Whose Stories? Whose Realities? The Materiality of Narratives in the Electronic Writing Classroom¹

Patricia Webb Peterson

But if the medium does help to shape the form, what will the new messages be? We can see how print gave rise to the novel, but what sort of art and literary forms will emerge from the computer and interactive multimedia? What will 'stories' be in the future?

-Dale Spender

We exist in a sea of powerful stories: They are the condition of finite rationality and personal and collective life histories. There is no way out of stories; but no matter what the One-Eyed Father says, there are many possible structures, not to mention contents, of narration. Changing the stories, in both material and semiotic senses, is a modest intervention worth making.

-Donna Haraway

What kind of stories will be told in the virtual age² of the writing classroom? Personal narratives have been given a dominant place in much rhetoric and composition literature³, and while some still see narratives as tools to expose the truth of the self, others have argued that all narratives are specific, negotiated ways of understanding ourselves⁴. The former view, an expressivist one, offers several limiting notions of writer and writing while the poststructuralist view offered by the latter suggests that narratives can be a space for ideological critique. Instead of throwing out narratives completely because of the expressivist limitations, I contend that we need to rethink what counts as narratives in our writing classes. Online technologies can help us to illustrate the social situatedness of narratives more effectively, perhaps, than traditional

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approaches to narrative writing. Instead of seeing narratives as revealing a stable, coherent self, we can use technologies to teach students to learn that their narratives are constructed through ideological frames which shape their ways of seeing themselves and their relations to others. Online technologies are supposed to help us achieve these goals because they emphasize the collaborative nature of writing. While I certainly support these goals, I caution us, especially as we enter into the virtual age which is full of promise and danger, to carefully think about what kinds of narratives we are calling for and how we encourage our students to use technologies to explore alternatives to expressivist narratives.

What follows then is a pedagogical and philosophical argument: I argue that we need to change not only our thinking about narratives, but also how we teach narratives in the writing classroom. I examine the effects that traditional narratives of self have on writers, argue for poststructuralist uses of narratives, and then offer two writing assignments that help to challenge and re-vision our usages of narratives in the writing classroom. The changes we need to make, I contend, are both in our ways of thinking and talking about narratives and the actual production of narratives. The assignments I outline undertake both of those tasks. My aim is for us to use the electronic writing classroom as a space for political change.

Material Effects of Narratives of the Individual

Rather than furthering the goals of critical analysis of subjectivity, our usage of narratives in the field of composition has been driven by an expressivist paradigm. In this paradigm, the writing of the narrative is an act of telling the story of a stable, coherent self, a self that is made visible by the writing but is not constructed through the writing. Narratives, then, express a Truth about the universality of human experience and show how the author fits into that larger universal. The theoretical backing for this approach to narratives is a belief in the liberal humanist individual who is free to walk between and through structures of power by making active choices. James Berlin argues that in expressivism, metaphors are a way of coming to know truth and that metaphors are supposedly seen as an accurate way to get at this truth. In this framework:

The writing teacher must therefore encourage the student to call on metaphor, to seek in sensory experience materials that can be used in suggesting the truths of the unconscious—the private, the personal, visionary world

of ultimate truth. Through writing, the student is thus getting in touch with the source of all human experience and shaping a new and better self. (Berlin 75)

Writing then is not about understanding the social constructedness of self, but is a way to understand the essential core of the individual and to reveal that in writing. This view suggests that writing cannot be taught, it is something that one knows or doesn't, and it is a practice one can learn by reading great authors (Berlin 74). Writing is seen as an act of originary-genius, a divinely or naturally inspired process of telling truth rather than as a way of negotiating and constructing meanings that change and blur in various contexts.

Berlin's critique of expressivism seems correct, but his suggestion that it no longer holds sway in the same way it once did is optimistic at best and short sighted at the worst. Expressivism is still firmly in place in writing programs across the country, supported by textbooks that mandate the first essay of the required writing course be a personal narrative essay because students know themselves and should be able to successfully complete that essay. After this first essay, the textbooks move to "harder" work such as research papers and analyses.⁵ This structure suggests that narratives 'just are' and that students will know what a narrative is and will be able to produce one. It does not acknowledge that as with any essay, the personal essay is a highly scripted form of writing that students must learn to write just as much as they must learn how to write a research paper. There is, therefore, nothing 'truer' about narratives, as the textbooks suggest. The form of narrative embraced in many textbooks and in many first year writing courses embodies a liberal humanist individual.

Rather than being an empowering thing, the concept of the individual in these texts highlights that instead of being free from the influences of power, the individual is constructed through power relations beyond the individual's control. As Michel Foucault points out, the production of individuality is consequently made invisible and appears as natural, a given. Thus, ad campaigns such as "Reeboks Let UBU" can have such a powerful influence on our thinking that we are unaware of the complex hierarchy that produced the concept of individuality in the first place. I am not suggesting, however, that those who believe in the individual are 'duped' into some false consciousness; what I am saying is the power relations that have produced the individual are so carefully hidden and reinforced that the individual appears to be a free-will choice, not an assigned status.

