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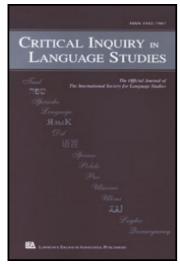
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RETHINKING CRITICAL LITERACY IN THE NEW INFORMATION AGE

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This article looks at new information and communication technologies (ICTs) as sites of public pedagogy in that they produce particular forms of knowledge and literacies and reproduce representations that are always mediated through specific social relations. Public pedagogy as a process that constitutes a broader category beyond classroom practices, official curricula, and educational canons, extends to all sectors of human life, including virtual spaces. No longer restricted to traditional sites of learning such as educational or religious sites, public pedagogy produces new forms of knowledge and apprenticeship and new narratives for agency and for naming the world. Virtual spaces as sites of public pedagogy create, in turn, forms of literacy that go against traditional understandings of what constitutes a text. The article also attempts to discuss yet unrealized alternative directions in these virtual spaces, where critical literacy becomes emancipatory and an essential and powerful tool in the project for a radical pedagogy.

Introduction

This critical understanding of technology, with which the education we need must be infused, is one that sees in it a growing capacity for intervention in the world, one that must necessarily be subjected to the political and ethical test. (Paulo Freire, 2004, p. 85)

With the rapid growth of information and communication technologies (ICTs), virtual space is slowly becoming the natural habitat of human beings in a rapidly globalizing world of networks, liquidity, and extraterritoriality. In this framework, it is important to understand this globalizing world and its virtual extension. At the same time, it is imperative that we develop a deeper compre-

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hension of the transformation in multiple realms of human life including communication, human relations, labor relations, and of course, pedagogy due to the advent of new technologies. In this article I propose a global critical reading of virtual spaces as sites of public pedagogy with emerging new literacy perspectives. This critical reading could shed light on both the limitations and the possibilities concerning agency, meaning-making, and identity formations in a globalization of virtual and real cultures characterized by enormous contradictions.

According to Henry Giroux, "texts of numerous types now operate within global cultures of circulation offering new discursive forms, modes of literacy, and types of interaction. The combination of new technologies and diverse modes of circulation, in turn, are mediated through various interpretative communities, which both situate texts and confer meanings in ways that cannot be specified in advance" (2005, p. 44). This observation points to new forms of fluid "texts" that challenge and redefine the traditional view of literacy as a rule-governed, fixed, and rigid narrative that is culturally and socially defined. In this process, producers and interpreters of new texts also assume an interactive new role that defines them as active participants rather than passive meaning consumers. These new texts are media forms, cultural products, and popular culture practices that include, but are not limited to, images, videos, e-books, hyper readings, multimedia blogs, online discussions, social networking sites, RSS Feeds, wikis, podcasts, video games, music, and instant messaging (IM). In the radical shift from print to screen, these texts have gained increased power through interconnectivity, bidirectionality, hypertextuality, and the existence of a very large audience. 1

Texts, as social practices and cultural products, can travel in milliseconds from one part of the planet to another and reach an unprecedented number of people. At the same time, text decoders (readers) and producers (writers) can engage in creating new texts through interaction as they negotiate meanings and representations (as is the case, for instance, with blogs or online discussions). The key here is *connectivity*, that is, *access*. As I will demonstrate in the following section, while much has been written about the disparity in technology use and the now-famed

¹For a detailed discussion on the effects of the new media, see Kress (2003).

"digital divide," issues of access continue to plague peoples' entry to the global village, where trade and goods (including cultural goods such as movies and music) almost instantaneously cross borders unimpeded, and where billions of people still remain locked out by more rigid and militarized cultural and physical borders as noted by David Trend: "While a minority of the world's population is moving into a virtual society, with all of the attendant benefits, the rest of humanity remains in a world of material scarcity. As increasing amounts of commercial and cultural activity are shifting to the Internet, the distance between the connected and the unconnected may well be creating a new global information proletariat" (2001, p. 10).

Connectivity and access create, in turn, a new class of "literate netizens" situated opposite a large group of "unconnected underclass." Accordingly, Manuel Castells has observed that "between the discontinuous spatial elements of the informational city, there will remain switched off, wireless communities, still real people in real places, yet transformed into urban shadows doomed to haunt the ultimate urban dream of the new technocracy" (1985, p. 19). Castells's astute observation points to the paradox of diversified technologies. While new technologies have found their way to more and more homes, the more sophisticated tools still remain out of reach due to both their high cost and the required cultural and knowledge capital needed (a code for negotiating meaning) in order to use them. According to Castells, "[w]hile the media have indeed globally intraconnected and programs and messages circulate in the global network, we are not living in a global village but in customized cottages globally produced and locally distributed" (p. 341) where power and economic relations remain rigidly asymmetrical.

Given the rapid emergence and expansion of the netizens class, literacy needs to be critically understood within a theoretical framework that makes access issues central. New perspectives on literacy define the borders of new texts and the expanded borders of the digital age (Luke & Elkins, 1998), and they constitute and structure the way we construct knowledge, define and redefine representations and transcendent forms of language use, and produce new discourses and discursive practices at the crossroads of a new information age. I take these literacies to include not only the use, production, reproduction, and dissemi-

nation of new "text" forms but also the interpretation, meaning negotiation, and text creation and transformation on the part of their audience. What we have in place is a bidirectional process where authors and readers interact and co-create. Individuals negotiate meaning, forms of knowledge and discourse, develop multiple identities, and are socialized in new discursive and material communities that galvanize specific histories, ideologies, and knowledge.

