Distracted by Digital Writing: Unruly Bodies and the Schooling of Literacy

[T]he rhetorical power of the phrase 'literacy crisis' resides in its ability to condense a broad range of cultural, social, political, and economic tensions into one central image.

--John Trimbur, "Literacy and the Discourse of Crisis"

We all have trouble focusing sometimes. However, "distraction" has become a buzzword in popular media referring to more than the familiar jerk back to reality that happens after we have been daydreaming instead of listening. Today's distraction is described not as a momentary state but as a permeating condition affecting all parts of life. In this webtext, I will ask that we consider what is negotiated with respect to literacy when we portray students in particular as *pervasively* distracted. Discourse that identifies a contemporary "attention crisis" often involves implicit assumptions about literacy in at least two senses: first, it supposes that digital literacy causes distraction, and, second, it proposes that this inability to focus leads to decreased reading and writing abilities in non-digital contexts. This tightly bound argumentative structure means that analyzing contemporary representations of distraction can teach us something about what literacy means today, including what forms of literacy are valued and how we apprehend relationships between students and literacy professionals.

In line with the theme of the collection, I take up this investigation by way of John Trimbur's "Literacy and the Discourse of Crisis." Using Trimbur's framework, I contextualize contemporary dissatisfaction with students' distractedness within the legacy left by the relatively recent construction of literacy as a schooled set of measurable cognitive skills, a history he painstakingly develops in his 1991 essay. With this arc in mind, the focus on the "attention crisis" caused by rampant digital literacy is noteworthy. Through a focus on distraction, literacy crisis rhetoric has surfaced as more than panic over the linguistic details of student writing—though there are certainly complaints about IM and text-speak showing up in academic essays. Instead, the discourse that creates crisis rhetoric has taken up embodied practices and operations related to acquiring literacy

outside school as a chief target of concern. In other words, a changed embodiment or *habitus* associated with digital reading and writing is often positioned both as evidence of literacy decline, as well as proof of why students struggle with academic engagement. Current attention crisis discourse suggests that time spent reading and writing in digital environments (and outside of schooled contexts) is powerful because it changes how students participate in school and other parts of their lives. However, cultural texts reveal that we have not shifted to valuing these literacies. They are unsettling to us.

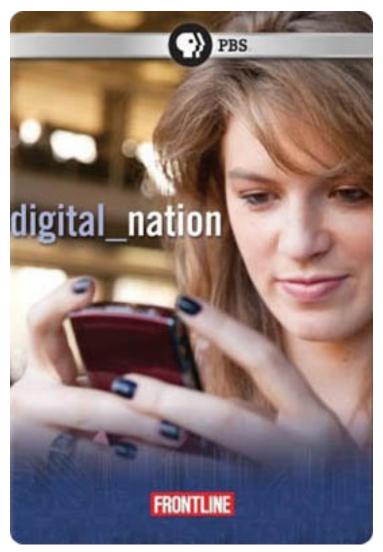
In order to illustrate this dynamic, I build literally on Trimbur's claim that literacy crisis discourse distills powerful "tensions into one central image" (277). Specifically, I analyze how the image of the distracted student body functions rhetorically with respect to contemporary literacy. Just as Trimbur's discussion is grounded in his analysis of the 1975 Newsweek article, "Why Johnny Can't Write," I anchor my argument in an instance of broadly circulating public media discourse: the 2010 FRONTLINE production *Digital* Nation: Life on the Virtual Frontier, which was supported by the MacArthur Foundation and the Verizon Foundation. This "multiplatform initiative" combined a documentary broadcast, a Website archiving user-contributed stories, and an "extensive promotion and outreach campaign" to draw attention to the impact of digital media on culture (see FRONTLINE). Produced by Rachel Dretzin and Douglas Rushkoff, the Digital Nation video documentary assembled an impressive group of leading US scholars of digital literacy and culture (James Paul Gee, Henry Jenkins, and Sherry Turkle among them) while analyzing the effects of technologies on all aspects of American life including school, work, play, and even military activity. The broadcast originally aired on PBS in early 2010, is available for free viewing online, and has been released broadly in DVD format. Because of its unparalleled focus on the impact of the Web and its broad availability and dissemination, I focus on how representations of student bodies operate rhetorically in this documentary in ways that reveal important notions about literacy crisis. Dialoguing these bodies with those from the historical moments to which Trimbur attends, I untangle new contexts for crisis discourse and gesture toward new assumptions about value. The popular discourse about attention crisis combines a range of contemporary anxieties in the body of the so-called distracted digital native, her body decorated by her technologies and her focus on "them" rather than "us."

With this dynamic in play, pausing to reflect on this rhetoric and the anxieties to which it is attached is worth the attention of Computers and Writing scholars. The seductive nature of crisis rhetoric often creates a distraction in itself, what Richard Lanham has called an attention structure mediating how we direct our time. As teachers, many of us experience the ways students internalize crisis discourse, leading them to participate in self-fulfilling prophecies about their ability and performances rather than developing new strategies for navigating the complex environments in which contemporary literacy is practiced. For this reason, I conclude this text by drawing on recent Computers and Writing scholarship and my own qualitative study of emerging writing practices to describe how repositioning the student body might lead to new understandings of what initially appears as distraction.¹

Digital Nation, Student Bodies, and Distraction

A prominent image of the literate student body lives on the DVD cover of *Digital Nation*. We see her gaze lowered, her slight smile, and her dark-painted fingernails gripping a smart phone in a magenta case. The image of this young woman provides a clue to the complex ideas the documentary develops. She is practicing some kind of digital reading (and perhaps writing if her thumbs are moving) to which we are not privy. We are looking at her. She is not looking at us. She is looking at her Blackberry smart phone.