The individual, then, is not a free-willed category that allows us to do what we want when we want to; instead, it is a category produced "as effect and object of power, as effect and object of knowledge" (Foucault 192). As such, seeing it as a natural category or as a solution to the problems we now face (as many of my students do) is dangerous business. To argue for the valuing of the individual is to advocate the invisibility of the individual's history and its careful production in our culture. As Foucault argues, "it is not that the beautiful totality of the individual is amputated, repressed, altered by our social order; it is rather that the individual is carefully fabricated in it, according to a whole technique of forces and bodies" (217). Writing plays a part in this production of the individual and the consequent concealment of that production. In terms of the school exam, writing makes it possible to render the individual visible in panoptic terms and to then create a system that is used to judge, quantify, and categorize those individuals (Foucault 190). In this way, writing is the making visible of the self so as to regulate what is revealed. Studying writing, then, can help us to demystify this process and to bring to light the power structures inherent in school writing.

Studying writing is an important intervention to make because it can, hopefully, lead us to different ways of using and viewing writing—ways that allow for the multiplicity of subjects and for a difference that is not quantified, measured, and judged. For example, writing could be one way of encouraging the plural culture that Michel de Certeau argues for. In *Culture in the Plural*, de Certeau argues that universities (and other schooling institutions) have attempted to homogenize the learning that occurs there so that what is produced in writing is the status quo. With the introduction of many different kinds of students in the university, homogenization is detrimental in that it privileges one view of the world over all others. Because they are not hailed by traditional perceptions about learning, students may resist those imposed, overly singular categories. This resistance, de Certeau claims, is productive, inventive and necessary, not destructive. De Certeau writes:

with his or her cultural baggage, a student moves ahead in the style of collages that are made elsewhere as an individual "bricolage" or handiwork of several sound recordings or a combination of "noble" paintings with images taken from advertising. Creativity is the act of reusing and recombining heterogeneous materials. Meaning is tied to the significance that comes from this new use. (49)

Thus, the power to change traditional narratives lies in the ability to rearticulate the meanings associated with traditional cultural icons. Creativity is based upon an irreverent mixing of high and low culture—a mixing that challenges our usual assumptions. Unfortunately, many of our teaching practices and our students' assumptions about what they will or should learn in the classroom limit the cultural creativity that de Certeau highlights. An obsession with (and a continued defense of) the individual seems to be at the heart of the unwillingness to change, the unwillingness to see writing as a powerful, multiplicitous act, rather than a way of judging and classifying individuals.

Clearly, the university is a powerful site which produces and reinforces these limiting notions of the individual. Linda Brodkey argues that one dominant narrative about this system posits education as:

largely a matter of disciplining students by subjecting them to a series of lessons and examinations that monitor their progress toward 'mastery' of a subject matter. Success is measured by the gradual policing of self that culminates, ideally, in autonomous, educated adults who know what their teachers know. (19)

In Brodkey's eyes, the key problem with the individual (and its translation into Author) is twofold: First, the scene of writing (the writer writing alone) does not reflect the actual practices we engage in around the act of writing. And second, the dominant narrative of writer writing alone is:

a scene or tableau that represents an event (transcription) as the experience (writing) by removing writer and writing from the influence of both durative and historic time. While the gesture may make a good deal of sense in terms of modernism, it unnecessarily romanticizes writing, which, as everyone who writes knows takes time. (68)

If instructors in the university adopt this view of writing, we could end up trying to discipline students to reproduce what we know rather than encouraging them to critically evaluate their own positionings—in the university as well as in other areas of their lives. If we adopt this mystified view of writing, clear boundaries are probably drawn and certain people get to be defined as writers while others are, well, Other. Unfortunately, our uses of narrative in the writing classroom often subscribe to this mystified view.

The effects of this view can be very dangerous. In his discussion of the power of the confession, Foucault may not have been talking directly about the personal narrative when he discussed confessional narratives, but he might just as well have been. He writes that the confession is:

A ritual that unfolds within a power relationship, for one does not confess without the presence (or virtual presence) of a partner who is not simply the interlocutor but the authority who requires the confession, prescribes and appreciates it, and intervenes in order to judge, punish, forgive, console, and reconcile. (62)

Foucault argues that the form these confessions have taken vary: "interrogations, consultations, autobiographical narratives, letters" (63). In much the same way, the personal essay is a form of confessing the truth of the individual and laying it out for the teacher to judge it. At the heart of all confessions, Foucault argues, is the production of a certain kind of individual and the production of a truth, but the fact that the self and the truth is produced and not given is concealed throughout the confessional process. As a result, what is revealed appears to be an always already given truth rather than one that has been produced through the discourse of telling.