All this is mobilized in a virtual but still deeply political and ideological space that, ultimately, constitutes another site of public pedagogy. As such, it becomes the ground for literacy practices and discourses as individuals try to negotiate texts as social practices to make and communicate meaning, albeit in a nontraditional and highly creative way. It is also unavoidable that "literacies" in this new space create new forms of "illiteracies" to which they are always dialectically situated. At the same time, the issue of language takes yet another twist. Breaking from the traditional confines of communicative action, language, as a means of making sense of one's world and as core of human identity, finds new registers and modes of expression in virtual spaces. It is a language that emerges from lived experiences, localities, and context-bound negotiation of identities. People use their own reality and lived experiences as the basis for their evolving literacy (Freire & Macedo, 1987), and it is through this language that they recreate their real and virtual worlds. For instance, the production of highly specialized and unique discourses among young people engaged in playing online video games (Gee, 2007) or the creation and development of online fan-fiction discourse (Black, 2008) go beyond the traditional print-based, standard literacy to include transcendent forms of language use that "allow individuals to represent conceptual realities that are hidden or obscured by traditional language use" (Rommetveit, in Black, 2008).

As a consequence of the nuanced conceptualization of skills, capacities, practices, and discourses contained in these new public pedagogy spaces, and beyond "computer literacy," "technological literacy," "electronic literacy" (Castells, 1985, 1996; Warschauer, 1999), and "critical media literacy" (Kellner & Share, 2005; Luke, 1994; Luke & Elkins, 1998; Alverman & Hagood, 2000), I want to suggest a more global critical reading

of virtual spaces as sites of public pedagogy with emerging new literacy perspectives. My understanding of literacies in the information and communication technology landscape is based in a critical framework (Freire & Macedo, 1987; Giroux, 2001) and draws its interpretive and analytical power not simply from the ability to read, interpret, and deconstruct the text at hand but rather from a position of being in the world and with the world critically (Freire & Macedo, 1987). That is, literacy should not be viewed as a form of verbalism reduced to a mere codification and decodification of the world decontextualized *from* the world. It springs from the realization of one's location in the historical, social, political, and cultural spheres, as well as from his or her relations with these diverse spheres, since

[literacy must involve] the "word universe" of people who are learning, expressing their actual language, their anxieties, fears, demands, and dreams. Words should be laden with the meaning of the people's existential experience, and not of the teacher's experience. Surveying the word universe thus gives us the people's words, pregnant with the world, words from the people's reading of the world. (Freire & Macedo, 1987, p. 35)

This literacy is situated within the world of the learners and must always be context bound (Gee, 1996, 2004; Barton, Hamilton, & Ivanic, 2000). As a social practice, it breaks the continuity and consensus of common sense (Bhabha, 1999) and uses different texts as points of departure in an attempt to link the local with the global and vice versa. By common sense, I mean the fragmentary, incoherent, and inconsequential conception of the world, which is uncritically absorbed by the various social and cultural environments and is in conformity with the social and cultural position of those groups whose philosophy it is.² At the same time, this kind of literacy bridges multiple texts and meanings and creates anchors between private worries and public troubles. In short, it provides critical tools so learners can understand "their anxieties, fears, demands, and dreams" (Freire & Macedo, 1987, p. 35). Critical literacy comes always with a perspective on action and intervention beyond the discursive and the textual. An important task, then, is to locate those spheres of action, virtual and real,

²For a detailed discussion on common sense, see Gramsci (1971).

where we can attempt educated interventions, subversions, and, ultimately, changes. Rethinking our pedagogies in light of the new ICT landscape seems to be at the core of this change.

New technologies are emerging in multiple sites of human activity with lightning speed. They have produced discourses and practices in information, telemedicine, environment, education, media, entertainment, business, and so forth. Transgressing space is undoubtedly one of the major achievements of new technologies and "digerati" (the new literati) have been talking about the new global village. According to Fairclough and Chouliaraki, "the global scale and sheer complexity of contemporary economic and social processes increase the sense of helplessness and incomprehension" (1999, p. 3). That is, access to the "global information village" requires an economic, cultural, and discursive passport that, at some level, makes a lie of the eradication of borders implied in the global village notion.

Another important dimension of the new ICTs has to do with technological hype as a consumerist byproduct of neoliberalism that is largely promoted in advanced, capitalist, industrialized societies where almost everything is reduced to a mere commodity. I am discussing this issue more extensively in the section on "Technohype." Technologies as new commodities target audiences as consumers, while as cultural commodities they are also semiotic in that they are composed of texts (words, images, and other registers) to be consumed and assimilated. Therefore, it is interesting to look at what kinds of knowledge, histories, and representations are reproduced and promoted in this market-driven space. Again, these forms of knowledge need to be understood pedagogically as the arena of education occupies a central position in the dialogue between formal/informal, standard/nonstandard, acceptable/nonacceptable text forms. According to Douglas Kellner (2002), "[t]he demands of the new global economy, culture, and polity require a more informed, participatory, and active citizenship, and thus increased roles and challenges for education."

