of that very same material artifact into a signal stream made up of zillions of offs and ons, wholly dependent on a complex infrastructure over which none of us has any control" (1997, 43). These same fears remain with us today, as reactions to the digital are often critical of any technological treatment of the text that manipulates the form.

The early period of electronic textual studies projects might be characterized as that of the "value added" edition, where textual scholars believed that technology "has a set of qualities that can be used to give the electronic text an added value towards the printed text" (Karlsson and Malm 2004, 2). As long-standing print editorial projects, from the Founding Fathers' documents to Shakespeare, develop digital components, versions, or editions, and as presses in the United States now seem less likely to support large-scale editorial projects, it seems apparent that the future of editing is digital. Early projects along these lines have been so successful that Kenneth Price has maintained that "digital work has achieved primacy only for editions" (2007, 434). But what if we flip Price's statement?: textual studies are central to digital humanities work. Textual studies theories, forms, practices, and methodologies have been and are interwoven into the digital humanities. But what, exactly, does the legacy of textual studies mean to the way in which we understand digital literary studies?

In spite of the importance of digital editorial production, many practitioners of digital humanities lack an understanding of the theories, methodologies, and history of textual studies. Editions are recognized early digital forms, yet issues of production that hinge on methodology in scholarly editing, from TEI to interface design, have been integrated in the field without a clear understanding of their historical context. At the same time, some in the digital humanities community have begun to view digital edition building as technologically unsophisticated, in effect echoing Ian Small's view of editing as "a largely pragmatic, unsophisticated activity" (1999, 43). Amanda Gailey and Andrew Jewell call this technological hipsterism: "This shift in focus from content development to technological innovation, a trend that sometimes seems driven by innovation for innovation's sake, can at its worst seem to posit a 'hipster ethos' for the digital humanities community—that the quality of the work you do is not so important as staying at the edge of innovation, always one step ahead of the unfashionable masses" (2012, 5). We might wonder if digital humanities is potentially in danger of replicating the rejection of edition building years ago at the hands of literary critics? Michael Groden sums up the initial divide: "Literary theorists and critics have tended to see editing and bibliography as activities that are preliminary to criticism and the textual theorists and critics themselves as concerned only with empirical evidence, often with minute details (commas, watermarks)" (1991, 259). We must guard against a similar paradigm within the digital humanities by which editing would be viewed merely as preliminary to the "real work" of interpretative technology in data mining. There is good reason to consider textual studies a central pillar of digital humanities work.

The centrality of textual studies to digital humanities has helped to draw charges of a lack of critical rigor in digital humanities work. Leroy F. Searle has suggested that "[f]or an earlier generation, the vocation of editorial scholarship often seemed a haven (if not the very citadel) of intellectual probity, in which one could practice a science — mild and respectful, if sometimes dull—without being drawn into the relatively unregulated life of literary criticism and theory, where, as I. A. Richards remarked after a lifetime of experience with it, 'an indecent disregard of fact is still current form" (SEARLE 2004, 3). Martha Nell Smith makes a similar argument regarding the conservatism of digital humanities, arguing that the replication of traditional methodologies damages the possibilities contained within the new medium. In "The Human Touch: Software of the Highest Order, Revisiting Editing as Interpretation", Smith (2007) points to the way in which digital humanities has retreated into the modes of analytic, objective approaches as a "safe" alternative to the messy fluidities found in literary studies, noting: "[i]t was as if these matters of objective and hard science provided an oasis for folks who do not want to clutter sharp, disciplined, methodical philosophy with considerations of the gender, race, and class-determined facts of life [. . .]. Humanities computing seemed to offer a space free from all this messiness and a return to objective questions of representation" (2007, 4). The methodological histories of textual studies profoundly inform arguments voiced by Searle and Smith, and would be of great utility to digital humanists.

