FOR MORE THAN TEN YEARS, computer technology has played a central role in my teaching and research. When I chose to pursue a PhD in English rather than attend law school (as everyone in my family of attorneys was expected to do), I did not think about computers much at all, although I was somewhat fascinated with my friends who were talking about punch cards and carrying stacks of them around in their knapsacks (it was the mid-1970s). And to this day my dissertation director jokes about my 1985 thesis as “the last typed dissertation in America.”

Background and context
When I was tenured in 1992, computers sat on both desks in my home occupied by two academics, and on many desks in the English department where I still reside, but we all used them as glorified typewriters. By then, I had learned the great convenience of electronic copy and paste and was very impressed with myself for being able to use macros in my word processing program. More and more elaborate and sophisticated word processing was the best, I assumed, that a computer would do for a literary scholar.

Then, in fall 1992, the letter came, via fax machine. The missive was from someone whose work and name I knew (and often cited) but whom I had never met. One of the most admired intellects working in Romantic literature and editorial theory, Jerome McGann wrote perspicaciously about my first book and concluded by insisting that my interest in study of her manuscripts would surely be well served by my producing a “hypermedia archive” of Emily Dickinson’s writings. Hypermedia archive? I had only a vague inkling of what that might in fact be.

Shortly, I will return to recounting what happened in the wake of that suggestion regarding an electronic production of Emily Dickinson’s writings and what possibilities are enabled by digital scholarly productions. But first let me make clear that I am writing wearing two hats—both that of coordinator and general editor of the Dickinson Electronic Archives and that of a professor of English who is also the director of the Maryland Institute for Technology in the Humanities (MITH) at the University of Maryland. In the course of this critical storytelling, I will review the new methods and philosophies of editing that shape the work of the Dickinson project and invite critical recommendations for and participation in formulating protocols and guidelines for scholarly editing and...
Susan Dickinson, manuscript of "I'm waiting but she comes not back," reproduced by permission of the Houghton Library, Harvard University.
knowledge production. The analyses rendered by these observations extend to many areas of scholarship and teaching beyond textual editing. Thus non-literary fields of study might also benefit from the alterations—in presumptions, practices, and relationships between teacher-student and expert-novice—that new technologies have wrought upon praxes of scholarly editing.

As one of its major objectives, Rowing in Eden: Rereading Emily Dickinson, my first book, recasts two of the oldest questions posed about the well-known nineteenth-century American poet: Why didn’t she publish more poems while she was alive? And who was her most important contemporary audience? Seeking an answer to the first question, I started asking why Dickinson was so emphatic about her careful use of the terms “publish” and “print.” Without thinking twice about it, we use the term “publish” to refer to the kind of distribution that the article you are reading enjoys. In the early twenty-first century, this article is distributed in bound form, in a journal known as Liberal Education, parts of which are also published online, apparently un- or at least lesser-bound. But according to her written record, Emily Dickinson probably would not have called this article “published,” but would have used the term “printed.” When she worries that the prominent editor with whom she corresponded, abolitionist and women’s suffrage advocate Thomas W. Higginson, may have seen one of the ten poems she saw printed in periodicals during her lifetime, she anxiously writes, “I had told you I did not publish.”

Dickinson distributed nearly half of her poems in letters written to others, and many of her letters have been lost. Thus it is reasonable to conclude that she distributed far more than half of her poems in her letters. Continuing to analyze with this set of facts, I decided that my dissertation would test the hypothesis that Emily Dickinson did in fact publish hundreds and hundreds of her poems: she “published” by circulating her poems in manuscript via the letter. At first I thought that all I needed to do was examine the scholarly edition of her letters and see which poems had been included, in which missives, and to which correspondent. But that second question of mine—to whom did she send the most poems and letters?—quickly led me beyond the print editions of her writing produced by Harvard University Press to her manuscripts. How? The meticulous scholarly transcriptions of letters and some poems indicated that some writings to and about her sister-in-law, Susan Dickinson, the individual to whom Emily Dickinson sent the most poems, letters, and letter-poems, had been mutilated: seven lines erased; half of a page cut out. To try to determine what was behind the erasures, what provoked someone to cut away some of her words, I stepped into the Special Collections at Amherst College and Harvard that hold those nineteenth-century manuscripts, a move which led to this twenty-first century world of digital production and knowledge exchange.