Simply because narratives have been used to support a mystified view of writing and writers does not mean that we need to abandon narratives completely. Brodkey's solution to this dilemma is a theory of critical narrative in which stories are still seen as important and useful, but provides a framework in which stories can be critically evaluated and constructed. Brodkey argues that:

critical narrators, then, are narrators whose self-consciousness about ideology makes it necessary for them to point out that all stories, including their own, are told from a vantage point, and to call attention to the voice in which the story is being told. In critical narratives, it is from the narrative stance or conceptual vantage point of critical theory that a story of cultural hegemony is generated. That means that the events related have been conceptualized by a narrator who sees, organizes, interprets, and narrates social events in terms of critical theory. (109-10)

This view of narration emphasizes the process of producing the story and the rhetorical choices an author makes to represent himself or herself in writing, a view that is a far cry from the confessional nature of some expressivist narratives. It argues for using narratives as a way to critically understand and re-evaluate our conceptions of self and the occurrences that happen to us. Critical narratives can then highlight the play of power and the production of knowledge in events and can offer us new foundations upon which to build less limiting ideas of authorship and selfhood. The expressivist paradigm needs to be dismantled and new forms of narratives need to be negotiated if we are to move beyond problematic notions of self that limit the kind of work and thinking that students can accomplish.

Technologies and Narratives of Self: Possibilities

What possibilities do information technologies offer to those of us who want to ask students to critically reflect upon their understandings of self? I would contend that information technologies are important to study because they shape our conceptions of what it means to have a self in the virtual age. This impact comes not only (and, I would contend, not mostly) from the actual use of a particular technology, although that is an important factor to study; rather, I argue that the idea of technology, that is, the narratives of technology, have a crucial impact on our conceptions of ourselves, whether or not we are actively using a particular technology at that time. The metaphors (a traditional narrative device) used to describe ourselves today are based in and drawn from the metaphors used to describe technology. As Allucquere Rosanne Stone argues:

These technologies, discourse networks, and social formations continue the trend toward increasing awareness of a sense of self; toward increasing physical isolation of individuals in Western and Western-influenced societies; and toward displacement of shared physical space, both public and private, by textuality and prosthetic communication—in brief, the constellation of events that define the close of the mechanical age and the unfolding or revealing of what, for the lack of a better term, we might call the virtual age. (20)

Studying narratives of technologies, then, does not only help us to better understand our uses of technologies, but would also help us to understand the current production of subjectivity and its intersections with technologies and cultures of technologies.

In order to study "technologies," however, we need to have a clear definition of what it is we're studying. Haraway and Stone have contended that technology is not simply a package of tools we group together under that heading; rather new technologies comprise, as Stone writes, "arenas for social experience" (15). Instead of viewing technology as a tool, then, I draw upon Anne Balsamo's definition:

The notion of "technology" describes the workings of a collection of practices that produce specific cultural effects. Technology names the process whereby discursive practices work interdependently with other cultural forces to produce effects at the level of the body. (21)

Technology is at the core of our social experiences because the term refers to not just the tools, but our social practices and engagements with others—whether or not we are using technologies at that very moment. These practices are, like all other practices, guided by stories that shape our understandings of what is possible.

But technology can also refer to specific computer technologies that allow people to access information and contact people across time and space. Information technologies such as synchronous conferencing programs, e-mail, listservs, and the World Wide Web connect people and information in ways that were not previously possible. Because these technologies allow new kinds of information flows, how we think about ourselves and our relationships with others has changed as a result of material effects—phone lines, modems, computer hardware and software. So, when I discuss technologies, I am drawing upon both conceptions—the social arenas in which these products are used/understood/critiqued and the actual products used to further/create the goals of the information age.

Technologies and the culture of technologies, defined in this way, are having a decided impact on our conceptions of writer and writing. Sadie Plant argues that:

all individuated notions of organized selves and unified lives are thrown into question on a Net whose connectivities do not merely extend beyond people as subjects with individual faces, names, and identities. The terminology of computer-mediated communication implies an increasing sense of distance and alienating isolation, and the corporate hype enthuses about a new sense of interpersonal interaction. But the keystrokes of users on the Net connect them to a vast distributed plan composed not merely of computers, users, and telephone lines, but all the zeros and ones of machine code, the switches of electronic circuitry, fluctuating ways of neurochemical activity, hormonal energy, thoughts, desires. (143)

Although I certainly believe that individuated selves still exist in online communities, I find valuable Plant's emphasis that while metaphors used to describe technologies suggest one thing (disconnectedness), actual uses that encourage connectedness are not reflected in the metaphors. Hence, we need to open up the ways we describe technologies' possibilities and see the ways that those metaphors and narratives are attempting to shape our usage of the technology in a particular, invested way.