This article weaves through new forms of literacy, as these resonate with questions of access, and the much-celebrated cyberdemocracy. I start with defining new texts in the framework of the new information and communication technologies and I compare them with more traditional forms of literacy, always with a perspective on critical literacy. I then link the production and

consumption of these new texts with issues of access in a cultural and economic framework. Next I provide a discussion where I try to deconstruct technolype and the myth of cyberdemocracy by linking them to the concept of "public sphere." Ultimately, I attempt to discuss yet unrealized alternative directions in virtual spaces as sites of public pedagogy, where critical literacy becomes emancipatory and an essential and powerful tool in the project for a radical pedagogy. A radical view of literacy, according to Giroux (in Freire & Macedo, 1987) "revolves around the importance of naming and transforming these ideological and social conditions that undermine the possibility for forms of community and public life organized around the imperatives of a critical democracy" (p. 5). Fostering critical literacy in the information age by means of a viable democratic pedagogical project allows "aspects of this new world which enhance human life [to] be accentuated" and "aspects which are detrimental to it [to] be changed or mitigated" (Fairclough & Chouliaraki, 1999, p. 4). However, the latter cannot become a reality until the former is critically understood and denounced. In other words, the ideologies that sustain asymmetrical access to both literacy, in general, and technological literacy, in particular, due to class, race, culture, and economic discrimination must be unveiled and denounced before we can announce the emergence of cyberdemocracy—a democracy not founded "on the basis of reveries, false dreams, or pure illusions, ... [but a democracy dependent] ... on the faithfulness of those who dream to their historic and material circumstances and to the level of technological scientific development of their context" (Freire, 2004, pp. 32–33). Thus, understanding their context implies a deeper comprehension of the interdependence between the impediments of the digital divide and the liberatory promise of new ICTs.

Literacies, Illiteracies, and the Asymmetries of Access

Issues of Access

The grim picture of the information city and the communities in the urban shadows introduced earlier by Manuel Castells illustrates very powerfully the issue of access to new technologies. New technologies are so diversified that they open up new spaces for access and reach literally millions of people. In turn, more and more people can "publish" their ideas/texts for a very large potential audience. Connecting with people around the planet is one click away. However, membership in the global village is restricted by economic, social, cultural, discursive, and political considerations. The prohibitive cost of high-technology goods, personal computers, high-speed connections, and other hardware do not resonate as important considerations for people who do not even have a telephone landline. This is a real problem considering that in the United States, for instance, there are approximately 65 telephone lines per 100 people, while in Bangladesh or Afghanistan there is less than one line per 100 people (Trend, 2001, p. 23). Even within the United States, however, telephone penetration varies between rural and urban areas and along income lines. In households where income is under \$20,000, there is less chance there will be a telephone line. In addition, rural, lower-income minorities have particularly low rates of telephone lines per household. New technologies are widening the gap, rather than democratizing spaces and increasing access and technology use. Those in the urban shadows of the "techno-city" not only do not have the material resources to facilitate their access, they do not have the "code" to decipher the complicated discourses involved in the operation and use of such technologies. Jeremy Rifkin (2000) notes that "when one segment of the human population is no longer able even to communicate with the other in time and space, the question of access takes on political import of historic proportions. The great divide in the coming age is between those whose lives are increasingly taken up in cyberspace and those who will never have access to this powerful new realm of human existence" (p. 14). For groups of people who will never have access to any of these new informational or entertainment technologies, the issues of skills, capacities, and multiple layers of literacy are nonexistent. It is of vital importance to first open up the discussion about how to bridge the gap between those who have access and those who do not and how to challenge the popular assumption that new technologies are inclusive and accessible to all. Access here should be understood as articulating on two levels, since it involves two sets

of constraints. One is the *agenda of access*, the range of available technologies as tools, which is necessarily linked to material conditions. The second is the *code of access*, that is, the cultural capital and discourses necessary to negotiate both meaning as well as content of the agenda of access.³ The code of access necessarily includes multiple layers of literacy practices. These two factors are mutually informing and dependent upon each other in that, even if access to new technological tools is granted materially, one still needs the required educational and cultural capital to negotiate them both operationally and discursively. At the same time, somebody who has acquired the discourse necessary to negotiate new media still requires the actual tool in order to materialize access. There are groups situated in the two poles of this reality that have differential degrees of access since the latter depends on discursive and material resources.

Given the rapid hegemonization of the code, the agency invoked in the unproblematized discourse around access is not simply "a matter of the spatial relations of places and spaces and the distribution of people within them.... It is a matter of the structured mobility by which people are given access to particular kinds of places (and resources), and to the paths that allow one to move to and from such places" (Grossman, cited in Giroux, 2000). Consider, for instance, the following paradox set forth by Trend (2001): Most U.S. corporations only recruit online, and two-thirds of the world's children have never made a phone call! In light of these facts and statistics, there is a clear need to question the very foundations of our "global village" in the age of worldwide networks and information technologies. What does it take to have access? What could access to more information technology mean for people who have traditionally lived in its shadows? What kind of information would they have access to and for what purposes?

Against a landscape characterized by asymmetries of both material and cultural distribution, it is helpful to reconsider the issue of access, not only within an economic framework but also in cultural terms, designated earlier as the "code of access"—a concept that includes literacy practices and discourses. In this

³Here, I am borrowing from Zygmunt Bauman's discussion on "choice." See Bauman (1999, 72–73).

sense, literacy implies that there is a need to "develop sophisticated ability to negotiate a range of registers, dialects, and languages with an international audience" (Warschauer, 1999).

Literacies and Illiteracies

Before we can even engage in a debate over literacy, critical or otherwise, we must discuss the ideologies responsible for the existence of illiteracies that include the inability to read the word, the incapacity to read the world (including the dialectal relationship between the word and the world), the lack of technological literacy (that includes multiple understandings and definitions), among other illiteracies, all of which are inextricably linked to access. Before I go on to discuss illiteracies in relation to access, and while it is not my intention to get into an exhaustive presentation of the multiple treatments of the concept of literacy and its ideological bases, I would like to provide a brief discussion on my perspective on literacy as a means to apprehend critically its various understandings as an object of knowledge. The term literacy has known many definitions and analyses, and it has been discussed from various perspectives. Notions of literacy have been associated with different theoretical traditions ranging from traditional theories of schooling (instrumental/functional) to interactive, cultural/reproductive, multiliteracies (Kellner, 2002; Warshauer, 1999; Gee, 1999, 2004; Cope & Kalantzis, 2000), and, more recently, to multimodal views (Kress, 2003). I understand literacy to be the individual's act of reading, decoding, interpreting, producing, and transforming a text that takes on specific meanings in diverse social, pragmatic, material, and virtual contexts. This act is both action and interaction, as it necessarily works on both an individual and a collective level that are dialectically intertwined. In addition, it is important to highlight that the act of reading is intertextually connected (i.e., my text is always combined with the other's text and vice versa).⁴ Obviously this notion of literacy is politicized and invested with ideological meaning since it can produce cultural, political, and discursive significations, or reproduce canons, oppressive relations, and power asymmetries.