¹ This pdf represents a linear version of this argument, and you may proceed through the webtext version linearly using the links marked << and >> at each page's beginning and ending. For a different experience, the webtext is also hyperlinked to allow for potential alternative paths.



The young woman who graces the front of Digital Nation's DVD packaging likewise appears on the online viewing page for the documentary in slightly different view.² A prominent feature of the documentary's first chapter entitled "Distracted By Everything," the young woman is introduced early. She's a bright, cheerful young MIT student named Eliza Eddison, an obvious leader among her peers whom we witness coordinating a group of students chatting while working on their laptops. With classic ethnographic gaze in place, viewers are positioned to encounter her as if she is a strange creature in her natural habitat. We witness her

layered browser windows and technologies and overhear snippets of her strange language filled with references to wired life. She asks a peer, "Do you think it will stay in beta as long as Gmail stayed in beta—a decade?" and questions another, "Are we Gchat buddies?" While MIT professors address the audience directly, contact with Eliza and other students is generally mediated through interviewers' questions and we are guided in how to interpret their behavior based on the thoughts of their professors and parents, who give us insight on how we should decode their technology use.

Digital Nation's early display of students like Eliza cultivates distance between its subject and its viewer, as well as between students and the MIT professors who teach

² See http://www.pbs.org/wgbh/pages/frontline/digitalnation/view/

them. Clearly, we are to read Eliza as other and yet recognizable: an archetype whose commitments we understand because we know people like her. She is our student, our neighbor, our kid. The MIT professors who discuss students like Eliza call attention to how they are generationally different. Sherry Turkle, an engaging voice, states that the project of reaching out to students like Eliza has shifted the goal of education over the past twenty-five years. Instructors, in short, are continually trying "to distract them" from the web. While Turkle advocates bridging the gap between students and instructors, MIT professor David Jones is more pointed in his remarks: "There are two sorts of things you can test students about. You can test how well they are paying attention in lecture, and you can test how well they are absorbing material from readings you assign. And I don't think they are doing either of those things well." He continues, "It's not that the students are dumb, it's not that they're not trying, it's that they aren't trying in a way that's as effective as it could be because they are distracted by everything else." A definite us and them operates when these professors characterize their students. Even as top performers at a preeminent US educational setting, they still seem to be struggling to perform to our standards. From their educators' point of view, something is holding them back.

Within this first chapter of *Digital Nation*, "distraction" becomes the keyword used to describe that something that contributes to declining academic performance. Through my analysis of images and representations, I suggest that connections to literacy are foundational to how pervasive distraction is represented in two ways. First, the chapter builds an implicit sense that *digital reading and writing causes distraction*. This warrant emerges through continual references to how writing technologies (like cell phones) and digital literacy practices (like instant messaging, SMS texting, and social media use) cause an inability to focus. From Eliza's Gchat references to camera shots that pan across students Facebooking during class, digital literacy practices anchor the representations of distraction in the documentary's first chapter. The second connection between distraction and digital literacy is built more explicitly later in *Digital Nation*, when Mark Bauerlein credits lack of focus emerging from technology use with widespread decline in reading and writing ability. The claim that distraction deteriorates literacy in general completes a tightly wound argumentative structure that assembles attitudes, beliefs, and values related

to contemporary literate practice. *Digital Nation* suggests that distraction separates us from them—students from educators, parents from children—and is related both to self-sponsored digital reading and writing practice and academic performance.

When Bauerlein argues that literacy skills have declined, his claim is connected to the argument Jones, the MIT professor referenced previously, made about students' overall habits of engagement. These claims suppose that literacy practices from outside school have a strong effect on school performance. Within this model, literacy decline is not as simple as the idea that contemporary students no longer can produce Standard English. Instead, the argument goes, students are paying more attention to their multiple technologies than to any other mode of communication. This change in operation directly affects students' ability to engage in schooled literate activity, but also leads to what N. Katherine Hayles in her recent scholarship has referred to as a dominant "cognitive mode of engagement" or hyperattention that determines how people think and process information. In turn, this preferred cognitive mode—one of continually needing stimulation—affects students' performance in schooled literacy tasks. Within *Digital Nation* this line of reasoning finds evidence in students' own testimony that they have a hard time developing connections between paragraphs or in producing more than short chunks of text during one sitting.

There is much for contemporary literacy scholars to contest in the evidence presented for these claims about declining literacy. From the idea that first drafts lacking transitions represent a widespread literacy scare to the idea that professors' memories of writing over the decades represent a valid or reliable measure of decline, there is plenty of room for debate. Indeed, literacy educators might draw on Trimbur's essay as evidence for why a decline model of literacy is problematic. To be fair, within *Digital Nation*, scholars like Gee and Jenkins continually advocate for more situated conceptions of literacy, asking viewers to look past a deficit model and toward how practices emerge within the constraints of shifting technological and cultural resources. While scholars in *Digital Nation* advance both "decline" and "progressive" models of literacy, I, like Trimbur, think that we might gain something by thinking about the contemporary discourse that creates this crisis outside of the framework of either decline or progression. What exactly is being

negotiated in this construction of our students as distracted? What anxieties lie under the surface of our complaints about the distracted digital native?

