

**Literacy, Info-literacy and Damned Illiteracy,
or
Literacy at all Levels, From the Ridiculous to the Sublime⁺**

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INTRODUCTION

Goody and Watt hypothesize that it is only the existence of written records, hence literacy itself, that makes possible countervailing intellectual positions and finally theoretical knowledge itself (Goody and Watt, 1963). As individuals who seek to develop theoretical knowledge ourselves, as well as to instruct students in how to assimilate and create knowledge, we are inclined to view literacy as one of mankind's most fundamental and most valuable accomplishments individually and collectively. But, when we speak or think of "literacy," just what is it that we have in mind? Does the term convey the same meaning to each of us? Has that meaning changed over time, and if so, what factors are responsible? Furthermore, is it "a good thing" for the concept of literacy to be malleable?

To assist in discussing these questions, we provide a cursory overview of some of the answers found in recent publications on literacy. We cover the following points:

First, the argument is often made that literacy is an ever-expanding concept, with new requirements added regularly to society's definition of a literate person. We will sketch some examples of such expansions.

Second, in contrast to those who see the definition of literacy changing through an additive process, there are many who believe its definition has been, or should be, *fundamentally* altered as a consequence of a number of technological and/or socio-economic factors. This is where we will focus most of our comments, sharing some of the high and low points in our review of the relatively new field of literacy studies, whose devotees often seek to "problematize" literacy as the first step in refashioning it.

Third, we will suggest that the most sensible approach to this business might be to recognize that some aspects of literacy do and should change, but that we are better served if the fundamental definition is a stable one. We hope to offer for your consideration a more stable, less problematic (dare we say, less trendy?) definition of literacy—one that might serve not only as a foundation for teaching literacy skills but also to identify the fundamental set of knowledges, skills and abilities that must be in place before educators can succeed in adding new competencies, such as the ones that we turn to now.

LITERACY AS AN EVER-EXPANDING CONCEPT

The list of competencies expected of today's literate individual is definitely expanding. Many of these "add-ons" to basic literacy are urgently proposed as essential to the global

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workplace or to the preservation or development of democratic societies. For example, throughout the past decade, the profession of librarianship has advocated the need for individuals to become “info-literate” (the prevailing jargon for “library literacy”). The American Library Association’s Presidential Committee on Information Literacy states that “To be information literate, a person must be able to recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information” (American Library Association, 1989, p. 1). The committee lays out an agenda for a coalition of librarians, educators, and public policy-makers to follow in order to raise the info-literacy level of Americans. As good practitioners of modern pedagogy, our librarian colleagues have developed a detailed description of the training objectives for information literacy instruction. The list of objectives for instruction at the collegiate level comprises a ten-page document, with thirty-four performance indicators and 140 specific behaviors that a student should be able to perform after being successfully trained in info-literacy (Association of College and Research Libraries, 2000).

Closely related to info-literacy is computer literacy. Most definitions of computer literacy center on the technical skills involved in using computers and networks, although some definitions also mention the ability to evaluate online information, which is at the heart of the info-literacy skill set.

At last year’s Hersmonceux conference, our fellow panelist, Peter Calamai spoke with us not only about the need for the general public to become more scientifically literate, but also about the obstacles to achieving this goal through the popular media (Calamai, 2001). Also at that conference, Dr. van den Broecke described an innovative effort to raise the level of statistical literacy among Dutch school children through a nation-wide search for the “most average” child (van den Broecke, 2001).

One of the more surprising new concepts of literacy, which we encountered, is “environmental literacy”—defined by UNESCO as “a basic functional education for all people, which provides them with the elementary knowledge, skills, and motives to cope with environmental needs and contribute to sustainable development.” Environmental literacy is seen in terms of a continuum, which begins with nominal literacy (“the state in which one recognizes some of the terms used in communicating about the environment but has little awareness of their meaning”), progresses to functional literacy, and culminates in operational environmental literacy, which is characterized mainly by the individual’s ability and willingness to “examine and choose among alternatives” and to “take positions and actions that work to sustain and develop the foundation of environmental knowledge” (Moseley, 2000, p. 23-24).