⁴For a detailed discussion on "intertextuality," see Kristeva (1986).

From a critical perspective, the traditional meaning of the word "literacy" as the ability to read and write is rooted in an instrumental/functional ideology that privileges "useful knowledge" through a process of rote memorization of what is deemed worthy (Apple, 1979; Aronowitz, 2008; Gee, 1996, 2004; Giroux, 2001; Freire, 1985, 1998, 2004; Freire & Macedo, 1987; Macedo, 1994). Steeped in positivism, it assumes a pedagogy of transmission where instruction is decontextualized and the audience is passive (Giroux, 2001). In the mainstream educational and public discourse, literacy captures what a given society deems important in terms of knowledge, representations, cultural capital, and social experiences. Gee (1996) correctly notes that this view situates the responsibility for literacy with the individual person and not with the society, since a given society imposes its standards and norms and the individual is called upon to comply. If the individual fails to do so, it is that person's virtues, skills, capacities, and, ultimately, character that are called into question, rather than the way society structures its literacy norms along power hierarchies. This instrumental/functional view insists on the so-called single truthfulness of meanings via the manufacture of grand narratives and is subordinated to practicality and usefulness while it fails to examine how different societies construct models of "acceptable" knowledge and cultural norms, how this knowledge is produced and used, in what contexts, for what purposes, as well what the roles are of text producers and receivers. Given the inherent instrumentality of technology, a functional approach in the context of the new information and communication technologies means ignoring how particular types of knowledge are produced and reproduced through new media/means of dissemination, who has access to them, and how this information is used beyond skills training. "Functionality" in these new technology-bound texts posits the ability and skills to operate high-tech equipment, and this use is divorced from the meanings, representations, information, and discourses that are produced and reproduced through them. Literacy as simply the acquisition of mechanical skills is reductionistic to the degree that the now technologically revolutionized society. New information and communication modalities restructure and transform not only skills and competencies inextricably connected to labor organization, but they are also the very modes of production.

However, even when people acquire the skills and become competent in the use of high-tech equipment along the lines of a traditional literacy approach, the question of "purpose" arises as an important one. What does it mean when new media and information technologies are used solely for personal (individual) growth and advancement (of course, only for those who have access to them) and for increasing one's skills and access to more information, thereby possibly affording them more chances to land a better job? That is, what happens when the purpose of literacy is restricted to "benefiting" only the individual? It is interesting to note at this point that beyond the hype around the availability of high-tech jobs or the assumption that technological literacy is a passport to a better position in the labor force, statistics point to a different reality. According to a 2007 U.S. Department of Labor report, with projections between 2006 and 2016, among the 30 occupations with the largest employment growth are much less technologically demanding jobs, such as registered nurses, retail salespersons, customer service representatives, and food preparation and serving workers, rather than Silicon Valley executives. This paradox cannot be understood outside a theoretical framework that may shed light on the restructuring of labor in a postindustrial society that, in turn, is directly tied to issues of access.

Gunther Kress's discussion is illuminating because his ideas make us rethink the nature and functions of literacy. He poses the notion of "multimodality" of the new media, which necessarily includes the "existence of numerous modal resources involved in the making of messages—word, spoken, written; image, still and moving; music; objects as 3D models; soundtrack; action" (2003, p. 22). Within the multimodality, obviously, mainstream notions of reading and writing and their functions are put to the test and transformed since "language and literacy now have to be seen as partial bearers of meaning only" because there are other modes that bear meaning as well (p. 35). He suggests that literacy is involved in both representational modes (what a culture makes available as means of making meaning—speech writing, image, gesture, music) and media of dissemination (what the culture makes available as means for distributing these meanings as messages, books, computer screens, magazines, videos, films, radios, chats). Obviously, these categories become forms of

knowledge when embodied in actual social life. Meaning modes become "situated" when individuals associate them with the experience of participating within communities that create or engage in specific domains. For example, according to Gee (2004, pp. 17-18), "people acquire situated meanings for words—that is, meanings that they can apply in actual contexts of use for action and problem solving-only when they have heard these words in interactional dialogue with people more expert than themselves (Tomasello, 1999) and when they have experienced the images and actions to which the words apply." He insists that dialogue, experience, and action are crucial if people want to move beyond "just words for words, if they are to be able to cash out words for experiences, actions, functions, and problem solving. They must be able to build simulations in their minds of how the words are used in talk and action in different specific contexts." Since they are called to apply this to multiple contexts of use, "they generalize the meanings of the word more and more, but the words never lose their moorings in talk, embodied experience, action, and problem solving" (Gee, 2004, pp. 17-18). Digital spaces provide multiple contexts through different modalities where students can develop meanings anchored in their experiences and daily practices. This is where a need for a critical reading becomes fundamental, where critical literacy is understood as the capacity of reading and decoding the means of meaning making and the ability to locate and access the media of dissemination while positioning them in a cultural, ideological, social, and political context.