Trimbur and the Historical Reconstruction of Literacy

In the previous paragraphs, I argue that distraction becomes a keyword connecting to literacy in at least two senses. Trimbur's theory of crisis discourse can offer a lens for further analyzing distraction and the distracted student body as rhetorical symbols connected to complex cultural negotiations. In "Literacy and the Discourse of Crisis," which is reviewed in the introduction to this volume, Trimbur explores how the words "literacy crisis" can behave performatively—constituting crisis—as they also release underlying anxieties. Rather than arguing that crisis rhetoric stems from the status of literacy as a material process in either linear decline or progression, Trimbur maps the discourse that creates literacy crisis in cycles motivated by ongoing class re-organization. When literacy crisis discourse is performed, it means that cultural understandings of literacy are being negotiated, and hierarchies potentially shifted—or shored up. Trimbur builds a framework for this Marxist historicizing of literacy crisis discourse on Gramsci's notion of cultural hegemony. Gramsci's theory provides language for what Trimbur identifies as two related processes that call literacy crisis rhetoric into being: "the consolidation of political authority by the state through consent rather than coercion, and the establishment of the leadership of one particular class or political group in relation to other classes and political groups" (280). Within this dual dynamic, literacy becomes a tool for ordering and arranging people, particularly with respect to class.

However, in order for literacy to play this role in recent US history, Trimbur argues that the idea of literacy needed to be radically transformed into a practicable tool. It is within this framework of the maintenance and negotiation of cultural hegemony that Trimbur tells a convincing story about the history of literacy's transformation from participatory practices embedded in "the everyday life of ordinary people" to schooled cognitive skills imparted by experts that can be measured in order to rank and order individuals (288). For Trimbur, "schooling transformed literacy from a tool of participation in public life into an instrument of social control" (289). I take up this aspect of Trimbur's

argument in my analysis because, as he suggests, grafting literacy to schooling meant that crisis discourse has often justified the presence and careers of literacy educators.

From Community Practice to Schooled Cognitive Competency

As Trimbur explores how literacy shifted in recent American history, several actors and narratives emerge. The marriage of literacy and schooling happened, in Trimbur's telling, through the common-school crusade and the rise of progressive education. This could be seen first in the role of literacy in "nineteenth-century schools, in which teachers assumed managerial rather than pedagogical roles, taught not only grammar and mechanical correctness but also how to accept supervision, follow directions, and concentrate on tedious and repetitive tasks" (289). This instruction not only imparted a habitus necessary for individuals functioning in a changing American economy, but also removed literacy from its place as a changing collection of community practices and made it a tool measuring and marking moral acceptability—a marker of status that middle class citizens craved to separate themselves from the uneducated masses. Alongside the shift toward the literacy of school becoming a form of personal credentialing, Trimbur describes the professionalization of literacy experts responsible for distinguishing between acceptable and non-acceptable reading material, which developed as a result of the late nineteenth century publishing boom and broader access to a range of texts. This rise of a professional class associated with defining and measuring appropriate reading and writing further shifted literacy toward an individualistic form of credentialing. Increasingly, Trimbur argues, literacy was furthermore understood as measurable cognitively, a line against which students could become sorted and ranked. This increased with the advent of psychometric testing, which Trimbur says "added scientific authority" to the ranking systems of progressive education. Within this paradigm, again, schooled literacy served a meritocratic function as cultural capital: it marked and distinguished the upwardly mobile middle classes from the working class.

After developing this impressive historical narrative, Trimbur's final call to action positions literacy educators to intervene in the relationship between literacy and cultural hegemony by addressing their own roles as gatekeepers of educational access. Situated

within the context of the early nineties' shifts in higher education, Trimbur reminds us that literacy educators are implicated in using education to maintain hegemonic divisions of labor and cults of expertise. His call to action, then, is a call to fight for open access to higher learning and better student conditions. Educators should intervene in the use of literacy as tool for maintaining meritocracy by working to "democratize higher education through open admissions to all colleges and universities, free tuition, and a livable student stipend" (294). Within the framework of cultural hegemony Trimbur outlines in his particular historical moment, this call to increase educational access provided a relevant and timely means of intervention. What is left less clear in Trimbur's call to action is the degree to which he would argue that academics should similarly intervene in the recent historical phenomenon of intertwining of literacy and schooling. While Trimbur calls for a return to literacy as "intellectual resource against injustice, a means to ensure democratic participation in public life," this shift appears to retain a sense of literacy as a schooled, cognitive skill set (294). Indeed, the connections between literacy and schooling remain intact within Trimbur's call for educator action, even as his argument calls these relationships into question by exposing their constructedness—the extent to which they could be and have been otherwise. It was perhaps outside the scope of Trimbur's argument to advocate more strongly for valuing vernacular or self-sponsored literacies (and for helping students learn how to value them). I suggest that his argument about the nature of crisis in his historical moment leaves room for contemporary literacy educators to practice an additional form of advocacy that enacts more active support for vernacular and community literacies.

Language Standards as Status Markers

As the introduction to this collection describes and as I have elaborated, Trimbur's Gramscian reading develops complex connections among literacy, schooling, and class hierarchies, while admonishing educators to intervene in hegemony by democratizing access to education. While I do not propose that the problems that Trimbur highlighted in the early nineties have been solved or that it is no longer imperative to bring material access to education to racial minorities and the working poor, I am interested in shifting

the conversation for the moment to delve into the rift I suggested was rampant in current literacy crisis rhetoric: the separation between us (educators) and them (students). Trimbur gestures to this disconnection when discussing the ongoing professionalization of literacy experts needed to determine what kind of literacy should be "standard" or morally acceptable. In the contemporary historical moment, we are experiencing this separation not only as a difference in credentialing, but also as a perceived generational rift defined by how ubiquitous access to technologies has shaped younger individuals (see Prensky). My analysis in the remainder of this webtext focuses on what is at stake in continually reinforcing that separation by framing contemporary student bodies as other. To explore this further, I will first illustrate how contemporary representations of distracted student bodies differ from those at play during the historical moment that Trimbur explores.