It is important to stress at this point that these new information technologies are not in and of themselves changing our social interactions; rather it is the way we are using them and thinking about them and talking about them that is changing our social arenas. While technologies are certainly cultural artifacts that bear the traces of designers' intentions, they do not have agency in and of themselves. Without a sense of critical, situated use, technologies can be used to reiterate grand narratives of totalization and a false image of homogeneity. Technologies do, however, offer us the option of changing our current understandings about writing and knowledge. Because they are new, information technologies are capable of making usually invisible assumptions visible. Kaplan argues that:

when a technology is as pervasive and as profoundly shaping as print has been, it is often difficult to perceive the full extent of its entitlements and exclusions. Its formations and empowerments seem simply natural and right. When a new tool emerges, however, the conflict engendered by its emergence can illuminate previously obscured relations. (15)

While others in computers and composition have argued that what changes is the text, the author, and the reader, my focus is on using

technologies to highlight the careful production of the individual and to actively work toward dismantling the narratives supporting it. Because information technologies can encourage collaboration and can make the social interactions around texts more visible, they can help us with this much-needed challenge.

If we introduce these technologies into composition classrooms critically, the individual and the kinds of narratives used to reveal it can be challenged. Because technologies can connect people and can decenter notions of text and authority, they can be used to highlight collaboration. As Janet Eldred writes:

networking can work in a writing classroom because it can be used to stress composing as a social, collaborative act, as an act of synthesizing and negotiating knowledge. But networking will work for us only if we plan carefully how we will use it in our classrooms, how we will take advantage of its strengths and downplay its weaknesses. (48)

I have chosen to adopt various computer technologies in my classes because I want my students to learn how to use them and to use them to challenge the assumptions that they have about themselves in relation to other writers. Since, as Eldred points out, computers can stress collaboration, they can be used to connect students with other writers and readers, highlighting the social nature of writing. Computer networking can allow students to interact directly with their audiences and with each other in ways previously not possible. And while computers can just as easily be used to support limiting notions of the individual, they can also be used to change that notion.

If used critically, computer technologies can also change the relationships between students and teachers, shifting the focus of audience from teacher-only to other venues. Carol Klimick Cyganowski argues that the role of the instructor is decentralized in courses taught in computer labs: "Rather than a hierarchical teacher-passive whole group, the lab situation naturally fragments or parcels the class into partnerships and small groups" (70). While I disagree that these arrangements come naturally out of computer lab classes, I would agree that such organizational structures can arise. Along these same lines, Michael Spitzer argues that networks can change students' relationship to writing by linking them to different audiences:

Whether the students all work in the same classroom or send messages across the country, the social context of the network provides them with an immediate audience, one concerned not simply with "correcting" their papers, and their writing can assume a purpose that is recognizable to them. Because they can change the social dynamic of a classroom and also provide student writers with a genuine and uncontrived audience, networks have the potential to transform student writing from listless academic drudgery into writing that is purposeful and reader-based. (59)

Besides connecting them to their audience, networks can also allow all students to have a voice in the classroom. Even students who are afraid to speak up in class often speak up on networked discussions. This kind of interaction can open up important discussions about writing. Spitzer claims that "students can learn that their peers have experiences similar to their own and that these experiences can be discussed with, and illuminated by, others" (62).

Ultimately, computers can help us to encourage students to become producers of their own knowledges rather than consumers of others' knowledge. They can be more directly invited into the conversation, and since they have a growing level of expertise in computer arenas (often my students now know much more about computers than I do), they can have a direct influence on changing those narratives. As Haraway argues, "the point is to place students inside technoscience, where their own work matters and where they have a chance to experience and be accountable for the heterogeneous skills and embodiments of technoscience-in-the-making" (115). The point is to create the subject position of student as an active participant, rather than a passive receiver. The point is to encourage students to explore the power relations inherent in their stories about themselves—including their relationships to technologies. And technologies themselves can help us do just that.

What would these new narratives look like and what kinds of assignments would promote them? As shown earlier, narratives have often been included in first-year writing classes, but when they are, they are often presented in textbooks as the 'easy' first essay. After all, students know about themselves and should be able to write about that subject, right? But narratives are complex social structures, and we need to use them in our classes in multiple ways: first of all, we can ask students to tell us their stories (not

in order to reveal themselves so as to be able to classify them, as in Foucault's sense, but to come to an understanding of their experiences and assumptions about those experiences). These conversations (both written and oral) can lead to a recognition that narratives are powerful constructs that encourage us to see the world in one way while denying us the opportunity to understand experiences in other ways. Then, we can ask students to examine the assumptions that are inherent in those stories—the multiple, contradictory discourses they seamlessly weave together that map out how writing and writers and selves are represented. We need to encourage them to become active participants in the conversations about what counts as knowledge, and engaging narrative structures is one way of doing this. And finally we can ask students to rewrite narratives—to become producers as well as consumers of narratives. Cain argues:

the power of composing comes from an ability not simply to control or stabilize meaning (which is necessarily contingent) but to also render it visible and subject to contestation, subverting expected and familiar representations into the strange and uncanny and, in turn, making that which is strange and uncanny familiar and expected. A genuine power of writers, then, is in their ability to make the familiar gardens of conscious life and culture strange, so that we can better see the contradictions we enact between the many lives we lead, the many stories we narrate to and about ourselves, and see them as meaningful rather than anomalies. (169)

We can help them accomplish this strange-making by asking them to examine and produce narratives about learning in the academy and their relationships to it.