Against the message "emanating from school authorities [...] to 'forget' all other forms and sites of learning" since "[A]cademic and technical knowledge become the only legitimate forms, and the school is the only reliable site" (Aronowitz, 2008, p. 25), a critical literacy approach for our "new times" acknowledges that pedagogy is a public business and is not contained simply within classroom walls but breaks into every sector of public life, cyberspace, and real and virtual worlds. Literacy is seen as a social practice situated in space and time, ideologically and culturally informed through a meaning-making process. People produce their social/cultural world in all their practices in virtual and real spaces (Gee, 1996). Accordingly "literacy informs the understanding of the ways in which the

world is read in particular times, places, and circumstances ... Literacy always comes with a perspective on interpretation" (Gee, 2004). This type of literacy is liberatory in that it becomes a medium and a force for human agency and political action and enables human subjects to "read the word and the world" (Freire & Macedo, 1987) as they become conscious of themselves as historical beings who intervene in the world to transcend their position as mere objects to which they have been relegated by the dominant power structure.

Deconstructing Technohype and Cyberdemocracy

To change "aspects [of the new information age] which are detrimental" so they are furthering both democratization and humanization, it is imperative to develop critical tools of analysis that can sift through the current hype that colonizes the promises and possibilities of cyberdemocracy. The development of critical tools will provide safeguards against a notion of cyberdemocracy as a slogan that falsely equates consumerism with democracy. For example, as it does every year, *Time* magazine featured The Person of the Year on its December 25, 2005-January 1, 2006, cover. Skipping other figures from the political, show business, or economic terrain, in 2006 it declared the Person of the Year to be nobody else but "You: Yes, You." The subtitle read: "You control the Information Age. Welcome to your World." The cover illustration featured a white keyboard with a mirror where the computer screen would ordinarily be, allowing each reader to see his or her reflection. According to *Time*, "You" are all these individuals who have created some type of Web content, be it a video blog, a wiki, a social network site, or even a Second Life avatar, anything that made the Internet a "massive social experiment," a new site for "cyber-democracy." The article went on to say that "the new Web is a very different thing. It's a tool for bringing together the small contributions of millions of people and making them matter. Silicon Valley consultants call it Web 2.0, as if it were a new version of some older software. But it's really a revolution." That is, a revolution of individuality, one may add, since readers can see only their individual reflections on the cover mirror and not the millions of people they are

supposedly interconnected with. Time writers insist that "this is an opportunity to build a new kind of international understanding, not politician to politician, great man to great man, but citizen to citizen, person to person. It's a chance for people to look at a computer screen and really, genuinely wonder who's out there looking back at them." What we clearly see here is a shift from institutions to individuals who now surface as citizens of a new cyberdemocracy. This is the paradox of our times: the lonely person behind the computer screen supposedly more interconnected than ever. The individual creates and owns the information and communication world as a monad, power lies with the one who interconnects with the many. While I do not want to downplay the pivotal role of human agency, creativity, and action in the formation and maintenance of democratic practices, the process of individualization and ownership in the development of information technologies must be critically understood. That is, it is important to ask "who is this individual?" Any response to this critical question must factor in issues inherent in the interaction of race, ethnicity, class, gender language, education level, income, and so forth that shape both the possibilities and limitations of cyberdemocracy. At the very least, any in-depth analysis must be situated within the current myth of cyberdemocracy, where millions of people are supposedly mobilized, participate in debate and action, and organize for change by bypassing those experts to whom they formerly delegated the affairs of the polis. These aims are far from reality in a largely commodified World Wide Web. Therefore, before I discuss the emancipatory possibilities of new ICTs, I find it necessary to address technolype, consumerism, and the promise of cyberdemocracy. There are currently at least two opposing perspectives.

First, there is a blind celebration of technological hype as the apotheosis of progress and liberation, as clearly illustrated on the *Time* cover, as if the new technological tools will solve world problems if we just all get "wired" (or should I say, go "wireless"?). The hype is supported and promoted both by a market-driven society endemic to our neoliberal times and as well as commodification and consumerism. Economy has become the highest value of social life and human activities are assessed based on their economic dimension. For instance, it is interesting to note that, beyond the individual level, the largest Internet

communities are commercial and not social or cultural.⁵ This is directly connected to who creates and produces information, for what purposes, and with what agenda, and how this information is disseminated. Advertisers will give you the virtual space you need in exchange for running ads and allowing pop-up windows beyond your control. Or they will force you to use applications where you have to share, for example, your e-mail or other personal information, which is then used for market analysis and mass e-mailing (spam). Thus, the purported "public" space comes with very private compromises that ultimately serve the needs of a booming virtual market and go unmonitored by organizations that would normally oversee commercial activity and best-business practices.

Furthermore, ICTs are romanticized and an illusion is created of a picture-perfect participatory democracy and a "new public sphere." First of all, there is nothing "public" in a highly commercialized sphere such as the Web, and democracy does need a real public space where it can be realized. As Giroux (1983, p. 236) argues, "[t]he concept of public sphere reveals the degree to which culture has become a commodity to be consumed and produced as part of the logic of reification rather than in the interest of enlightenment and self-determination." Furthermore, a public sphere is constituted as a particular way to use language in public, and the proliferation of public spheres is a proliferation of ways to use language in public (Fairclough & Chouliaraki, 1999, p. 5). Therefore, a highly commodified discourse does nothing to further virtual spaces as public spheres. This is analogous to what happens in real life where more and more we witness the disappearance of public spheres. The emergence of cyberspace as an alternative public sphere can be understood in light of this disappearance of everything "public" in the United States and globally and the depoliticization of public discourse. Increasingly, the private sector is taking over the support and welfare functions of the state, such as education, healthcare, retirement, and so forth. It redefines them and turns