Perhaps the area of greatest impact of the historical traditions of textual studies is the emphasis on what we might call a whole-text approach in the potential creation of a digital edition that is not deformed, that is a trustworthy text that has been subjected to strict editorial controls. Peter Shillingsburg has very vocally argued for such an approach to digital texts: "Out of many (methodologies), one, but not a singularity of monolithic view—rather a general methodology of relational complexities: that can be the aesthetics of scholarly editing in the twenty-first century if we understand that the emerging oneness does not consist of simplification or elimination of the complexity but instead that it arises from our recognition of the textual condition understood whole" (2006, 23–24). The final outcome is still a centrality of the whole text, not text as discrete parts broken into data chunks as we see, for instance, in approaches whose goal is data mining. As with the interfaces developed during the heyday of digital edition building, a whole-text approach seeks to represent the text without intervention or deformation. As digital humanists experiment with data mining and visualizations, the treatment of the text is less about a representation and more about interpretation created through an algorithmic manipulation of the textual data points. Such an approach is counter to those who championed the digital edition, but there remains no reason why such approaches cannot coexist within the larger digital humanities. One of the dangers of the loss of textual studies traditions is that we have not critically attended to the means by which certain approaches to digitization have brought particularized assumptions into the field (SMALL 1999, 43). TEI's limitations have received a great deal of attention, but the big data approaches are also flawed due to a lack of critical understanding of the processes of production and their methodological reasons in scholarly editing. As I have argued elsewhere, it is difficult to treat texts responsibly as "data" when much of our data set is inaccurate, whether because of faulty editing or because of the lack of digitization of certain types of texts, particularly those by what we might think of as non-canonical authors. The tensions between such approaches threaten to create splits between digital editing and digital humanities reminiscent of the textual studies wars of the second half of the twentieth century.

Instead of envisioning scholarly textual editing as separate from interpretative approaches such as data mining, it might be useful to adapt the concept of the interface, which—as we recall—is in the primary paradigm of computer science a program that controls the display and allows the user to interact with the system. The majority of scholarly editorial work has focused on the interface as a display and interaction mechanism, as a single representation of the theoretical conception of editorial production. But what if we were, instead, to utilize the notion interface as constructed by chemistry, creating a surface that forms a common boundary between two different phases? If we understand "interface" in this manner, then we might accept that the boundary necessitates multiple phases or approaches working in contact with each other, and that at those points of contact there is more interaction and interpretative flexibility. In this model, the interface allows seemingly contradictory items to coexist and work with one another. Data sets and editions can coexist, but only if those from digital and textual editors can find bridges to those approaching digital humanities from other traditions and with other goals.