Many writers stress the need for “media” literacy in recognition of the pervasive impact of television on our lives. The intent of some advocates for media literacy (or “mediacy”) is similar to that of the info-literacy proponents—namely, to make us better analyzers of content. Writing about the media literacy imperative, Quesada states that, “. . . the aim of media education . . . is to increase students’ awareness of the many forms of media messages encountered in their everyday lives” (Quesada, 2000, p. 49). Others writing on this topic focus more on the ways in which the pacing and images of contemporary media (especially television and, in particular, MTV) have begun to alter the way we think. Ulmer believes that “A powerful new electronic literacy is taking hold, providing a different way of expressing ideas and perceiving the world from written literacy” (Wheat, 1994). Thanks to MTV’s popularization of the electronic media’s ability to present several stories simultaneously, relying on sounds and images more than on words, today’s channel-surfing youth have “burst through the barriers of linear thinking—the

logic of the written word in which one idea leads to the next, sentence by sentence, page by page, in straight lines,” as Ulmer describes it (Wheat, 1994). Some writers even see media literacy, or television literacy, as the single most pressing area for a new literacy campaign. Browne believes that “. . . television is the universal medium, and literacy in it is indispensable if we are going to utilize it, and understand society, fully (Browne, 1992, p. 65).

This sketch is far from a complete inventory of the numerous competencies that are gathered under an umbrella heading of “literacy.” We’ve omitted geographic literacy, financial literacy, oracy, visual literacy, health literacy, philosophical literacy, and cultural literacy—to cite only a few that might have been included and were encountered in our research. But, our focus is on the literature that purports to describe or prescribe changes in the fundamental definition of literacy.

DEFINITIONS OF LITERACY

It turns out that many researchers who work in the relatively new interdisciplinary area of “literacy studies” devote substantial attention to the basic definition of literacy. They do so from a conviction that how we define the term has substantial impact on the goals and methods that are set for literacy education, in particular, and for education overall. Pattison expresses a viewpoint held by many of his colleagues with his declaration that, “We are inadequately literate in part because we have inadequate ideas about literacy” (Pattison, 1982, p. v.)

Definitions of literacy today are multiple, complex, shifting, and often at odds with each other. Graff, notes that:

Less than a decade ago, the place and meaning of the concept and the fact of *literacy* in scholarly and popular understanding were simple and secure. . . [But now,] in the late 1980s, no central theory governs expectations about the roles and meanings of literacy. Its very nature has itself become problematic and a problematic that arouses contention and an increasing degree of critical attention (Graff, 1987, p. 2-3).

Contrary to Graff’s notion that the meaning of the term literacy was stable until the 1980s, it turns out that even as early as the Middle Ages, the term was ambiguous. Clanchy points out that contemporary efforts to determine literacy rates in the 12th and 13th centuries are hindered by evidence that indicates that at times the word *litteratus* was used to convey that a person was able to read (or to read and write), but at other times was used to describe a person knowledgeable about literature. At still other times, *litteratus* was used as a synonym for *clericus*, that is, to indicate a member of the clergy. Medieval descriptions of literacy are further complicated by the fact that they usually refer to a person’s ability to read (or write) in Latin, but sometimes refer to the ability to read or write in the vernacular tongue (Clanchy, 1981, p. 16-18). Efforts to calculate how widespread literacy was at any given point in history are frustrated by varying usages of the word to describe the ability only to read, or to read and make a sign for one’s name, or to read and write.

Today, we generally understand literacy as describing—at the minimum—the ability to read and to write. But, many literacy experts see that definition as too confining. For example, Pattison defines literacy as “mechanical ability with the technologies of language coupled with consciousness of language as a force in human affairs” (Pattison, p. vii). He elaborates this definition throughout his book, which has as its central purpose the development of an enduring and expansive definition of literacy. The following statement conveys one of his key tenets:

Literacy is a combination of variables—individual and cultural awareness of language and the interplay of this awareness with the means of expression. This approach will frustrate anyone looking for a simple, mechanical definition because it distinguishes between the attainment of reading and writing skills and the acquisition of literacy. Reading and writing may be parts of literacy but do not constitute the whole (Pattison, p. 7).

Browne hurtles even farther away from defining literacy as the ability to read and write, seeing it instead as “fluency, ease, understanding in the language of communication used by any *item* [emphasis added] or phenomenon in its rays of outreach” (Browne, p. 2). Note his use of the word “item” in his definition; it is quite intentional. While a great deal of contemporary literacy research bears the stamp of the modern day distrust of language, Browne goes to extraordinary lengths to avoid giving human speech a privileged role in his conception of language. He argues that animals, trees, and artifacts (to mention only a few of the many tongues of literacy he identifies), all communicate eloquently if we are but literate enough to comprehend. To his way of thinking, “If one is fluent in these media of communication one does not need writing. With such fluency, one can hear and read; without it one must remain partially or wholly ignorant” (Browne, p. 8). Browne would have us banish the word “literacy” from our vocabulary as “an old fashioned anachronistic word which should give way to more useful terms” (Browne, p. 19). He recommends the term “fluency” in its place.