Trimbur introduces his argument with an analysis of the now iconic 1975 Newsweek spread, "Why Johnny Can't Write," by Morril Sheils. Trimbur points to the "alarmist tone," the "appeal to parental anxieties," and the "stock characters" developed in the article (278). As I discussed previously, Trimbur shows how the anxieties that live beneath the surface of the appeals in "Why Johnny Can't Write" evidence the breakdown of literacy's perceived ability to maintain meritocratic hierarchies that schooled literacy extended, giving voice to a rising fear that middle class (white) children no longer were bestowed with the competitive edge over minorities and working class students they once had as the result of higher education. He cites at length from Sheils' call for language standardization:

The point is that there have to be some fixed rules, however tedious, if the codes of human communication are to remain decipherable. If the written language is placed at the mercy of every new colloquialism and if every fresh dialect demands and gets equal sway, then we will soon find ourselves back in Babel. In America . . . there are too many people intent on being masters of the language and too few willing to be its servants (Sheils qtd in Trimbur, 279).

As this passage exemplifies, the complaints within crisis discourse focus on the linguistic deficiencies of these students, and the failure of schools to intervene effectively in the

process of language standardization. Within "Why Johnny Can't Write," the literacy crisis is connected explicitly to both schooled literacy and linguistic performances in academic writing tasks. While the contemporary focus on distraction contains echoes of this crisis legacy, there have been key changes in who is perceived to be "master" and "servant" of the language, as well as what is to blame for the "Babel" in which we find ourselves.

From Passive to Active Agents: Comparing Johnny and Eliza as Literacy Symbols

In order to develop what is different about the contemporary construction of literacy crisis, I will pause to analyze two emblematic images of literacy crisis rhetoric side-by-side: the young man shown on the cover of the 1975 article, "Why Johnny Can't Write" (referred to hereafter as "Johnny" to make describing him easier) and "Eliza" from the cover of 2010 *Digital Nation*, whom I introduced earlier. Both students' bodies fall under our gaze, and it is clear that the viewer is positioned to intrude on their everyday literacy activity without



needing their permission or consent. The two students are portrayed in terms that are eerily similar in some ways, their respective emblematic writing technologies in hand, obvious markers of class and status in their class rings, perfect coifs, and collegiate garb. (It makes you wonder a little whether someone on the Digital Nation staff fashioned this shot of Eliza to purposefully recall Johnny's image.) Johnny, of course, dons a pen and paper, the writing technologies we would expect to be in hand in 1975 and Eliza, as I described previously, holds her Blackberry. Neither of these two students seems particularly distracted by the environment around them—both direct complete attention toward the writing technologies dominant within their scenes. The biggest clue to the key difference between the two is developed in their body language, our suppositions about the kinds of texts they are interacting with, and the attitudes they exhibit toward those texts. Johnny seems genuinely perplexed and frustrated by the task at hand. With all the rumpled paper and furrowed brow, we are sure that he is engaged in a writing task that is not routine or familiar to him—one that almost certainly must be an academic writing task with which he is struggling. Eliza, by contrast, seems happy. Unlike Johnny, Eliza's gaze does not lead us to believe she's reading or writing something sanctioned by "us" literacy experts—an essay on Shakespeare or Dickens (or even on discourse communities or rhetorical situations, for that matter). We would have to bet she is immersed in a text to a friend, updating her Facebook status, checking in on Twitter or Pinterest to see what her friends have posted since her last class, or checking out the latest Tumblr meme site. Compared with Johnny, Eliza seems more carefree and relaxed, more content in her own world. Read as a symbol of literacy, she does not require the instruction of literacy educators to be successful in the task in which she is engaged.

As I described, the written report attached to Johnny's image focuses primarily on students' linguistic practice and has a strong racial undercurrent connected to the influx of African American Language in public schools. However, the report also focuses briefly on the negative impact of technologies. The technology of focus in "Why Johnny Can't Write" is the television, and its effect is described in two major themes. First, the report argues that time spent listening to the "simplistic spoken style of television" instead of reading leads to informalities in language use (59). Second, Sheils argues that TV encourages a

non-active stance toward literacy acquisition as "the passiveness of the viewing. . .seems to have a markedly bad effect on a child's active pursuit of written skills" (59). The caption that lies underneath the included picture of children watching TV reinforces this connection between the television and inactivity: "Passive voice: TV entertains, but demands no really active learning" (58). Importantly, with the shift from 1975's Johnny to 2010's Eliza, we shift from fearing literacy passivity to activity, from focusing on linguistic difference to unruly embodiment.

Digital Nation and other texts that mediate between academic and public views of digital culture's effects on our thinking and communicating (e.g., Carr's *The Shallows*; Bauerlein's *The Dumbest Generation*) offer starting points for understanding where we stand with respect to a key component of Trimbur's historicizing of literacy crisis rhetoric: that literacy has been rhetorically shifted from the public practices of community life into measurable, cognitive status markers maintained in school. Our new felt sense of the powerful, agentive nature of digital literacy practices throws the schooling of literacy into a bit of a tailspin. Literacy is increasingly portrayed as re-embedded in the mundane operations of everyday life: people are writing to each other all the time for self-expression, to connect to one another, and to participate in activities that are meaningful to them. Especially in comparison to Johnny, Eliza's image emblemizes this move toward literacy as a self-sponsored daily practice. However, her version of literacy does not always adhere to the standards literacy professionals have set: to use Richard Lanham's phrasing, it's seen as "fluff" rather than "stuff" at its best or cognitively damaging at its worst.