That first book of mine is in large part about what critical difference it makes to read Dickinson’s writings in manuscript rather than in print translation. And the famous scholar who wrote to insist that I needed to produce a “hypermedia archive” of Dickinson’s manuscripts made a persuasive case: in a book, my readers could only see what I was arguing about Dickinson’s manuscript production by examining the handful of halftone reproductions a writer is allowed to produce in a book of literary criticism. But in an electronic archive featuring images as well as texts, all of Dickinson’s manuscripts could be reproduced so that readers could test my hypotheses much more fully. So in 1994, I applied for and received a Networked Associate Fellowship to develop the Dickinson Electronic Archives (www.emilydickinson.org) at the Institute for Advanced Technology in the Humanities (IATH) at the University of Virginia. My work using electronic media to produce scholarly and pedagogical resources over the past decade has persuaded me that while...
not magical, advanced applications of technology and new media can open our research and teaching worlds up to possibilities that profoundly enhance knowledge production.2

Applying technology
Digital editions of texts, through computer encoding as well as the full display of primary documents, enable new levels of self-consciousness about the constructed nature of truth, scholarship, fact. In unprecedented ways, these born-digital texts can help researchers and students alike avoid what Bruno Latour and Steve Woolgar (1986) and others describe as “black-boxing”—the scientific/cultural/cognitive process by which critical opinion becomes fact, and fact, in turn, becomes “truth.” Instead of making only the final product available for critical inquiry, digital editions encourage methodologies that open the processes of knowledge production to evaluation and that rely on many people to observe, record, and analyze data to come to consensus or informed disensus about what has been observed.

In many fields, scholars have been pressed toward greater self-reflexiveness about the process of constructing knowledge, and scholars have long aspired to open their work to critical scrutiny. New media allow faculty not only to further this self-reflexiveness in their research but also to share this process of meaning-making with students in the classroom. Digital editions can thus create the potential to include students in rich conversations about the process by which we arrive at “truth” and how we establish “fact,” and thereby enhance their critical thinking and engagement with texts, with the making of disciplines, and with bodies of knowledge.

Scholarly editions used to be produced by the “wizard behind the curtain,” as it were. The work, the decisions, the judgments made to establish critical fact and to produce authentic, authoritative, and reliable texts that could all be agreed upon were not at all transparent to readers/users of those editions. However, that need no longer be the case, and that is indeed a very good thing. Articulating the policies and principles of the Dickinson Electronic Archives (www.emilydickinson.org/about_the_site.html) and Emily Dickinson’s Correspondences (www.emilydickinson.org/nosearch/edc/edc_edit.html), we have tried to make clear the critical process, its opportunities and shortcomings. By reviewing those statements you will see that our rules are dynamic, not static. For centuries, certain truisms that prevailed conventions of editing held the following, which are no longer necessary nor fruitful for knowledge building. Those truisms are
• that an author’s work is best circulated when normalized through a single, “most authoritative” scholarly edition;
• that scholarly editions subsequent to such an edition are “corrections” and supplant what has come before;
• that editors working on a single edition must agree with one another;
• that in any disagreement one party is right and all others are wrong, or at least one party is “better than” all others;
• that readers/users of such editions need not be bothered with the details of judgment that went into determining genre, worthy information (what to include, exclude, and in what order), and other editorial decisions setting priorities and agendas.

As far as editorial work goes, such assumptions lead to critical games of “gotcha” among editors and critics and suppress versioning (which may allow that both and neither and either might all be true). Neither faultfinding as an end in itself nor suppression is healthy for knowledge production and critical understanding.