Online technologies offer a medium which encourages the production of different kinds of narratives. Hypertextual linking emphasizes collaborative authorship, a changing relationship between writer and reader, and challenges the usual linearity of narratives. Hypertexts allow for multiple voices, multiple stories, and multiple perspectives in one space, asking the readers to draw connections between stories, to build their own cognitive map through the document. These texts can, however, also be set up so that a linear path through an argument can be taken, but then the main text can be heavily supplemented with other sources that expand and develop the main points. Hypertext writing ranges

from traditional essays with links imbedded in the document to poetic forays into analysis and evaluation. By providing not only a means to critique traditional conceptions of narratives and selves but also a medium to write differently, online technologies can have a significant impact on changing our usages of narratives in the writing classroom.

Writing Narratives in the Virtual Age: Political Interventions in the Classroom

How do we create writing assignments that encourage students to use online technologies to critique and rewrite narratives of self? What follows is a series of writing assignments that can be used in electronic classrooms to help students work toward these goals. The assignments are not the only way to accomplish the goals I've listed, but they offer a framework, a local map with larger implications that can begin to help us map out ways of encouraging the writing, analyzing, and rewriting of narratives of self. The assignments begin to revise our use of narratives on three levels: form, content, and response. Form is the shape that the narratives take, content is the kind of stories that are allowed to be told, and response is the way the audience uses the narratives.

Technoliteracy Autobiography

In an attempt to directly critique the confessional nature of personal narratives that is frequently drawn upon in composition, I devised an autobiographical assignment for graduate students in my Computers and Composition seminar. These students were teachers themselves, and the assignment was designed to ask them to question their assumptions about narratives as well as to have them think about the ways they could assign narrative assignments differently in their own undergraduate writing classes. As with most assignments and good ideas, I learned about this assignment from another, Gail Hawisher, who required her students to complete a similar assignment. "Borrowing" assignments and making them our own is part of the collaborative process of teaching. The virtual age and our use of technologies in it has begun to raise further questions about ownership of texts, originary authorship, and copyright law, and is thus an exciting time in which text-based rules are being challenged even as others strictly defend them. We straddle the boundary between what we always assumed to be good literacy practices and what we are learning are the limits of

those practices. The technoliteracy autobiography and the way that I obtained the assignment, revised it, and passed it onto my students who are teachers themselves (some of whom have adopted the assignment in their own writing classes) illustrate the changing nature of writing, knowledge-making, and our acceptance toward collaboration and multiplicity. The assignment as I wrote it follows:

Technoliteracy Autobiography:

For the next class, write a short narrative about your experiences with computing. The purpose of this paper is for you to reflect on your own history with computing and to think about the ways that technologies and literacies intersect in your own lives. This exercise can also be useful for you as an instructor in a CMC classroom because you can share these experiences with your students and make your own learning process a part of the class discussion, if you like. The format of the autobiography is up to you—from a standard essay to a creative (but factual) piece to a hypertext to something in between. You can include samples of your earlier writings if they apply. Use this assignment to explore your histories.

Areas that you may want to explore are:

Your first experiences with computers—word processing, e-mail, MOOs, Web, etc. Each type of computing may have a different story, a different history, so please be specific.

Your experiences with computing in your personal life and academic life. Specific contexts of usage.

Your family's experiences with and attitudes about computing.

What you found most difficult to learn, what you found easy to learn, how you learned, etc.

Ways that you have taught others to use computers and the contexts in which you did so.

Your current computing uses and how those differ from past uses. Think about what you now consider 'easy' or 'routine' and think about how you learned it.

What you still want to learn about, what you don't know but think you should, and your future plans for training/experience, etc.

If you have any questions, please feel free to e-mail me.

One note: These documents will be public. I would like you to share them with your classmates and possibly put them on a Web page later in the semester. As you are well aware, the context for which you are writing will shape what you chose to include in those narratives. I will send you my own technoliteracy autobiography later this week via e-mail.