⁵There are currently more than 80 million registered Internet domains, of which around 60 million are commercial, according to http://www.domaintools.com, an Internet-based domain and Internet statistics site. This is indicative of the commodification of the Web.

them into commodities to sell back to those who can afford them. At the same time, the language used for the affairs of the polis is also depoliticized; it is a pragmatic language that can only talk about the concrete, the tangible—a language that has lost its historicity and transcendence. Depoliticization is produced by reinforcement of specific discursive practices and, in turn, produces its own discourse of naturalness and rationality. Ultimately, according to Boggs, a revitalized politics will "depend on a subversion of instrumental rationality, which is one of the hallmarks of contemporary technological discourse Democratic transformation requires a sustained popular attack on instrumentalism" (2000, p. 16). Given the profound crisis of politics, the deterioration of social and civic engagement, and the general public's alienation from the political system, the challenge to reinvent a decommodified, historical, and political language is great. Chris Carlesson observes that "perhaps the loss of public space has driven the dreamers into cyberspace, with the only thriving 'public communities' found on the Internet bulletin boards" (cited in Boggs, 2000, p. 273). Can cyberspace serve as the new public arena for open debate and a revitalization of politics, as Time suggested in 2006? Boggs is cautious in answering this question when he notes that technolype fails to take into consideration "deep cultural and psychological obstacles embodied in the whole paradigm of technological discourse. There is no way of avoiding the question of precisely what kind of citizen-empowerment messages get transmitted in cyberspace." He insists that we know that

global informational technology is already thoroughly permeated with such capitalist values as: a tough aggressive individualism, an intensely competitive ethos, commodified images, and an instrumental rationality.... Thus "citizenship" that takes shape in cyberspace, no matter how open and popularly accessible the medium, will probably lack the social concreteness and immediacy long understood as a precondition for democratic involvement and decision making. The world of the Internet, which has revolutionized the flow of information and images, nonetheless favors somewhat anonymous and detached modes of communication—highly appealing to those with the time and resources (a tiny minority of the global population) but hardly a step in the direction of a repoliticized public sphere. (2000, p. 271)

Boggs's brilliant observations question new information/ communication technologies as emancipatory tools by default. He also raises questions about the values reflected in the new media, values inextricably related to the real world. This is in line with the remark in Trend (2001) that "accompanying the hightech consolidation of economic capital is a comparable consolidation of cultural capital. The worldview of most people already is profoundly shaped by the information they receive in electronic formats. As digital media become the prime conduits for personal communications, business transactions, and entertainment of all kinds, the commodification of cyberculture becomes synonymous with the commodification of human experience" (p. 11). Blind overcelebration of new technologies not only fails to link them to real life, but it also promotes an instrumentalization of knowledge, what Shiller calls an "electronically organized total environment" that has the potential to "colonize virtually every realm of social space' (cited in Boggs, 2000, p. 270).

The second tendency regarding new information and communication technologies, situated in the other extreme, draws directly from the "colonization of social space" to question the total domination of the new media in human life and activity and sees new informational technologies as tools for domestication and oppression. Technological rationality is colonizing and/or canonizing everyday life, robbing individuals of freedom and individuality by imposing technologically imperative rules and structures upon thought and behavior (Kellner, 1964). As Marcuse noted in *One-Dimensional Man* in 1964, operationalism becomes the theory and practice of containment and creates conditions for pacification. This view challenges ideas of democratization that supposedly will grow out of technologies as if inherent to them and sees prevailing forms of social control as technological. It views users as a captive audience and cautions against the total domination of the machine that will regulate every aspect of human activity. As bell hooks (1996) notes, "[w]hile audiences are clearly not passive and are able to pick and choose, it is simultaneously true that there are certain 'received' messages that are rarely mediated by the will of the audience" (p. 3). In this view, the impetus for more technology comes from a "new desire for social control that will make people more easily manipulated by corporations" (Trend, 2001, p. 8).

These two trends, or perspectives, point to some more pressing questions. How do new technologies, as privatized instruments, become emancipatory tools? How can we move from a solipsist preoccupation to shaping a collective project? How do we move from the individual to communities with political projects? Is there such a thing as technological neutrality? Where are the pockets of hope in the projected "total domination of the machine," and how can we use new technologies as a counterdiscourse for domination? In the next section, I will present new ways of thinking about information and communication technologies as emancipatory tools in the framework of critical literacy. I propose that in education in general, and language education in particular, we reframe the way we think about new technologies to the extent that language is never neutral but deeply political. Language educators can, through progressive and critical literacy, enable students to develop skills to unmask the dominant ideology while remaining always conscious that "changing [the world] is difficult, but it is possible" (Freire, 2004, p. 100).

Conclusion: New Technologies as Possibilities for Critical Literacy

Leila—she doesn't give out her last name—is a video blogger. Leila has posted 49 videos on YouTube under the user name pppppanic (that's five p's). She speaks directly into her webcam about her life, her opinions, her shifting moods, what she did that day. She says *um* and *ah* a lot. She has been known to drink and blog. Sometimes she doesn't speak at all, just runs words across the screen while melancholy singer-songwriter stuff plays in the background. (Grossman, 2006)

Leila belongs to the skyrocketing number of young people who are creating new ways with words—ways that not only fracture the traditional hegemony of written texts but also create new empowering writing zones where youngsters are less and less afraid of making their private thoughts public in words that reflect who they are. They are creating or interacting with content on the Web from text blogs to video blogs (vlogs), but also from art blogs, photo blogs, sketch blogs, MP3 blogs, and podcasting, to multiplayer online gaming communities, wikis, and social net-

working sites such as Facebook and MySpace. On these multiple sites, new texts and discursive practices are produced making them inherently pedagogical. New ICTs can be understood as sites of public pedagogy in that they produce particular forms of knowledge and reproduce representations that are always mediated through specific social relations. These diverse pedagogical sites, according to Giroux (2005), also organize "personal and public structures of attention and concern within specific circuits of power as part of their attempt to reach distinct audiences," and as such "they demand a radical rethinking of how visual and visualizing technologies are produced, circulated, and taken up" (pp. 45–46).