MEASURING LITERACY

Even writers who are willing to define literacy primarily as the ability to read and write point out that such a definition, in itself, does not tell us much about exactly what a literate person can do. The recently released International Adult Literacy Survey (IALS, sponsored by the Organization for Economic Co-operation and Development (OECD) and a number of other agencies) acknowledges the need to understand literacy as a broad continuum and to measure it accordingly. Thus, the Survey incorporates a complex set of measures, which evaluate five levels of literacy in three different domains. The rationale for this approach is described as follows:

Many previous studies have treated literacy as a condition that adults either have or do not have. The IALS no longer defines literacy in terms of an arbitrary standard of reading performance, distinguishing the few who completely fail the test (the “illiterates”) from nearly all those growing up in OECD countries who reach a minimum threshold (those who are “literate”). Rather, proficiency levels along a continuum denote how well adults use information to function in society and the economy. Thus, literacy is defined as a particular capability and mode of behavior: the ability to understand and employ printed information in daily activities, at home, at work and in the community—to achieve one’s goals, and to develop one’s knowledge and potential (OECD, 2000, p. x).

The decision to use this complex approach to measuring literacy may, in fact, have been influenced by the work of writers such as Graff, who have argued that our understanding of literacy has been too simplistic and rests on too many unexamined assumptions. Graff critiques earlier efforts to describe literacy in terms of only three levels—illiterate, functionally literate, and literate—stating:

The decades of the 1950s witnessed an increasing tendency to distinguish between a literate and a functionally literate person, defined by the ‘essential knowledge and skills which enable him to engage in all those activities in which literacy is required for effective

functioning in his group and community, and whose attainments make it possible for him to use these skills towards his own and the community's development' (Harman, 1970, p. 227). Crucially, nowhere are the critical concepts of 'effective functioning,' 'knowledge and skills,' or 'development' defined or even discussed. Nowhere is the key notion of functional literacy ever addressed; nor are the implications explored (Graff, 1987, p. 58).

Nevertheless, the concept of literacy as a continuum is not universally accepted—or at any rate, the goal of most literacy campaigns to teach minimal, or functional, literacy is not universally accepted. Smith asserts that he “cannot see how there can be (nor that there should be) such a thing as *minimal literacy*; this seems a contradiction in terms, like *narrow broadmindedness*. Literacy is like boats and telescopes, useful but not restricted to utilitarian ends. To teach reading and writing as if the most important uses were for completing tax returns and job applications is like using a telescope as a door stop” (Smith, 1983, p. viii).

Many literacy researchers want to define the term only within the context of a specific society, rather than to attempt a universal definition. Meek opens her book, *On Being Literate*, with these words: “As soon as you have read the first page of the Introduction of this book, you will know the most important thing about literacy: its definition depends on what people, at any given place and time, take for granted as the usual thing to do with reading and writing” (Meek, 1991, p. xi). In his preface to *Worlds of Literacy*, Barton notes that

Up till now, people developing social views of literacy have demonstrated how literacy is situated in its specific environment and dependent on its context. In this book we want to develop beyond this, showing how there are links and parallels between these different contexts. Our idea is that there are different worlds of literacy: in a country like Britain there are distinct literacies which exist alongside each other; that individual people have different experiences and different demands made upon them; and that different people have distinct experiences of and hopes and purposes for reading and writing” (Hamilton, Barton, and Ivanic, 1994, p. x).

Browne speaks for many of his colleagues with his caution that “imposing conventional *literacy* as the ability to read and write fails to recognize the principles of cultural relativism and the conditions under which communication takes a variety of forms” (Browne, p. 155).

Pattison, on the other hand, differentiates between the need for context-specific *standards* for literacy and the need for a universal *definition*. He acknowledges that “different cultures may have different concepts of language and different technologies to express these concepts; thus there can be no universal standard of literacy;” In fact, this is one of the four overarching premises that frame his work (Pattison, p. vi). But, he also argues strenuously the need for “a universal definition of literacy for scholar and ordinary citizen alike, applicable to the past and present and serviceable for the future” (Pattison, p. 4).