The words "literacy crisis" are never uttered in *Digital Nation*. However, much like Trimbur described when he analyzed "Why Johnny Can't Write," we hear parental anxieties, professor complaints, and see student images. Though *Digital Nation* draws on similar anecdotal evidence, students' perceived failures are not limited to grammar, punctuation, and spelling—those typical markers of class status. Instead, the layered vignettes lead to the idea that cognitive functions and embodied practices are changing for the worse because individuals are growing up digital.

Reading Distraction through the Lens of Foucault's Docile Bodies

In order to push on our unease with distraction in the context of the connection of literacy to schooling, I draw on Michel Foucault's concept of "docile bodies." In Discipline and Punish, Foucault theorizes the docile body as a malleable object on which disciplinary force is acted, a node in the complex field in which power is organized and arranged. For Foucault, the body is an object that we can read in order to determine how fields of power are organized during moments in history: its movements, its postures, its positionality reveal the discursive forces that have shaped it. The idea of the docile body comes from Foucault's reading of a particular historical moment—the eighteenth century and reforms in practices of punishment—in which bodies became texts on which to inscribe dominant ways of doing things. In order for the body to be disciplined in this way, it must be receptive and accept powers that work on it. The docile body, then, is "something that can be made; out of a formless clay, an inapt body [from which] the machine required can be constructed" (135). The words Foucault further uses to describe this body cast it as unformed and willing to be shaped: it's "pliable," capable of being "manipulated, shaped, trained" (135, 136). "Training" is an important facet of the operation of power upon the docile body, and Foucault focuses on a range of institutions from prisons, to the military, to schools as he describes the settings in which docile bodies are disciplined. Within these institutions, bodies are made to respond to signals that are implicit and yet tightly organized through the networks of relations that maintain order. The effect of this arrangement, as Foucault describes it, is "a 'political anatomy'" and a "mechanics of power" that "defined how one may have a hold over others' bodies, not only so that they may do what one wishes, but so that they may operate as one wishes, with the techniques, the speed and the efficiency that one determines" (138).

Foucault's concept of docile bodies illuminates the sense that bodies must be positioned receptively in order for logics of arrangement to act upon them. Furthermore, he constructs bodily processes and operations as the object of applications of power. It is the act of controlling how bodies move, the processes they perform, and how they enact them that Foucault refers to as the "modality" through which disciplining works. Foucault shows how the modality of control "implies an uninterrupted, constant coercion,

supervising the processes of the activity rather than its result and is exercised according to a codification that partitions as closely as possible time, space, movement" (136). Notably, the "processes of the activity rather than its result" become the focus of an embodied exercise of power (136, emphasis mine).

Unruly Bodies in School

Current concerns with the "distraction" of contemporary students reveal uneasiness about the processes and operations through which contemporary students acquire literacy. If literacy has historically been associated with school, something incrementally gained in the "move from grade level to grade level" (Trimbur 286), that conception of literacy is now undercut, not only by efforts to democratize education but also by the increasing agency many students have in determining how they become literate and which literacies they value. In Trimbur's terms, stakeholders who have been responsible for defining literacy in recent US history may be losing power. The anxiety associated with whether literacy is losing its ability to mark status and class now extends to whether the separation between literacy experts and those who need instruction can be maintained. We are beginning to wonder whether students are paying attention to the standards of schooled literacy as they are learning to read and write elsewhere: online.

Read in light of Foucault's image of docile bodies, the view of schooling as it intersects with crisis discourse developed in *Digital Nation* is telling. The images of literacy decline developed often assume a paradigm that measures literacy abilities based on school performance and the docility of student bodies in relation to the standards delivered by educational professionals. As MIT Professor Jones reminds us, educators often test students on "how well they are paying attention in lecture" and "how well they are absorbing material." Indeed, the operations of the "distracted" digital native reject the positioning of their bodies as something to be controlled by the techniques of schooling. Eliza's image in contrast with Johnny's reveals hints of this tension, as a body that the documentary describes as "distracted by everything" appears more like one captivated with rapt attention—but toward a writing technology of her own choosing rather than one sanctioned by professionals. While this example is implicit, there are other moments of

more overt tensions between schooled and non-school literacy in the film in which student bodies resist being controlled or show the ambiguity between where important literacies come from. For example, producer and sometimes character Rachel Dreztin opens a later chapter of *Digital Nation* by reflecting on the strange ways in which youth seem born into digital habits. This scene opens with images of Dretzin's young children comfortable and happy, snapping self-portraits with a MacBook PhotoBooth. The scene turns to her young son, who has recently begun a school program that requires he use a laptop in school and at home. Dretzin expresses confusion between what her children are learning in school from what they know simply as a result of constant use of technologies. As her son uses his laptop to work on his English homework, Dretzin asks, "What are you doing? Show me. Who wrote these? Who wrote these blogs? How do you know how to make a blog?" In another moment, a young student tells us that he and his friends visit websites when "teachers bore us."