It is important to note that public pedagogy refers to a process that constitutes a broader category beyond classroom practices and the confines of official curricula and educational canons and extends to all sectors of human life, including virtual spaces. No longer restricted to traditional sites of learning such as educational or religious sites, public pedagogy produces new forms of knowledge and apprenticeship, new ways of understanding and naming the world, and new narratives for agency (Giroux, 2005). Sites of public pedagogy create, in turn, forms of literacy that go against traditional understandings of what constitutes a text. These texts often use language in an unorthodox way, adopt informal writing styles, and make use of text shortcuts and emoticons. In a sense, they redefine the nature and functions of language and break away from a rigid, grammatically and syntactically structured model that aspires to imitate and mimic the standard norm by creating new forms and uses based on peoples' own daily lives and realities. This is accurately analyzed, for example, by Rebecca Black (2008) in her discussion of English-language learners who, as new members of the emergent netizens class, have gained a sense of authorship in the process of text production—a process no longer totally mediated and guided by the imposition of rigid rules of the standard discourse. According to Black, "[r]ather than using language and text solely to reproduce existing genres and participate in concretized social patterns, these adolescent fans are creatively making use of a range of representational resources to design new, hybrid genres of fan fiction that allow them to enact specific socially situated identities" (p. 73).

Digital texts and discourses need to be negotiated and understood both as embodiments of an existing, real, social, economic, and cultural world and as interpretations of this world. In addition, various groups experience these texts in different ways or do not experience them at all. They mediate these texts differently through their own lived experiences and realities and make sense of them within multiple frameworks of interpretation. We are, therefore, witnessing the emergence of new discursive spaces that do not necessarily have a material location. Services, goods, discourses, information, and capital have achieved an extraterritorial status, and we need new vocabularies to talk about them and new symbolic frameworks to understand them. Given the urgency to understand the ever-changing and shifting relations due to the onset of technology, it is imperative that educators rethink their pedagogies so as to shape education in ways that advance democratic practices. Otherwise, as Carmen Luke (1995) correctly notes, "unless educators take a lead in developing appropriate pedagogies for these new electronic media and forms of communication, corporate experts will be the ones to determine how people will learn, what they learn, and what constitutes literacy" (p. 71). The role of educators in redefining the space of literacy is very important since meanings are not guaranteed anymore, which, in turn, opens up the arena for struggle over interpretation.

New information and communication technologies as sites of public pedagogy function on two levels. For one, they expand possibilities for language transcendence. That is, discourses produced in blogs, chats, online fan fiction, online discussions, and special interest groups, among others, do not comply with the restricted definition of literacy nor to the norms of what language is in terms of what constitutes grammatical correctness and rules for writing. In fact, through digital media, young people are reclaiming the authorship of their own words as well as their worlds, since it is through their language that they can reconstruct their historical and cultural location. As Jim Gee (2005) notes,

there are new ways with words, and new ways of learning, afoot in the world—ways not necessarily connected to academics or schools. These ways are, in their own fashion, just as special, technical, and complex as academic and school ways. But they are motivating for many people for

whom school wasn't.... These new ways, though, are just as important—maybe more important—for success in the modern world as school ways. These new ways are the ways with words (and their concomitant ways of thinking) connected to contemporary digital technologies and the myriad of popular culture and specialist practices to which they have given rise. (p. 4)

While these new ways with words are very real and fundamental to students' emerging literacy, by no means am I suggesting here that young people engaging in communication via digital media or creating Web content are necessarily engaging in some sort of revolutionary act or transgressing or intervening in the public sphere. Even though longitudinal and quasi-experimental studies on teens interacting online have, as found by the Pew Internet and American Life Project (2008), identified "a set of civic learning opportunities (such as simulations of civic or political activities, helping others, and debating ethical issues) that promote civic outcomes among youth," and that that teens who take part in social interaction related to the game, such as commenting on websites or contributing to discussion boards, are more engaged civically and politically, I do not take engagement in Web activities as necessarily participating in some sort of political project. It would be naïve to assume that technology is emancipatory by default or that young people who are engaging in highly commercialized video gaming are doing something subversive.

On the contrary, what I am suggesting is that this new text production and interaction within virtual spaces, because it *is* rooted in the cultural capital and daily realities of students (again, those students who have access), needs to be taken seriously, both as a form of self-expression and as a space with political potential. Because it springs from young people's experience and social and historical location, it has the potential to become emancipatory. When students feel that what they bring into the classroom and virtual space (including their language) is valued, and they realize they can write about things that interest them in a language they feel comfortable with, a set of conditions for meaningful engagement is already present. In this sense, new ICTs can expand access to students who, due to their economic, class, or language background, always struggle with meaning making via traditional forms of literacy. For example, what does it mean

that the majority of Internet content (an estimated 86%) is in English, the language spoken (as a native language) by only 6% of the world's population? While the development of sites in languages other than English is on the rise, the dominance of the English language unavoidably affects access for non-English speakers. At the same time, those non-English sites are mostly limited to speakers of the specific language—a linguistic reality that compromises the "globality" of the medium. The dominance of English in the digital world is usually assumed as a given an assumption that does not correspond to reality and hides a series of implications in terms of the struggle over meaning with respect to how it articulates as part of a larger cultural politics. Given the current assumption, governing language use on the Web has, for all practical purpose, made English a de facto prerequisite for membership in the digital community. That is, English has become the code of access while, at the same time, it has also allowed for the development of other hybrid forms of "Englishes" in a space where information is now constituted in multisemiotic ways.