This assignment asks students to write narratives about their usages of technologies. It asks them not to tell the truth of their usage, but rather to reconstruct and situate their experiences in the frameworks we had been discussing in class. It provides students with a series of questions to prompt their thinking and while these questions certainly guided my students' responses to the assignment, the range of responses to this assignment amazed me. The form of the responses were varied: some created hypertextual documents that linked their narrative with previous writing they had done. Some wrote in traditional essay formats, but challenged the conception of narratives by the kinds of detail they included and the kinds of analysis they undertook. They all worked from the same assignment, had a grounding in our class discussions, but they all approached the writing very differently, based upon their socially situated positionings.

The content of the assignment asks them not only to tell a story, or multiple stories, but to analyze those stories, to step back and examine the ways that their previous encounters help to construct their current experiences as teachers in computer rooms, as users of technologies, as developers of innovative Web pages and courses created for online environments. While it is a personal narrative of sorts because it asks students to reflect on themselves, it is more squarely situated in a tradition which recognizes that the self is a constructed, fragmented, social thing that is constantly being negotiated. It asks students to critically evaluate their assumptions about technology by examining how those assumptions were produced. By analyzing the production of their assumptions they began to realize that they could imagine and use technologies in different ways.

The technoliteracy autobiography asks students to both critique and build. It required not only that they rethink their conceptions of narratives, but that they also build a new kind of narrative that emphasized the social situatedness of their understandings. The narratives that resulted highlighted laments about the way technologies such as e-mail are stripping us of the love of letter writing and yet also gives us almost immediate contact with those around

the world; the narratives see the limits of having students talk to each other online when they are sitting in the room together at the same time, while acknowledging that quiet students talk in this technologically supplied space in ways that they do not in face to face discussions. They tied their technology use to class issues some of them had access to computers at home very early on and were given the encouragement and training to use them; others saw the machines as isolating and discriminatory; all saw them as the wave of the future. The narratives spoke of fears about changing practices online and also explored the freedom of being heard for the first time online. The assignment offers a framework for rethinking not only the purpose of narratives, but the parts of narratives that typically get emphasized. It questions our drive to embrace the postmodern because the narratives are always imbedded in bodies, experiences, and our interpretations of them. But the assignment requires them to step outside the personal and examine the ideological underpinnings of those experiences; it asks them to see that their stories are maps they have created to make sense of material actions. It provides them a space to critique and build.

The audience they wrote the narrative for was, obviously, our class. They shared their narratives with each other and we discussed their findings in class. They were also encouraged to put their autobiographies on their Web pages and to include them in their final projects for the class. Some of the graduate students even showed their undergraduate students their autobiographies and used them as material for their classroom discussions. The kind of response I, as the instructor who assigned the piece, gave them focused much more on the insights the stories provided rather than on form issues. I encouraged them to share their narratives with others, and tried to illustrate that the assignment was one that extended beyond the brief moment in class we addressed it. It opened up a new way of writing narratives and their responses to the assignment included trying out new forms and contents in their final projects for the course.

Online Feminist/Technoscience Dictionary

In addition to actually writing different narratives, we can also challenge limiting notions of selves represented in narratives. Dictionaries, for example, are sites that appear to be neutral cultural forms that simply tell us the truth of a term, but they actually produce our interactions with terms in quite significant ways. In

that way, then, dictionaries are also cultural narratives. In *Archaeology of Knowledge*, Michel Foucault argues that those things which appear as if they were natural have actually been carefully constructed:

Order is, at one and the same time, that which is given in things as their inner law, the hidden network that determines the way they confront one another, and also that which has no existence except in the grid created by a glance, an examination, a language; and it is only in the blank spaces of this grid that order manifests itself in depth as though already there, waiting in silence for the moment of its expression. The fundamental codes of a culture—those governing its language, its schema of perception—establish for every man, from the very first, the empirical orders with which he will be dealing and within which he will be at home. (xx)

Foucault's argument highlights the constructedness of that which seems to appear natural. In Archaeology of Knowledge, he takes on classification schemas, but the comments he makes above could as easily relate to dictionaries because they, too, are seen by many as repositories of truth, objectively providing words' histories, definitions, and usages. Dictionaries are sites that attempt to fix meanings to support the status quo, rather than reflecting truth. They are thus purveyors of narratives about words and the ideological and material meaning given to them. And while dictionaries offer multiple definitions of terms, even the different parts of the definitions support a coherent view of the term. In telling histories, dictionary entries attempt to control our present and future usage of the terms. Dale Spender argues that dictionaries and standardized spellings come out of a print-based, phallologocentric culture that privileges linear, rational thinking which privileges patriarchal perspectives over others.