The impulse on the part of literacy experts to define literacy contextually seems to be closely tied to an inclination to refrain from imposing upon other societies the specific conception of literacy that prevails in developed, Western nations or, more specifically, within certain class structures. Researchers such as Heath, Brandt, Labov, and others insist that the modes of communication used within a given community are as valid as the standard language taught in schools and via literacy campaigns. Often, this perspective is taken one step further and the argument is advanced that the dominant culture's very definition of literacy must be expanded to include all modes of communication. Brandt urges that:

If 'standard' literacy is to be achieved among all students, then the scope of the 'standard' must broaden. If standard skills are to be achieved by all, then what counts as standard skills also has to broaden. Pluralism not only requires that many voices be heard but that the differences in those voices be understood (Brandt, 1990, p. 124).

Tuman's account of this phenomenon casts it in a revealing light:

The critical reading and writing skills that for a century have defined the goal of higher literacy education are now seen as representing the language needs of a particular, not a universal, group—a change reflected in the increasing practice of referring to such language use as *academic discourse*, presumably necessary only for those with aspirations of working in a university-like setting . . . Implicit in this shift of focus is the belief that the key to becoming literate is not learning the language forms of any one group . . . but learning the general system by which different groups use language for their own advantage (and often for the disadvantage of others). One attains literacy either by mastering one or more of these discourse practices (hence the common use of the plural form, *literacies*) or by grasping the general social process of domination and control that underlies all language use (Tuman, 1992, p. 47-48.).

LITERACY AND POWER

Many literacy activists maintain that literacy is inextricably tied to systems of power and domination. This view is traced, in part, to the belief mentioned above that “some ‘standard’ forms of language are privileged and others marginalised because of historical circumstances and power struggles” and it results in a conviction that literacy is “central to issues of language and power, intimately connected to our notions of identity and social value” (Hamilton, Barton, and Ivanic, 1994, p. 2). It is not only the knowledge of standard forms of a given language that is suspect, but the very ability to read and write. Browne refers to the work of Levi-Strauss in justifying his own assessment that “The art of writing can be a put-down and a keep-out exercised by the cognoscenti, to whom it provides the mechanism for a priesthood to impose itself on a public which either does not know the secret or can be intimidated by its use” (Browne, p.20). Perhaps the most striking aspect of this tendency to conflate literacy and social domination is the notion that literacy campaigns themselves often constitute an attempt by the powerful few to control and dominate the many, by teaching them only a limited literacy. Arnove and Graff emphasize this characteristic in their historical review of literacy campaigns:

Historically, there has been constant tension between the use of literacy for achieving individual versus collective goals. . . Throughout history, the provision of literacy skills to reform either individuals or their societies rarely has been linked to notions of people using these skills to achieve their own ends. To the contrary, reformers advocating the extension of education to the populace have attempted to restrict the ability to read to learning a particular text or doctrine. They commonly feared that unbridled literacy would lead people to new visions, to new ways of perceiving and naming the world that were not acceptable (Arnove and Graff, 1987, p. 7).

Some who write about literacy even seem to disparage its value—at least when defined in traditional ways. Describing the work of Brandt, Heath, and others who denounce the dominant culture's tendency to discount “the countless compelling uses of language by disenfranchised groups,” Tuman asks, “Of what special good are reading and writing if they are just two other ways for people to relate to each other through language?” (Tuman, p. 47). Galtung wonders

“What would happen if the whole world became literate?” He replies that not much would happen as a result—largely because most societies today use the process of schooling, rather than the process of education, to teach literacy skills. He argues the superiority of education, which he maintains “should and could be centered around values.” He adds that “values tend to equalize people much more than facts do: of facts one can know more or less, in values one can believe and [my] belief is as good as yours.” He challenges the reader to imagine a conception of literacy wherein “the ability to enter a dialogue would be seen as equal in importance to the ability to read and write,” and asks, “. . . should not literacy be defined more broadly as *how to deal with words in a social setting*, not merely how to read and write them?” (Galtung, 1981, p. 271-85).

While only a few of the writers we encountered disparaged the fundamental value of literacy to this extent, numerous literacy experts today question whether literacy confers the benefits to society that have often been attributed to it. Many, for example, deny the assertion that a society’s acquisition of literacy and its economic development go hand in hand. Graff, in particular, has focused much of his research on demonstrating that “The relationship of education in general and literacy in particular to work, occupation, and their rewards remains an imprecise one and often contradictory” (Graff, 1981, p. 233). The following excerpt from Pattison is indicative of the thinking of many of literacy experts in this regard:

Both the simple and the functional definitions of literacy tacitly assume that there exists a mechanical relation between the skills of reading and writing and social development. . . There is no *prima facie* reason to make this assumption, however, and in fact a new generation of social historians is now busily engaged in proving that no such relation exists. . . [E]ach of the three definitions contains an ideological basis. Each assumes to varying degrees that those who cannot meet a standard of literacy are ignorant and unwashed, and, conversely, that the ignorant and unwashed are illiterate by the given standard (Pattison, p. 119-20).