Texas A&M University

## **Works Cited**

- BURNARD, Lou, Katherine O'BRIEN O'KEEFFE, and John Unsworth, eds. 2006. Electronic Textual Editing. New York: Modern Language Association of America.
- DERRIDA, Jacques. 1996. Archive Fever: A Freudian Impression. Chicago: University of Chicago Press.
- Ezell, Margaret J. M. 2010. "Editing Early Modern Women's Manuscripts: Theory, Electronic Editions, and the Accidental Copy-Text". Literature Compass 7.2: 102–9.
- FINNERAN, Richard J., ed. 1996. The Literary Text in the Digital Age. Ann Arbor: University of Michigan Press.
- Gailey, Amanda, and Andrew Jewell. 2012. "Editors' Introduction to the First Issue of Scholarly Editing: The Annual of the Association for Documentary Editing". Scholarly Editing 33: 1–7.
- Gants, David. 1998. "The CUP Ben Jonson: Ruminations of the Electronic Edition". Ben Jonson Journal 5: 271–81.
- GREETHAM, D[avid] C. 1993. "Editorial and Critical Theory: From Modernism to Postmodernism". Palimpset: Editorial Theory in the Humanities, edited by George Bornstein and Ralph G. Williams, 9–28. Ann Arbor: University of Michigan Press.
- 2007. Review of Burnard, O'Brien O'Keeffe, and Unsworth 2006. Textual Cultures 2.2: 133–36.
- Groden, Michael. 1991. "Contemporary Textual and Literary Theory". Representing Modernist Texts: Editing as Interpretation, edited by George Bornstein, 259–86. Ann Arbor: University of Michigan Press.
- HILL, W. Speed. 1997. "Editorial Theory and Literary Criticism: Lamb and Wolf?" Review 19: 37-61.
- 2006. "From 'an age of editing' to a 'paradigm shift': An Editorial Retrospect". Text 16: 33-47.
- Karlsson, Lina, and Linda Malm. 2004. "Revolution or Remediation?: A Study of Electronic Scholarly Editions on the Web". HumanIT 7.1: 1–46.
- KENNEDY, Judith. 1995. "'A Terrible Beauty is Born': Textual Scholarship in the 1990s". Victorian Literature and Culture 21: 379-88.
- KIERNAN, Kevin. [2008] 2011. Electronic Beowulf. http://ebeowulf.uky.edu/ [editor's note: Only the most current edition, Electronic Beowulf 3.0 (2011), is referenced.]
- McGann, Jerome J. 1985. "The Monks and the Giants: Textual and Bibliographical Studies and the Interpretation of Literary Works". Textual Criticism and Literary Interpretation, edited by Jerome J. McGann, 180–99. Chicago: University of Chicago Press.
- MLA AD HOC COMMITTEE ON THE FUTURE OF SCHOLARLY PUBLISHING. 2002. "The Future of Scholarly Publishing". Profession, 172–86. New York: Modern Language Association.
- MLA COMMITTEE FOR SCHOLARLY EDITING. 2012. Guidelines for Editors of Scholarly Editions. http://www.mla.org/cse\_guidelines.

- Price, Kenneth M. 2007. "Electronic Scholarly Editions". A Companion to Digital Literary Studies, edited by Ray Siemens and Susan Schreibman, 435-50. Malden, Oxford: Blackwell.
- ROBINSON, Peter. 2004. "Where We Are with Electronic Scholarly Editions, and Where We Want to Be". http://computerphilologie.uni-muenchen.de/jg03/robinson .html.
- SEARLE, Leroy R. 2004. "Emerging Questions: Text and Theory in Contemporary Criticism". In Voice, Text, Hypertext: Emerging Practices in Textual Studies, edited by Raimonda Modiano, Leroy F. Searle, and Peter Shillingsburg, 3–21. Seattle: University of Washington Press.
- Shillingsburg, Peter L. 2006. From Gutenberg to Google: Electronic Representations of Literary Texts. Cambridge: Cambridge University Press.
- —. 2009. "How Literary Works Exist: Convenient Scholarly Editions". DHQ: Digital Humanities Quarterly 3.3: n. pag.
- —. 1996. "Principles for Electronic Archives, Scholarly Editions, and Tutorials". In Finneran 1996, 23–35.
- -. 1986. Scholarly Editing in the Computer Age: Theory and Practice Athens and London: University of Georgia Press.
- SMALL, Ian. 1999. "Identifying Text and Postmodernist Editorial Projects". The Yearbook of English Studies 29: 43-56.
- SMITH, Martha Nell. 2007. "The Human Touch: Software of the Highest Order: Revisiting Editing as Interpretation". *Textual Cultures* 2.1: 1–15.
- TANSELLE, G. Thomas. 1989. "Textual Criticism and Deconstruction". Studies in Bibliography 43: 1–33.
- —. 1995. "Print History and Other History". Studies in Bibliography 48: 268–89.
- —. 2006. "TEI: Foreword". In Burnard, O'Brien O'Keeffe, Unsworth 2006, 1–6.
- VISCOMI, Joseph. 2002. "Digital Facsimiles: Reading the William Blake Archive". Computers and the Humanities 36: 27–48.
- WILSON, Edmund. 1973. "The Fruits of MLA". The Devils and Canon Barham: Ten Essays on Poets, Novelists and Monsters, 154–202. New York: Farrar, Straus and Giroux.