Editing matters
One need not have seen Seabiscuit to know that poetry matters, or to know that since the early 1990s legislators have been trying to police which art, including the literary, warrants federal funding without taking into any account excellence of practice. In spite of studies such as the National Endowment for the Arts’ “Reading at Risk” (www.nea.gov/pub/ReadingAtRisk.pdf),
one can be sure that poetry can be a powerful force in the world. Thus it is no surprise that its representations easily become contested. Traditionally held up as the “highest” literary form, poetry is usually regarded as mattering more than epistolary writing. That she was such an astounding poet is why we still know Emily Dickinson today. Indeed, though time and again scholars remark how absolutely wonderful they are, many have treated Dickinson’s letters as if they are of a lower order, ancillary to her major writing project. Low, high, artistically superior or inferior—none of that sort of valuation interests me.

What does interest me (and has for the past couple of decades) is that Dickinson’s letter writing was central to her artistic production, that such artistic/poetic/epistolary production was very, oh, some have called it messy (I argue that a more apt term is fluid), and that for more than 100 years editors have presumed such messiness must be ordered, cleaned, and conventionalized in order to be intelligible for readers. Dickinson transports or lets flow a phrase, a line, a stanza, a paragraph-like unit from poem to letter-poem to letter and back again, demanding, as she herself would say, to be read “backwards, lest the plunge from the front overturn us.” Indeed, one is engulfed and must swim to appreciate that often very queer, editorially unwieldy writing. Besides being interested in Dickinson’s own practices, I am keenly interested in the processes of knowledge building that surround the making of such intellectual edifices as the “authorized text.” New media afford the means by which those processes, usually hidden away in the editor’s study and the copyeditor’s desk, can be laid bare.

My comments in this essay are as an editor, a swimmer, of that writing, an editor who has reproduced Dickinson’s inscriptions for the page as well as for the screen. At the outset I wish to re-declare that it is absolutely magnificent that an editor can never fully represent Dickinson’s writings, and I want to re-declare that all of the Dickinson editions produced have added value to our collective knowledge of her poetry. Each production of Dickinson’s writings differently witnesses the philosophical tensions in language in which fluidities inhere, even as they witness that “writing is fundamentally an arbitrary hence unstable hence variable approximation of thought” (Bryant 2002, 1). In the contexts of these witnesses or recognitions (these different and often contradictory instantiations of Dickinson’s texts), all of the following values, all of which inform knowledge production, are profoundly affected: authority, literariness, authenticity, sociology, access, reproductivity, original/original texts/moments, editorial responsibilities, authorship, intention.

Artist/philosopher Johanna Drucker’s observations (1998, 3) about the nature of writing as she reflects upon the word itself are more than apt to reflect upon Dickinson’s writing, her own and others’ editing of that writing, the building of knowledge through transmission of the written, and all of these activities’ natures and characters. Writing (or editing, which literary writing always is) is “a noun as well as a verb, an act and a product, a visual and verbal form, the composition of a text and trace of the hand”; “letters, words, and pictorial elements all participate in producing a work with complex textual value. At its most fundamental writing is inscription, a physical act which is the foundation of literary and symbolic activity.”

Editing is likewise a physical as well as a philosophical act, and the medium in which an edition is produced (or an edition’s place in the material world) is both part of and contains the message of the editorial philosophies at work. When I wrote my first book, Rowing in Eden, I was not aware of any container other than the book that could begin to put my editorial philosophy to work (the core tenets of which have not changed since the mid-1980s, though they have been substantially amplified since then and, I trust, will continue to be). The book object, which was the only medium I imagined for an edition of Dickinson’s writings in the early 1990s, and which I still regard as a most wonderful machine, has been simultaneously invaluable in its possibilities and exasperating in its constrictions for conveying her literary art. Making Open Me Carefully, Dickinson seemed always in the margins crooning Cole Porter’s “Don’t Fence Me In.”

Time and again, Dickinson’s editors, including...
yours truly, have—in ways that Gwendolyn Brooks would call “self-honeying and self-crowned”—acted as if we are liberators, tearing the fences down that previous editors erected, repairing the damage done by those who came before us. This is, including my own participation in such supposedly valiant, knight-in-shining-armor rescues, all unnecessarily limiting and belies not simply a weakness for self-congratulation but a desire for an authoritarian (rather than an authoritative) text. Desire for the authoritarian is revealed in scolding critical word choice that proclaims “right,” “wrong,” “better than,” and so forth (and these word choices permeate some of the articles that have recently been published in Dickinson studies). Desire for the authoritarian is also revealed by a willingness not to share data with the common reader about what goes into making an edition.