Galtung paints a similar portrait of traditional thinking with regard to illiteracy, stating that “illiteracy campaigns are conducted very much in the same manner as anti-smallpox or anti-malaria campaigns; illiteracy has to be eradicated so that the country can claim that the territory is free from that plague” (Galtung, p. 279).

Likewise, many of these authors seem to be on a quest to prove that literacy does not, in and of itself, enhance the worth of an individual nor, in and of itself, awaken critical consciousness. In fact, Pattison maintains that just the opposite is true:

Literacy does not precede but follows some more fundamental movement of the will toward knowledge. . . Does the mind become more aware because it becomes literate or literate because it becomes more aware? In civilizations like our own, reading and writing—the technologies of literacy—are so closely tied to consciousness of language that this question is usually answered with the reassuring reply that reading and writing make better minds. I reject this reply. . . Once awakened, consciousness may turn to literacy for fulfillment, but the awakening itself occurs beyond literacy. . . The impulse toward consciousness underlies all literacy but is not itself literacy. It is the mysterious act of the mind discovering itself (Pattison, p. 136-37).

Pattison also debunks the often-touted claim that literacy leads to the act of thinking, or to a certain kind of thought process. John Stuart Mill is one of the early expositors of this avowed

attribute of literacy. As Pattison describes it, “Mill’s essay *On Liberty* is built on the unstated premise that in a free society, where the flow of ideas is unchecked and the populace has access through reading and writing to these ideas, the truth will eventually triumph because in the end men will be reasonable about ideas once they have had the opportunity to scrutinize them” (Pattison, p. 148). But Pattison counters that “Noble as this theory of liberty is, it must be rejected as unreliable. Nothing in experience indicates that possession of the mechanical skills of reading and writing automatically confers political wisdom, advances human rationality, or leads on to truth. As has often been pointed out, Nazi Germany was one of the most educationally advanced nations on earth, and the dissemination of reading and writing skills must have been nearly universal.” He adds that, as of the date of his monograph (1982), the then Soviet Union’s efforts to raise the literacy rates within its empire had not inculcated its populace with a critical political consciousness. And so he delivers the “following postulate: there is no guarantee that because people can read and write they can also think” (Pattison, p. 149-50).

Although many contemporary literacy experts refrain from using literacy as a yardstick to measure the worth of a man, there is no denying the strong tendency of individuals who become literate to recalibrate their own sense of self-worth (especially when they attain literacy as adults and, thus, through real intention). Meek, who has spent many years teaching adults to read and write, relates that “However and wherever people learn to read and write, literacy adds to their sense of human worth and dignity” (Meek, p. 3).

If, as seems probable, the way that we define literacy and the value that we accord it, shape our understanding of it, what impact, if any, do the tools of literacy have upon our understanding of it? Have changes in the technologies of reading and writing caused changes in literacy? A sizeable number of contemporary writers proclaim that a seismic shift in literacy is underway right now as a consequence of the computer technology: a shift from print to online, or electronic, literacy. Some authors see this in-process transformation as a wholly positive development; others perceive risk and loss lurking amidst more beneficial consequences. But advocates and naysayers alike convey an overall sense that this particular transformation of literacy is inevitable.

A NEW LITERACY

Tuman certainly awards technology a starring role in the unfolding drama of literacy’s evolution, opening his argument with these words:

It would be comforting, for example, to be able to depend on the basic definition of literacy as ‘the ability to read and write,’ but the meanings of *reading* and *writing* are themselves unstable. Even worse, their meanings have shifted in the past and may shift again in the future, precisely in response to technological change, so that questions pertaining to the impact of technology on literacy become circular: how do we study the impact of a new technology when our understanding of literacy itself is shaped by an existing technology, often in ways that are not fully conscious? (Tuman, p. 2).

He foresees that the computer could alter the processes of reading and writing so thoroughly that we would not need to develop these skills at all:

Are we not looking at a future where advances in computer scanning of text, voice recognition, and voice synthesis may allow people who cannot write (that is, cannot encode speech) to produce written documents. . . and people who cannot read (that is, cannot decode

text) to listen to a computer ‘read’ (recite) any written text? Rather than heightening the demands of literacy, such computer-based technologies may well wind up relieving us of many of the traditional burdens entailed in transcribing and decoding texts (Tuman, p. 25).