In moments like these, I sense a different story about literacy developing. The conception of literacy as skill set portioned out to students in schools is breaking down, not necessarily as a result of changes enacted by educators but alongside the increasing importance of literacy practices that happen outside school settings (and often employing digital technologies). Students are not entering school as docile bodies with respect to their literacy practice, but are instead quite unruly. Active processes and practices that come from their own digital reading and writing practices are connected to their patterns of engagement, including those enacted in school. As the young student captured in the selection above states, if their teachers bore them, they will read or write something else.

Making Bodies Docile Through Irrefutable Evidence

It is at this point that I hope to bring together the many strands of conversation I have previously threaded through this webtext. From Trimbur, we have learned that educators have historically stood in a unique position with respect to the ongoing material and rhetorical shifts of literacy theory and practice. Particularly with the nineteenth-century turn to schools as locations where individuals acquired middle-class embodiments, Trimbur emphasizes that school became a place of learning "how to accept supervision,"

follow directions, and concentrate on tedious and repetitive tasks" (289). Foucault helps us understand that this form of disciplining requires a particular kind of body—one that is passive and moldable, able to be shaped so that it can practice those techniques schooling hopes to instill. In *Digital Nation*, we continually confront bodies that are active rather than passive with respect to literacy. These bodies are not seeking literacy instruction but instead are orienting themselves toward reading and writing embedded in non-school contexts. Our notions of literacy are being radically fragmented and reassembled by the continued empowerment of unschooled digital literacies.

As educators, we must begin to make sense of this dynamic precisely because our positions are not disinterested. Again, Foucault's theory of discipline might help us better understand our positions. Foucault suggests that within the classical age the power of institutions lie in their ability to enact power from a dual position of privilege: they both dictated standard techniques and produced knowledge that legitimated those practices. Describing the eighteenth-century army, Foucault says, "it was a real force, an everthreatening sword ... because it was a technique and a body of knowledge that could project their schema over the social order" (168, emphasis mine). As Foucault often references in *Discipline and Punish*, the academy presents an interesting example of this phenomenon, responsible for imparting operations and processes as well as for creating the knowledge that rationalizes them. Students sit in rows, their time is scheduled, and their bodily movement is regulated. At the same time, the academy through both scholarship and underlying values transmitted through pedagogy simultaneously makes decisions about what literacy is and how it should be conceived and measured. In the current political/educational climate, these techniques and knowledges are frequently subject to strong forces including increasing corporate power as well as that of national, state, and local government forces that operate outside academic institutions. However, it is important for educators to take responsibility for our own roles in positioning literacy, even on a day-to-day basis in our classrooms. To conclude my analysis of distracted student bodies, I will focus on this dynamic by briefly exploring how *Digital Nation* represents distracted brains through neuroscientific evidence, a move with the potential to newly reposition student bodies as passive and literacy as cognitively measurable.

Digital Nation legitimizes claims for changes in the materiality of literacy practice (both as decline and progression) through neuroscientific evidence and images of the brain that result from brain scans and other imaging technologies. To be more precise, the neuroscientific studies cited in *Digital Nation* do not purport to directly measure literacy ability. Instead, they measure activities and performances (like relationships between multi-tasking and productivity, for instance) that then become connected to claims about literacy by association. This move has become common in scholarship that explores the cognitive effects of technology use by scholars inside and outside disciplines like cognitive psychology (see Carr, Davidson, Wolf). For example, Hayles navigates a great deal of neuroscientific material to argue for the binary of "hyper" and "deep" models of attention as generational preferences. Although she initially cites John Bruner's cautionary tale that education specialists should be wary of making pedagogical decisions from "basic brain research," she later argues that "brain imaging studies are changing that situation, because they allow correlations between observable actions—what the subjects are doing at the time the image is taken—and metabolic processes in the brain" (192). To support her assertions about hyper and deep attention and their relationship to reading and writing ability, Hayles draws on Michael Posner's brain research that argues that younger individuals' brains are changing as a result of extended video game play.

By highlighting the role of brain imaging in contemporary representations of distraction, I do not mean to initiate a critique of neuroscience from the outside. Instead, I hope to identify neuroscientific evidence as a new and important actor in the discourse that creates literacy crisis so that we can begin the work of understanding how it functions rhetorically with respect to our conceptions of literacy. Recent research in neurorhetorics asks rhetorical scholars to weigh how neuroscientific arguments construct authority (see Gruber et. al; Jack and Appelbaum; Mays and Jung). It is also important for rhetorical scholars to position and analyze neuroscientific evidence within the historical trajectories of the interdisciplinary discursive arenas that it enters. For example, Trimbur argues that literacy crisis rhetoric tends to be substantiated by evidence that is difficult to refute. In particular, "Test results ... possess a kind of facticity that appears to put them above question and beyond interpretation. They appear, that is, to offer self evident accounts of

literacy crises—of deteriorating educational standards and declining student performances" (282). Read within the historical cycles of crisis discourse that Trimbur identifies, the move to brain imaging can be read as another turn toward irrefutable evidence.