New tools for editing

Happily, however, editing, as Adrienne Rich remarked about poetry (in “North American Time”), has “never stood a chance of standing outside history.” Fortunately, editors need not stay mired in critical food fights over the meanings of physical line breaks, capital letters, angled punctuation marks, and so forth. We have at our disposal new tools that can usher us into a different editorial time, one that demands the conscious cultivation of and by many hands, eyes, ears, and voices. While print editions are containers for static objects, artifacts that are by definition unchangeable once produced and thus that invite the critical stance of “right,” “wrong,” “better than” and so forth, the world of digital surrogates practically demands new models for editorial praxes in which editors and readers work together.

Such models are encouraged by the fact that in a world with access to photographic copies of texts and images, no one has to bear the burden of forging the perfect linguistic description of the artifact, and by the fact that digital artifacts are by definition alterable once produced. After all, digital surrogates featuring high-quality full-color images of a writer’s manuscripts render a more ample sense of their textual conditions, including the conditions for the writing scene in which they were produced. Informed more fully about textual conditions, readers can collaborate with the postulating editor in making the editorial artifacts for electronic media in ways not possible when decisions have already been made to exclude or include data and seal the resulting artifact into a printed state.

Electronic editions do not have clear end points, the boundaries that variorums and reading editions (such as the printed volume of Emily Dickinson’s writings on which I collaborated) do. In digital humanities the changes evident in how we work in, as, with, and for groups constitute a profound shift in humanities knowledge production. The new editorial praxes made possible, indeed demanded, by critical environments created by new media are central to that shift. Those editorial praxes are not only made visible, but are constituted by some of the new technologies in digital humanities, technologies that have gone under-remarked, even by geeky specialists such as yours truly. The technologies I have in mind are not the screen from which I am reading but are the ones I talked about in a recent article in American Literature and in a chapter on the work of editors in the digital sphere for Blackwell’s Companion to Digital Humanities—access, multimedia study objects, collaboration, self-consciousness, and audience.

Just as any editor has to take into account authorial intentions, and any reader is wise to consider both the writer’s and subsequent editors’ authorial intentions, multiple editors all working on parts of the same textual body must take into account the intentions of their coeditors and collaborators, those readers willing to commit time and energy and to abide by the principles established for scholarly textual production. Such forced engagements with the sociologies of intention that frame and inhere in any and all textual productions are immensely valuable for creating
editorial environments that are not only more trustworthy but also are bound to advance critical understandings, teaching scholars to ask questions heretofore unimagined.

Feminist sociologist Lucy Suchman (2000) makes insightful observations about the conditions necessary for optimizing knowledge production. Instead of viewing the “objective knowledge” proferred by a critical edition “as a single, asituated, master perspective that bases its claims to objectivity in the closure of controversy,” “objective knowledge” in the production of a dynamic critical edition online can more easily be seen as “multiple, located, partial perspectives that find their objective character through ongoing processes of debate.” Since critical vision is parallactic rather than unidimensional, the processes of comparing and evaluating those different angles of seeing as one compares and evaluates different images or different perspectives of the same images is essential in order see more clearly and accurately. The locus of objectivity is not “an established body of knowledge…produced or owned by anyone,” but “knowledges in dynamic production, reproduction and transformation, for which we are all responsible.”

By contrast, the hieratic models of the master editorial perspective do not acknowledge how “layered and intertwined” are the “relations of human practice and technical artifact” and how such individually driven productions can tend to obstruct rather than facilitate intellectual connections, treating editorial and critical works as “finished…achievements” rather than as ongoing research activities and part of a “process of accretion” of editorial technique and knowledge, part of midrash, as it were.