Short of such a complete metamorphosis of reading and writing, Tuman suggests other ways in which the computer might alter, if not their definition, then at least their use. He contends that, at present, the “paradigmatic text” in collegiate instruction is the essay, and he acknowledges that, in general, the use of the computer has done little to improve students’ ability to compose essays. If anything, the computer may have degraded such composition skills, by making it more difficult for students to have a sense of the whole work. Writing in 1992, Tuman probably had not yet witnessed the profound impact that e-mail has had on students’ writing abilities, as a consequence of its tendency to foster informality, rambling, alternative spellings, loose or nonexistent grammar, and the use of emoticons in the place of language to communicate feelings and even ideas.

But Tuman does imagine that the very presence of computers might, over time, cause a new format to replace the essay. He speculates that the newsletter or the research report might take on this role and offers these thoughts about such a potential change:

Is it not possible that the design features of word processors will lead us away from a concern with the generation and development of complex thought and in the direction of more effective communication of widely shared or collectively generated information (the common content of newsletters)? Or, what if the paradigmatic text moves in an entirely different direction, becoming, for example, a research report generated from a carefully structured search of the new electronic storehouse of collected wisdom (and information), a modern electronic database? Or moves in a third direction, where the paradigmatic text is no longer a text at all but an electronic conversation in which different parties read and respond to each other instantly (in *real time*) and informally over a computer network? (Tuman, p. 4).

It is the potential of the computer to obliterate the barrier of linearity, through the use of hypertext¹, which Tuman and others see as particularly likely to refashion the literacy of the digital age. Hypertext enthusiast Michael Joyce extols its fluidity and its mirroring of thought processes in a way that the printed text cannot achieve. He foresees hypertext-based literacy opening our way to “a kind of shining electronic village upon a hill—an integrated personalized, machine-enhanced, universally accessible, associative, new, yet familiar, world, platted upon the patterns of synapses, deeded to each according to his needs” (Joyce, 1988, p. 41).

Tuman himself is a bit more measured in his assessment of hypertext’s impact on literacy, but still predicts that the impact will be substantial. He describes the online text as “nothing but a database out of which new readers construct paths to meet their specific and individual needs” and the author of the online text as “nothing but the source . . . responsible for establishing and maintaining the rules for operating that database.” In such an environment, Tuman sees no “basis for the central notion of print literacy,” which is “that literate exchange involves the

¹ *Webopedia* provides the following definition of hypertext: “A special type of database system, invented by Ted Nelson in the 1960s, in which objects (text, pictures, music, programs, and so on) can be creatively linked to each other. When you select an object, you can see all the other objects that are linked to it. You can move from one object to another even though they might have very different forms.” <<http://www.webopedia.com>> (July 30, 2001).

comprehension of the unity of knowledge or vision represented by structures in either the distant author or the present (and seemingly stable) text” (Tuman, p. 65).

Online readers, by virtue of their interaction with the hypertext, become “fully engaged,” Tuman concludes, and are lifted out of the “passivity and lethargy associated with being only the receivers of other people’s prepackaged ideas.” Tuman commends the ability of these new readers to “add their own comments and their own links to this ever-expanding web of information about English literature” (Tuman, p. 66). While he cautions that there may be losses as well as gains in this transition, he is nevertheless certain that hypertext will fundamentally alter “our primary notion of what it means to read,” by eradicating what has been at the “center of print literacy,” namely, “one’s sustained, close involvement with one text” (Tuman, p. 75).

The ease with which one can create multimedia “documents” is also predicted to have great impact on our conception of literacy, as was noted at the opening of these remarks in the brief discussion of media literacy. Whereas some experts envision mediacy as an “add-on” to literacy—that is, a new type of literacy, which we must acquire while also maintaining existing literacy skills—others find evidence that our fundamental notion of reading and writing is being modulated by the centrality of graphics and multimedia to so much of our everyday communication.

A number of those who study that relationship between electronic technologies and literacy champion the potential of these technologies to admit a greater number of people into the halls of literacy simply by redefining what literacy entails. Browne remonstrates that “The old concept of literacy as fluency in print media locks more people out of literacy than admits them in.” He warns that “With the continued rise in media of communication other than print, using print as the only medium of literacy will continue to do more harm than good as the disparity between print and other media of communication broadens” (Browne, p. 26). Likewise, Tuman applauds changes not only in the technology of writing but in the ways in which writing is taught in school because now “all students . . . have a chance of succeeding, in no small measure because success itself, like the governing model of literacy, has been redefined” (Tuman, p. 126).