Neuroscientific evidence is a particularly fitting actor for the contemporary discourse that creates crisis because it responds to the problems that unruly bodies engaged in non-school-related literacy pose for literacy as a schooled, measurable, cognitive skill. By positioning the locus of meaningful activity not in the cognitive mind but in the biological brain, neuroscientific evidence can have the effect of suggesting that the most important impacts of digital literacy practice are not those that take place within social and cultural communities of practice but instead within the brains of individual practitioners. This move once more positions the student body as docile in Foucault's terms by bypassing the operations of the active body while constructing the brain as a passive physical apparatus continually rewritten by technological forces. This attitude is foundational to Nicholas Carr's now well-known introduction to *The Shallows*, in which he describes his "uncomfortable sense that someone, or something, has been tinkering with my brain, remapping the neural circuitry, reprogramming the memory" (5). We might even suggest that it is also behind public worries about how the effects of technological changes such as teaching keyboarding instead of cursive writing in public schools will diminish cognitive capacity. While there is much to be learned from current brain science, even cognitive psychologist Steven Pinker, a staunch defender of the biological nature of mind and language, has taken issue with Carr's arguments about the effects of the Internet on the brain, suggesting that "cognitive neuroscientists roll their eyes at such talk" and urging that the "solution is not to bemoan technology but to develop strategies of selfcontrol" (n.p.) Importantly, Howard Rheingold in NetSmart similarly worries about the technologically deterministic warrants of Carr's argument and calls for the exercise of human agency in constructing "mindfulness" toward the use of new technologies through acts of self-initiated training (and indeed by helping students learn new techniques for attention in academic classrooms).

For literacy educators teaching students who have grown up digital, it is important to acknowledge the power that comes from being part of institutions that shape literacy

technique and knowledge. While there is certainly an important place for neuroscientific research in these conversations, I am asking educators to be cautious about drawing on this form of evidence to widen a perceived gap between us and them without also looking to cultural and social contexts of literacy practice and technology use. By constructing students as pervasively distracted, we risk participating in discourse that positions students as lacking agency with respect to their own habits of engagement. It would be a shame for this to happen at such an opportune moment, when the rise of digital reading and writing offers an opportunity to argue for the importance of self-sponsored and community-based literacies and to help students learn from and about them.

An Alternative Positioning: Paying Attention to Emerging Practice

In this webtext so far, I have suggested that many educators, parents, and cultural critics are experiencing a felt sense that something is wrong with respect to contemporary students' literacy development. Though it is difficult to put our finger on what makes us uneasy, current discourse indicates a tension between the sense of literacy as embedded in everyday practice and a conception of literacy as cognitive skill. Literacies developed outside of school—especially involving digital technologies—are agentive and powerful in the lives of contemporary students. These practices affect the way that they engage, particularly their receptiveness to traditional techniques of schooling. However, we often resist valuing out of school literacies and create new academic standards to measure appropriate literate engagement. A material shift in literacy is underway but not without strong resistances and tensions especially from literacy professionals.

Crisis rhetoric functions as a method of diverting attention. However, Computers and Writing specialists have a history of scholarship closely linking technology use to emerging literacy practices. Collin Brooke (2009) has offered a generous reading of digital practice, urging us to describe emerging strategies (see, for example, Brooke's discussion of "persistence of cognition," pg. 157). While Trimbur's 1991 call to action importantly focused on increasing access to education, literacy researchers who specialize in Computers and Writing can intervene by uncovering the complexity and importance of vernacular literacies. Doing so will allow us to reposition students as having more agency

with respect to their own literacy development, as well as to develop pedagogies not only from a sense of what students lack but from how they are already successful.

What might it mean to position student bodies differently? In research and pedagogies, we can listen to, learn about, and theorize from the enacted literacy practices embedded in everyday student activity, rather than labeling them from a decline perspective. In order to give a sense of how I have tried to re-see student practice from this paradigm, I briefly describe two recurrent practices from my recent study of student writing outside classroom space. Within this IRB-approved research focusing on individuals writing in coffeehouses, I observed how students dealt with multiple demands on their time and attention. From one point of view, the activity of the writing sessions I describe appears distracted. Students often spend only seconds with one writing technology or medium before turning to another. However, this movement often 1) represented a way of coping with complex information landscapes, 2) was planned, and 3) resulted in writing performances that students deemed successful. While I observed similar kinds of engagement across all student participants in my research, here I focus on one participant, Kathryn, who helped me understand that practices often conceptualized as "fluff" rather than "stuff" were central to the unfolding of writing in lived experience.

Kathryn is a graduate student in Philosophy who agreed to let me observe her writing during a particularly crucial moment. She had a long research paper due at midnight on the night that I observed her. With this in mind, she had assembled multiple materials in order to complete the task. Something a simple as finishing a final seminar paper required that she work with materials distributed across media, space, and time. Because so many materials were required, some sources she needed to reference were digital, while others were printed out on copy paper that was relatively easy to cart around, and still others were in books (not so easy to carry when she needed twenty of them). When negotiating sources for her seminar paper, it was already clear that she would need to move across different kinds of materials, working with a level of attention that allowed her sometimes to focus in on a particular text for a long time but also to move quickly among and between them, synthesizing and dialoguing multiple scholarly voices.

Kathryn's seminar paper, however, was not written within a vacuum. While the individual task I observed already required her to shift attention across a number of media, genres, and arguments, she also wrote within the context of the other things that mattered in her life. When this larger context for her school writing is considered, it is no wonder that Kathryn frequently turned to other media and texts during her writing. Thus, the number of materials important to any given writing moment multiplied. Dealing with this proliferation of texts required Kathryn to attend to many kinds of writing over the course of completing the seminar paper. If she did not check her SMS text messages, her mom would think she had gone into hiding. If she didn't keep an eye on her Facebook account, her friends wondered if she had survived finals week.