Moving from editor (author surrogate) and author to reader (including editor and author), from enacting definitude (editing for the static printed page) to enacting fluidity (the dynamic screen), is enabling profound innovations in editorial praxes, changes demonstrating how vital are “recent moves to reframe objectivity from the epistemic stance necessary to achieve a definitive body of knowledge, to a contingent accomplishment of dynamic processes of knowing and acting” for enriching our intellectual commons (Suchman 2000). Acknowledging the fluidity of texts instead of insisting upon single-minded, singularly-oriented texts, “learning the meaning of the revision of texts,” as well as the revision of our editorial practices, creates an environment in which a “new kind of critical thinking based on difference, variation, approximation, intention, power, and change” can flourish and work for the common good.

If we are to shed the inertia bequeathed from the bibliographic world (and I would say unnecessary for that world of books and printed letters), editorial integrity and fidelity created within and upon the “shifting sands of democratic life” demand a “new cosmopolitanism” in scholarly editing (Bryant 2002, 177), adopting the “lesbian rule” of principled accommodation for not only digital humanities but also for all knowledge production (a seventeenth-century architectural term—a mason’s rule of lead, which bends to fit the curves of a molding; hence, figuratively, lesbian rules are pliant and accommodating principles for judgment). If we do this, we will necessarily abandon the “folk theory of categorization itself” that presently prevails in scholarship in general. That folk theory “says that things come in well-defined kinds, that the kinds are characterized by shared properties, and that there is one right taxonomy of the kinds.” That is a nineteenth-century priestly way of thinking, a desire to instantiate the authoritarian, to which we need not stay bound. The more pairs of critical eyes we can turn on the primary evidence (in the case of my work, on Dickinson’s writings in their manuscripts and in their various print iterations), the broader, deeper, and richer our discussions and our understandings will become.

**Concluding reflections**

To conclude and make my abstract meanings more concrete, a brief example from the editorial practices of the *Dickinson Electronic Archives* shows the importance of forging intellectual connections and of having as many pairs of eyes as possible looking at primary evidence. Besides editing writings by Emily Dickinson, we are producing online editions of writings by the Dickinson family in order to make data heretofore inaccessible public so that interested readers can build their knowledge about the contexts in and from which the famous poet was writing. My example is drawn from my work with graduate students and is one I used in an essay I wrote for literary specialists (2002).
Editing Writings by Susan Dickinson began in the most conventional way, with a solitary editor (me) transcribing documents in the Houghton Library at Harvard University and the John Hay Library at Brown University. Susan Dickinson’s handwriting is even more difficult to read than Emily Dickinson’s, and no one had transcribed her corpus before, so I began developing a key to her alphabet, recording how various letters were shaped during different times of her life and noting variances between her private draft hand and her performance script for other readers. I transcribed a series of her poems housed at the Houghton and was very excited after determining that one began, “I’m waiting but the cow’s not back.” That might seem an odd first line for a poem, but I knew that one of Susan Dickinson’s most beloved original art works was John F. Kensett’s Sunset with Cows (1856). In a short biography for An Emily Dickinson Encyclopedia, I interpreted Susan’s draft lyric as a poetic response to that painting.4 Reviews of that short biography especially praised me for making the connection and remarking such an important textual “fact.” Had editing of Writings by Susan Dickinson remained a conventional enterprise, the error of what I had deemed and what others had received as fact might have remained inscribed in literary history for years. However, in 1999 Lara Vetter, Laura Lauth, and I began to work on an online critical edition of Writings by Susan Dickinson, and that made all the difference.

As coeditors working within conventional frameworks, Vetter and Lauth might have relied on my multiply checked transcriptions and photocopies of the originals and worked to coauthor critical notes from analytical description and lower-grade facsimile reproduction. Perhaps we would have found the money for one of them to travel to the Houghton to check my transcriptions yet again, but that trip most likely would have not taken place. Many assistants on “definitive” editions never see the primary sources that the head editor sees, especially if they are graduate students working with a faculty advisor. Concomitantly, many head editors view a primary document once or a very few times and then rely on their notes and perhaps photocopies. Yet to produce an online edition, we digitized high-quality color slides taken of the originals so that we could render surrogate images of Susan Dickinson’s papers as part of the production. In doing so, we realized that our fact-checking would supersede even the most punctilious fact-checking used for print transcriptions. Working in concert with one another, we began to improve our respective keys to Susan Dickinson’s alphabet, and Vetter and Lauth fastidiously began to check my transcriptions by repeatedly viewing the high-quality, luminous images of the originals. In February 2000, a little over a year into the process, I received an e-mail from Vetter, the subject line of which was “Houston, we have a problem.”