But are Tuman and his colleagues correct in their prediction that computer technology will radically transform literacy? What has been the impact of past changes in the technologies associated with literacy? Pattison opens his discussion of this question with the assertion that “Language is the *primum mobile* of intellectual life;” he then goes on to note that “McLuhan and others have treated speech as technology.” But, Pattison dismissed this classification, reminding us that

. . . speech is only technological by straining the definition of technology beyond the limits of sense. Speech is a requisite for the application of all other technologies. Writing is clearly a technology, a human endeavor that like all technologies constitutes a manipulation of the physical environment by man. But the part of nature that writing seeks to organize—language—is nothing but speech itself. . . If speech is technological, then so is the human brain and the beaver’s tail. But to call any of these technological is to confuse technology with evolution. Technology is the application man makes of his brain and his capacity for language. It is not synonymous with brain and language (Pattison, p. 23-24).

Pattison identifies rhetoric as the initial technology of literacy, and reading and writing as the second. He points out that humankind faced losses as well as gains with the introduction of the

technology of writing, and he reminds us that new technologies have often been opposed because of the fear of such losses.

In the European tradition, Plato is the most eloquent opponent of writing . . . [he] believes deeply in the ability of language and the dialectic to apprehend the divine reality behind nature. Speech is a vehicle for this apprehension, but writing distorts speech and thwarts our access to real being by corrupting memory (Pattison, p. 39).

On the other hand, the gains for mankind that have been attributed to the technology of writing are impressive. Pattison reports that the work of Goody, McLuhan, Havelock, and others

would lead us to believe that writing has altered the way men think; that it has given birth to history, skepticism and science; that it has changed the political structure of the West. Writing is said to have opened for examination the inner life of man, or on the contrary to have alienated man from himself and the world. Our particular writing system, employing the alphabet, is said to have fathered modern science and technology, and to have been a necessary cause of democracy and the industrial revolution (Pattison, p. 40-41).

Current day writers continue to attribute similar, vast consequences to mankind's adoption of the technology of writing. For example, in their 1995 essay on "Thinking and Literacy," Carolyn and Eugene Headley extol the contributions of writing to the development of civilization with these words:

For ancient Greece, the advent of literacy brought about a transition from *mythos* to *logos* as the dominant mode of thought and problem solving . . . Poetic forms of ordinary speech gave way to prose. Logical and linear forms of explanation and expression emerged. In short, history, science and philosophy were born. The linear and logical aspect of written language added new patterns for thinking. These rational new patterns and their corresponding written forms provide an effective prod to memory, allowing greater permanence to both individual and collective decisions . . . A government of laws and not of men has as its prerequisite a literate citizenry . . . Literacy allows one to look back and project forward—it makes history possible . . . The world of Western civilization was dramatically changed and subsequently shaped by Cadmus' gift of an alphabet to the Greeks (Headley and Headley, 1995, p. 11-12).

But Pattison rejects these claims as lacking a foundation, and proposes that "By itself, writing is an inert force . . . Writing by itself does not change the world although in combination with certain other organic forces it might furnish the occasion for change. The chief among these other forces are first the degree and kind of awareness about language existing in the society where writing is used and second the economic structure of that society" (Pattison, p. 41-42). For Pattison and a number of other literacy experts, it is not technology that shapes literacy but rather conditions within society—including but not limited to means of economic production and the ethos of the time—that shape how the technology is used and, along with it, the contours of literacy. He illustrates his point with this eloquent description of the use of writing in classical Greece:

Writing did not make the Greek mind skeptical, logical, historical, or democratic. Instead, it furnished an opportunity for these predispositions to flourish. Well before Pericles or even Homer, the Greek-speaking peoples had developed a consciousness of language peculiar to themselves. The work ascribed to Homer is our best but not our only evidence of this literacy. . . The foundation of this literacy was a critical examination of language as the key

to life. Even before they had reading and writing, language was for the Greeks a divine medium which it behooved mortals to treat exhaustively and with the greatest diligence (Pattison, p. 45-47).

Pattison develops his point that reading and writing are, in themselves, inert technologies through an extensive analysis of variations in the uses made of these technologies by the Phoenicians, the Hebrews, the Spartans, and the early Christians. One of the most interesting aspects of his book, which cannot be adequately summed up in this paper, is his discussion of the impact that the Christian understanding of Logos has had on our conception of language, literacy, and the world around us.

Pattison's thesis about the relationships among technology, literacy, culture, and economic production is further advanced through his discussion of the printing press. Traditionally, the invention of printing is thought to have had powerful, direct impact not only on the pervasiveness of literacy, but also on its nature. Indeed, contemporary writers such as Tuman who argue that the computer is radically altering the nature of literacy, base their conclusion in part on their perception of the ways in which printing and other major technological shifts have transformed literacy in the past.