Compartmentalizing

With this background in place, a practice central to how Kathryn and other students negotiated complex literacy environments involved enacting techniques of separation, which they described as necessary to structuring and negotiating among literacy demands placed on them. The blurring of domains and boundaries that happened when students were writing led them to create structures to separate the jumble into separate, accomplishable tasks and "information spaces," to borrow the language of Johndan Johnson-Eilola who associates a similar process with symbolic-analytic work (71). Describing this practice, Kathryn said, "I need to separate things in some crazy way that makes sense for my brain." She enacted compartmentalization both as a technique for managing source material for her essay, as well as for making decisions about when to attend to the social relationships that always seemed to blur themselves into writing work time. For example, Kathryn focused on the role annotation played for separating out text that mattered for her argument. Pointing to a annotated source article she had brought into the coffeehouse in order to write her paper, she said, "I like to be able to see right at this part on this article, this is what I thought was really important." In writing her paper that night, Kathryn often moved seamlessly across multiple previously annotated print copies of scholarship. However, this movement was not a result of her distraction, but rather of the previous work she had done to compartmentalize or separate out parts of the

scholarship that mattered for the given task. In a similar way, she created structures for negotiating her social life, deciding how long she would focus on the seminar paper before checking Facebook or her phone. She did—often—move across multiple technologies. However, to call her distracted is to miss much of the planning and awareness she put into helping herself negotiate a difficult academic task, while maintaining meaningful relationships. The compartmentalizing that allowed students to subsequently move quickly among tasks varied widely, from how participants organized materials to how they made decisions about when to engage and when to ignore the dings on their cell phones or messages coming into their inboxes.

Monitoring

Alongside compartmentalizing, participants kept a close eye on changing contexts in order to adjust to new situations. I called this practice "monitoring" (see also Pigg, Zhou and Rosson). Participants writing not only focused on accomplishing tasks in isolation but also kept check on the world around them in ways that allowed them to adjust holistically and "triage" in response to changing priorities. Again, this happened within individual tasks but was also an important part of bringing together the social and affective needs that influenced how writing took place. For instance, Kathryn liked to work in public because she felt lonely at home. Being in a coffeehouse allowed her to position herself to gaze outward toward others, leading her to feel like part of a shared inhabitant of a space that was growing and changing rather than an isolated individual. In her videotaped work session, Kathryn often glanced up at the configuration of people and things around her, monitoring the setup, looking for changes, and motivating herself to keep working by breaking the monotony with a sense that others around her were engaged similarly. This physical activity was mirrored in how she monitored email and social networking accounts. While this activity might be seen as distraction, it was planned and fulfilled the affective needs that made a difficult writing task accomplishable.

Compartmentalizing and monitoring are alternative ways of understanding what appears as distraction. Reading these as embodied behaviors connected to the materiality of literacy, I avoid localizing student literate activity as cognitive preference or suggesting

that the pulls of multiplicity against which students work are related only to personal, generational, or cognitive inclinations toward digital media. However, by calling for a different positionality with respect to student bodies and emerging literacy practices, I do not mean that students no longer need academic literacy instruction. Looking toward emerging practices need not mean that students no longer need school to help them grow in their literate lives. Computers and writing specialists, in fact, have long argued that we not make broad assumptions about what students' prior experiences with technologies mean for their ability to be rhetorical, critical, and functionally literate, especially in their encounters with writing technologies (see Selber). For example, Davida Charney studied the cognitive effects of technologies like hypertext on cognitive processing before Scott DeWitt conceptualized the "impulsive reading model" habituated into web reading as a process against which to teach rhetorical reading. More recently, Stephanie Vie advocated teaching critical analysis in order to help students deal with the overload of information and ubiquitous advertising to which they have often become desensitized. And Amy Kimme Hea has similarly cautioned educators to avoid making assumptions about the knowledges and skills that students have with social media. Understanding the emerging practices of contemporary students only better prepares literacy educators for scaffolding pedagogies based not on lack but instead on existing practice.

Conclusion

Conceptions of literacy are currently in flux. The historical narratives about literacy that Trimbur uncovered in his 1991 piece are still at the heart of the current struggle. However, the power of digital literacy to shape and change human experience more broadly has shifted literacy crisis rhetoric. Embodied literacy practices (how bodies perform and engage literacy) and not merely linguistic features are associated with crisis discourse. In particular, self-sponsored, out-of-school literacies are constructed as agentive within this framework but often detrimental to ongoing literacy development. The image of this new crisis discourse is often figured in the body. Critics see text message language within school essays and lament the downfall of Standard English. But, they also associate the contemporary mediated embodiment of students with a cognitive state that creates

illiteracy. Within this model, in question are not only the ends of literacy encountered when they are displayed on the printed page or screen, but the mediated means of acquiring literacy. We are anxious about how new digital literacies are affecting more established ones, and digital technologies are the central target for our concern.

Trimbur was clearly on to something when he suggested that universities and writing professionals are multiply implicated by literacy crisis rhetoric. And it is because we are implicated that it is important to take on the complex task of interrogating the way we position student bodies with respect to literacy: Are we really concerned that students can't pay attention well enough to write? Or is it more frightening to think that they might stop paying attention to us and to our authority to impart both knowledge and operation of literacy?

Acknowledgements

This webtext is the product of many prior experiences and conversations. I wish to thank Angela Rounsaville for conversations during my initial drafting period—particularly for helping me connect more deeply to Trimbur's argument in the context of literacy studies theory and embodiment theories. In addition, I wish to thank Lynn Lewis for her ongoing dedication and supportive feedback, the late Genevieve Critel for her encouragement, the anonymous reviewers of this webtext for useful and valuable comments, and my research participants for their time and willingness to share.

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