The “problem” was that Vetter and Lauth had identified an error in my work. Vetter’s e-mail read:

MN, you’re not going to believe this…but…It’s not “I’m waiting but the cows not back” but rather “I’m waiting but she comes not back.” Laura and I have been working on the dawn and cow poems all afternoon, and we’re sure about this. Laura pointed out that it is on the verso of part of SD’s notes for a volume of ED, so we might read it now as an homage to Emily. I always wondered how a cow could have outstretched hands :) .5 (See figure at left)

Had we not been working in concert with one another, and had we not had the high-quality reproductions of Susan Dickinson’s manuscripts to revisit and thereby perpetually reevaluate our keys to her alphabet, my misreading might...
have been congealed in the technology of a critical print translation and what is very probably a poetic homage to Emily Dickinson would have lain lost in the annals of literary history.

In other words, had we not been producing this edition in multimedia that enables access to primary evidence for the many rather than the few, had we not be collaborating with one another, and had those technologies not in turn created a climate making us much more highly self-conscious about the new materialities of editing in which we were engaged, a solitary authoritative view, however erroneous, would likely have prevailed in this little corner of literary history. Central to the formulations and speculations of this essay is evaluating the effects of a technology implicitly invoked by all four that I have mentioned so far, that of audience.

If one considers a sense of audience a technology (with explanation and performance as kinds of knowledge application), then the technology of audience provides analytical perspectives that would not have been obtained had I been writing this essay with only literary or digital humanities audiences in mind. New media, and the new critical technologies they enable, make possible a transparency about our knowledge-producing processes that the book, the machine by which we previously transmitted knowledge, cannot. A product, the book covers its own processes. The advantage of transparency proffered by new media and by the technologies I have discussed here is one we should relentlessly pursue. Both in our new media scholarly publications and our pedagogical applications, we can expand our objects of study, our lines of critical inquiry, and scrutinize anew how our items of knowledge come into being, who makes them, and for what purposes. The new technologies can enable much more responsible practices in both research and teaching. All the user need do is seize and commit to the opportunity.

To respond to this article, e-mail liberaled@aacu.org, with the author’s name on the subject line.

NOTES
1. From an early 1866 letter from Emily Dickinson to Thomas Wentworth Higginson, editor and writer for the Atlantic Monthly. For a more detailed account, see Rowing in Eden: Rereading Emily Dickinson (Smith 1992, 11-12).

2. For example, working over a period of four years with the editors of the Walt Whitman Archive (www.whitmanarchive.org) and faculty from a range of postsecondary institutions (small liberal arts colleges to mid- and large-size comprehensive universities), I coproduced The Classroom Electric (http://classroomelectric.org), which seeks to integrate the major research archives exploring the works of Whitman and Dickinson into the undergraduate classroom.

3. Here I refer to my editorial work in print (Hart and Smith 1998), a profoundly telling contrast to that using electronic media.

4. Barton St. Armand (1984, 251, 260, 282) discusses Austin Dickinson’s art collection and mentions the works purchased or specially prized by Susan. Her name is penciled on the back of Sunset with Cows. Also see my biographical sketch in An Emily Dickinson Encyclopedia (1998).

5. Quoted from Lara Vetter, general editor of Dickinson Electronic Archives, in an e-mail to the author, February 23, 2000. I should also point out here that one problem was my knowing too much, that is, my awareness of Susan Dickinson’s especial affinity for the painting made me unable to read the words I had painstakingly transcribed differently once I interpreted the poem as an artistic response to work in another medium.

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