Pattison counters that "Neither print nor television necessarily leads to any particular social result. . . Among us, print did not create a capitalist economy; rather an already existing tendency toward such an economy influenced the book trade. . . Printing for us is both a cause and an effect of that particular historical event, the European Renaissance" (Pattison, p. 88-89). His discussion of the interactive impact of printing, literacy, and the socio-economic environment during the centuries following Gutenberg is far too extensive to summarize here. A key element of his argument is that "New technologies do not drive out old forms of literacy. Rather, the new technology, be it print or television, lives side by side with the existing state of literacy and gradually blends with it in complex ways that change but do not necessarily diminish or abolish it" (Pattison, p. 115). Pattison uses an analogy to convey the subtle impact of various technologies on literacy, stating that "It is too much to say that the medium is the message, but certainly the medium colors the message. The same food stored in metal or plastic acquires a distinct flavor from its container. So print gave its flavor to the old debate about literacy" (Pattison, p. 112).

CONCLUSION

And so the debate continues, and we invite you to engage with it. But before closing, we want to offer our assessment of the debate and, as promised, provide an alternate definition of literacy. In doing so, we seek guidance from the great "jazz literate," Charlie Mingus, who admonished, "Making the simple complicated is commonplace; making the complicated simple, awesomely simple, that's creativity."

The move from literacy to literacies parallels the general decline in stable intellectual distinctions that has been the result of science's (i.e., reason's) loss of authority.

The act of defining, by definition, is a setting of limits, of ends. Open-ended definitions of literacy are limitless and serve no purpose, therefore, other than to create the image or shadow of intellectual respectability. The process is similar to the discovery or invention of the sanitation engineer—need we say more?

In the contemporary world literacy, the term, shares the same fate as ethics, the term. The pressure to recognize countless competing and mutually exclusive so-called ethics results only in denying any rational or moral foundation for any ethics whatever. What that means in practice is that one may respect and/or observe any ethics or no ethics indifferently. There is no meta-ethics.

So, too, literacy. The pressure to identify every putative mode of expression as a literacy is precisely the method to deny to any and every mode of expression the distinction of being literate or cultured. In that sense, the struggle over “ebonics” in the United States aims less to elevate a gutter argot to social acceptability than to diminish any and all claims to elevation of established usages. Against this background, to affect to define literacy, that is, to set limits for literacy, is akin to spitting in the wind.

But this far in there is no turning back. So, let us just say what literacy—that is, lettered accomplishment—is not. At the most general level, it is not any *other* kind of accomplishment or facility—not computered, not legaled, not numbered, not cultured, not politicalized. Those are all areas of worthy accomplishment, as is many another. But none of them is in itself lettered accomplishment. So, it is only by analogy that we apply the name literacy to these and other things.

We can understand the thing itself by asking, just what is being analogized? When we inspect the various adapted forms, we see that it is not mere expression, for “environmental literacy” does not yield a cognate expression. It is not writing, for “geographical literacy” does not yield a cognate expression. It is not reading, for “jazz literacy” does not yield a cognate expression. It is not “understanding, cognizing, conceiving, or thinking literacy,” for “library literacy” does not yield a cognate expression. Taking this last as a jumping off point, one can understand a library. The library scientist presumably does so. But folk apply the term “library literacy” rather to users who know how to navigate the library. (A student who asked, “Can one access books there?” was not an illiterate person, though certainly an ignorant one!)

In all of our examples, it turns out that we would similarly have to identify a general facility that is predicated of the named substance, environment, geography, jazz, and library. Perhaps, then, the only way to define literacy is with reference to the substance that is present when the term remains unmodified. And that is letters.

If we speak of facility with letters, or lettered accomplishment, then we have the form that is consistently analogizable to all the forms that borrow the name, literacy. All that remains is to understand that, by facility, we don’t mean merely reading and writing. We recognize Homer as literate, even if he did employ formulaic expressions. For what, after all, are letters or alphabets but formulas? Nor do we deny to the gent, who can only make his mark, understanding sufficient to signify his intent, when we say he is not literate. To be literate is not merely to possess any language whatever, but rather to possess a language in a disciplined and transmissible form, in company with others, among whom this very facility itself constitutes a pathway of science or knowledge.

And so we end where we opened this paper, with a conviction that literacy is—and will remain—one of mankind's most fundamental and most valuable accomplishments.

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