I would like to reiterate here that the social repercussions of new technologies are determined not by the internal dynamics of new technologies themselves but rather by their internal social environment. A change in the role of technology requires a change in the structure of society.⁶ At the same time, digital spaces offer the potential to expose students to new forms of apprenticeship and introduce them to new discourse communities where they can become the authors of their own histories and begin to feel increasingly at ease in telling their stories in their own words. These forms of apprenticeship can also take the shape of "vocabularies" that articulate what Bourdieu calls "clinical knowledge," that is, the knowledge of how the socialhistorical works to produce histories, significations, and narratives that "may help you and me to fight more effectively what we see as improper, harmful or offending our moral sense" (Bourdieu, in Bauman, 1999, p. 2). For example, through the access to a wealth of information from alternative sources of media, people can make more informed decisions when they are called to exercise their civic duties. However, the challenge

⁶Here I am borrowing L.S. Stavrianos's discussion on science. See Stavrianos (1976).

presented by the explosion of information on the Web is to find ways that will enable people to sift through the potential information overload and make the necessary linkages to "read" the world critically. In other words, the apprehension of clinical knowledge is necessary for a type of literacy in an entirely political sense, as espoused by Ernesto Laclau (Worsham & Olson, 1999). That is, literacy begins to be possible in a situation where a proliferation of discourses oppose all forms of oppression. In situations of oppression, the oppressed do not immediately or necessarily recognize themselves as such, but once discourses of liberation begin to proliferate and circulate, oppression can then become a question that can reshape new ways of thinking as well as an object of knowledge to be apprehended and transcended. New ICTs can serve as spaces where such alternative discourses can proliferate. For Laclau, a literate culture is a "culture of questions," and it is "the ethical and political obligation of educators and progressive intellectuals to create such a culture, one that is democratic to the extent that the possibility of unlimited questioning exists" (Worsham et al., 1999, p. 4).

Since schooling is not simply a source of training but a site where students develop agency and their civic identity, we need to develop a parallel to our pedagogies that can open up spaces for a culture of questions around ICTs—questions that will equip citizens with tools to understand new digital texts, problematize their use, and explore their potential for serving democratic goals and realizing a political project that liberates rather than succumbs to domestication. In other words, critical literacy should interrogate the exclusionary character of new information technologies as it affects many communities around the world and determine where we can articulate alternative discourses. Within a critical literacy perspective, educators should seek to adopt pedagogies and literacy concepts designed to build skills to make our students simply more competitive in the job market, but we should also embrace educational practices that raise important critical questions about access, equity, linguistic hegemony, and other important questions that are a sine qua non for democratic practices.

A critical perspective on new ICTs and Web hype would mean that we create pedagogical spaces where students can sharpen their critical evaluation skills and raise questions

about content, authority, and canons. Emancipatory possibilities emerge from looking at new technologies historically, from questioning their instrumental/operationalist character, and from understanding their link to real life and especially to market interests. It also means understanding how these new ICTs have redefined labor itself and relations of production.

In digital space there is fertile ground for multiple political projects, for creating a culture of questions and a new set of meanings. True, the Web is flooded with individualism and self-promotion to the point of narcissism. However, it also gives space for multiple voices to come to the surface, voices that traditionally would have no venue: community organizing, access to alternative media, dialoguing on the affairs of the polis and the world, disseminating information from multiple sources, and personal narratives as witness accounts. Web content should move beyond a solipsist preoccupation or the phenomenon of the many watching the many. Individual autonomy does not spring from simply the act of creating content without limits but rather from creating content with a purpose and within the confines of one's individual autonomy. Another challenge in virtual spaces is to awaken a sense of active engagement with politics in order to break down a culture of apathy and disengagement, what Cornelius Castoriadis (2000) has characterized as the "rise of insignificance" in contemporary societies. That is, a state of affairs where reality shows and glimpses into other people's private lives have become more important than true participation in civic life, and where self-interest and individualism have largely replaced the struggles for a welfare state health insurance for everyone, access to education, sustainable development, preservation of the environment, and the eradication of injustice, inequality, and poverty.

The end of this type of critical/political literacy should not be limited to "interpretive understanding" of the new discourses but rather include a contribution to people's access to their own autonomy (their capacity to challenge themselves and to lucidly transform themselves). This project is fundamentally pedagogical—a project for a "paideia of autonomy" against the triumph of neoliberal significations and, therefore, also political. This pedagogical project would necessarily require a language that is based on students' daily lives and experiences, their cultural

and historical location, a decommodified historical language that is part of a democratic imaginary signification that questions any and all authority, including the authority of our own thoughts. This language could be part of a pedagogical project of hope if schools are understood as primary sites where language is produced and articulated.

In these potentially liberatory digital spaces we may be able to connect new information and communication technologies with a politics of transformation and reinvent them, not as a tool of oppression and control but as new spaces that bring the voices of more people to the fore. This would enable those who have been subordinated to transcend their object position and become subjects of their history—a transformative process to allow people to view themselves as "historical-socio-cultural [beings] making and remaking themselves as they do in the history they create ... [where] men and women [realize that they] can change the world for the better, [they] can make it less unjust, but they can do so only from the starting point of the concrete reality they 'come upon' in their generation'' (Freire, 2004, pp. 31, 87).

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