Recognizing the narrativity of definitions and the limits that phallocentric definitions can impose on us, I devised an assignment that asks graduate students to rethink and rewrite definitions. Because the focus of the class was to illustrate the ways that women have been excluded from technological opportunities, I chose to focus the assignment on terms that relate to technology, technoscience, and information technologies. The assignment is as follows:

Online Feminist Dictionary

Goal of the Assignment:

The goal is for us as a class to create an online dictionary of technoculture terms. The lens through which we will examine these terms will be the feminist theories we've been exploring in the class. Feminist theory, however, is not one thing; rather, it is a body of theories with a variety of investments that explore not only gender, but also race, class and ethnicity issues. Our dictionary will work in the tradition of Paula Treichler's Feminist Dictionary and will be a collaborative project. We will not only define the terms, but will hotlink them to other sources and provide bibliographies for the terms. Part of the goal is to map new metaphors for understanding technoculture, and part of the goal is to challenge the whole process of classification, categorization, and definitions.

Description of the Assignment:

- 1. As a class, we will collect a list of technoculture terms that we want to include in our online bibliography.
- 2. We will divide the terms up and assign individuals to research and write about certain terms.
- 3. Once the first round of research and writing is done, the terms (and the research/writing) will be passed on to another set of individuals. These individuals will read through what has already been written, revise/add to it and do some further research (add to the bibliography, provide a different perspective, provide more online links).
- 4. The terms will then be discussed between the two people who wrote and researched them. Revisions/remappings will be done.
- 5. Then, the terms will be presented to the class as a whole. Each person will have a change to add to/revise/do further research on any of the terms.
- 6. We will then put the 'dictionary' online.

Drawing upon Treichler, et al's print feminist dictionary, I wanted to create an online dictionary of technoculture terms. The driving force behind the assignment was an examination of the power of definition and a critique of the linear, totalizing narratives in cur-

rent dictionaries. If technologies are to be used in innovative ways, feminist perspectives cannot be excluded from the discussions of how they will be used and how they will be perceived. The current metaphorical definitions of information technologies exclude these perspectives: console cowboys roam the new frontier to jack in and abort programs in order to gain control on the information superhighway. While a dominant metaphor for the Internet is certainly a web of connections, the kinds of connections allowed in cyberspace are shaped by its military origins and its simultaneous links to the big business and men's only clubs.

The form of the Internet, then, has been imagined, talked about, and used in very limiting ways. As Zillah Eisenstein argues:

The wealthy white males of cyberculture applaud its nonhierarchical interactions. They celebrate the cyberarenas where authorities and experts have no special status. Not surprisingly, some women choose to differ with this assessment. These cyberwomen think "technology serves as a site for the reinscription of cultural narratives of gendered and racial identities." Men like the net because they can escape (real) women there. The net reminds men of the good old days of "men only" clubs. Gender hierarchy seems completely democratic to men, to whom it is transparent, because the rules operate in their favor. (95)

Hence, the dominant narratives of the Internet and other information technologies do not necessarily offer online redefinitions of cultural formations, although many laud the Internet for its democratic, leveling potentials. The current technologies are "embedded in the engendered meanings and structures of science itself. These masculinist underpinnings digitize sexism in newly abstract form" (Eisenstein 95). The physical form and structure of the Internet help to shape the narratives that are told there. The existing online narratives likewise shape the possibilities we imagine for the form and structure of the Internet.

We can begin to change the limiting narratives by telling new ones that change our definitions of terms and the material possibilities for those terms, i.e. by changing the content in order to change and challenge the traditional form/structure of the Internet itself and the stories that get told there (as well as the stories that get told about it). Eisenstein argues that "if the nation is to stake out a claim for publicness new publics must speak out and press for their voic-

es to be heard . . . Both shared collectivity and unique individuality must be nurtured and respected" (130). While I have difficulty with her usage of "unique" because it can be seen as an essentialist term, I find Eisenstein's arguments for a balance between collectivity and individuality to be a useful framework for rethinking definitions and narratives in the virtual age. This suggests, as does my dictionary assignment, that it is not only the local narratives (Lyotard's petit recit) or the universal narratives (grand narratives of some modernists) that count; rather, it is important intersections between the two that can have a useful political effect. By their nature, definitions suggest a sort of universality along with particularity; the problem with this universality is when it appears as fixed truth. One can speak in universals (i.e. global, interrelated definitions) and not be relying upon the same limiting narratives of self that I discussed above. Definitions then can be rewritten to include universal and particular aspects without doing violence.

The dictionary assignment draws upon the possibilities of hypertext to tell multiple stories, but as we wrote our definitions, we agreed to offer a meaning for the term that we preferred, that we saw as political viable. We contemplated just offering a series of multiple perspectives on the term, but decided that it was crucial for us to take a stand, go out on a limb and actually define the term. At the heart of our definitions is an engagement with a whole body of theory, our own experiences, and a great deal of Web-based research. Even in our 'universal' definitions, we emphasize the local, the particular, the contextual, the political. We wanted to build something that was informed, not just critique the existing uses of the term. After we offered our definition (which was collaboratively generated by the whole class), we then provided the multiplicity, the particular, the local. We provided a list of quotes, references, visual images that further defined and yet also complicated our initial definition. We used the lens of material feminism to write, rethink, and critique the definitions. We explored and cri tiqued the metaphors used to describe these terms and we offered alternative visions.

This kind of assignment could be done without using the Web, but I contend that the hypertextual nature of the Web allows the assignment to balance the universal and particular aspects that need to be included in the definitions. The Web allows for a kind of multiplicity and a kind of immediate access to our terms that other media would not. By putting the dictionary online, we enter the space we are attempting to critique, and we are inviting others to add to, revise, and rethink our definitions. This assignment can

continue across classes. Each semester, I can ask my students to add to and revise the existing terms, thus making the assignment even more collaborative and multiple. The response to and use of this project, then, is ongoing and multiple. Culture and history come into play in the choice of terms, in the definitions, in the links, in the revisiting of the terms. In a sense, the assignment encourages students to productively struggle with their part in political change. As Chris Toulouse argues, "what the Web offers academics is the possibility of moving from critic after the fact to the activist who helps create them. This is an unsettling prospect even to those who embrace change" (6). Unsettling, perhaps, but deadly necessary, if we are to have an inhabitable virtual age.

Different Stories Online: Conclusions

I opened this article with Haraway's assertion that "changing the stories, in both material and semiotic senses, is a modest intervention worth making" (47). Because narratives powerfully shape our perceptions of potential uses of and engagements with technologies, we need to pay careful attention to how we are narrativizing technology usages. In order to do this, however, we must not rely upon limiting expressivist views of narratives; instead, we must draw upon what Brodkey calls critical narratives that allow writers to explore the ideological conflicts inherent in their understandings of social relations. Information technologies such as the Internet can help us build critical narratives because they offer us ways of changing not only the form of the narrative, but the content and the response/usage of narratives as well. The assignments I've described were two ways that we can adopt our philosophical critiques of narrativity into the electronic writing classroom. While the interventions these assignments make might be 'modest,' it is, as Haraway suggests, an "intervention worth making."

If our usage of technology in the classroom is to have an effect on our narratives of subjectivity, we need to develop and deploy a critical framework for its use, a framework that takes into account the changing nature of writing and writer in the virtual age along with the resistances to these changes. We need to have a voice in the kind of stories that will be told about writing in the virtual age and the ways that technologies will shape that writing. Besides changing our metaphors and our narrative structures, we must also change the practices revolving around our usage of technology. If we begin assigning students to create Web pages, for example, we cannot then use the old frameworks of evaluation on this new tech-

nology. If we do, we are doing our students a disservice by exposing them to a new hypertextual technology but using our old strategies of evaluation to grade and reward their work. As a teacher, I still become uncomfortable when my students spend class time on working on their graphics for their page. I still have a desire to tell them that graphics do not count as much as content, but as Douglas Kellner argues, images and content are intimately tied together in the postmodern age. He argues that "interpretive analysis of both image and narrative continues to be of importance in analysing even those texts taken to be paradigmatic of postmodern culture" (147). Therefore, our patterns of response need to change, even as we encourage our students to explore new forms and contents for their narratives. We need to change our own stories of response and grading.

The changes I'm arguing for, then, are both philosophical and pedagogical. They ask the students to think and write differently, and they ask us to think and write differently. While technologies can certainly assist this process, we must continue to think critically about the technologies we are using. Otherwise, we may inadvertently use technologies to support the traditional narratives we are trying to critique. This intervention can have an extended impact on the kinds of stories told, how stories get told, who gets to tell them, and how we use them. The virtual age is truly full of promise and danger, as Stone contends. And we as teachers and theorists have the exciting task of imagining ways of using the Internet to create spaces for contextual, situated, and political stories of identity.

Notes

- ¹ I wish to thank my writing group for their help with the revisions of this piece: Katherine Heenan, Janice Norton, and Sharon Crowley. Others whose input was invaluable for this article are Gail Hawisher, Paul Prior, and Amanda Anderson.
- ² I use Allucquere Rosanne Stone's definition of the virtual age: "By virtual age I don't mean the hype of virtual reality technology, which is certainly interesting enough in its own ways. Rather, I refer to the gradual change that has come over the relationship between sense of self and the body, and the relationship between individual and group, during a particular span of time. I characterize this relationship as virtual because the accustomed grounding of social interaction in the physical facticity of human bodies is changing" (17).

- ³ See, for instance, Phelps and Emig's collection *Feminine Principles and Women's Experiences in American Composition and Rhetoric*. It offers a variety of articles on the topic of personal narratives.
- ⁴ Peter Elbow's work is an example of the expressivist paradigm while theorists such as Mary Ann Cain and Mary Soliday are examples of a poststructuralist approach to narratives.
- ⁵ For an example of such textbooks, see *The St. Martin's Guide to Writing*.

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