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## Language, Literacy and Mind: The Literacy Hypothesis

## Lenguaje, Literacidad y Mente: La Hipótesis de la Literacidad

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Literacy is important not only as a means of access to new information and as an extension of memory. Rather, it is argued that writing is a means to the awareness of the implicit properties of language. This awareness is expressed through new concepts for referring to what is said, what is meant by it, what it implies, of what it is composed, and the like. Writing achieves this effect through distancing the thoughts of the writer from the fixed, objective form it takes when written down. The effect on the reader, correspondingly, is equally distanced from the writer with the result that reading is less like hearing a speaker that like over-hearing. I describe this effect by saying that writing puts language within quotation marks.

Keywords: literacy, language awareness, quotation.

La literacidad no solamente es importante como un medio para acceder a nueva información y como extensión de la memoria. Se propone, en cambio, que la escritura es un medio para tomar conciencia de las propiedades implícitas del lenguaje. Esta toma de conciencia se expresa a través de nuevos conceptos para referirse a lo que se dice, su significado, sus implicancias, los elementos que lo componen y otros aspectos similares. La escritura logra este efecto al distanciar los pensamientos del escritor de la forma fija y objetiva que adquieren al ser escritos. De manera equivalente, el lector vive un proceso de distanciamiento similar al del escritor, con el efecto que leer se parece menos a escuchar directamente a un hablante que a escucharlo sin que este se dé cuenta. Describo estos efectos señalando que la escritura pone al lenguaje entre comillas.

Palabras clave: literacidad, reconocimiento del lenguaje, cita textual.

The literacy hypothesis was the bold claim that the cognitive and social changes observed over time and across cultures may be traced, in large part, to changes in means of communication, especially the invention of writing systems. This view took its bestknown form in the groundbreaking and influential paper written by anthropologist Jack Goody and literary theorist Ian Watt, first published in 1963, entitled The consequences of literacy (Goody & Watt, 1968). In that paper the authors argued that an alphabetic writing system had played a dramatic role in the specialization of modes of discourse, thus sharply distinguishing between myth and history, and the rise of specialized modes of thought based on linguistic awareness and formal logic. In a word, they saw literacy as a primary factor in the rise of what we now call a literate society, and more grandly, civilization: civil society, the society of rules and laws.

Goody and Watt's formulations were similar to those that were advanced in the same period by Eric Havelock (1982), Marshall McLuhan (1962) and Walter Ong (1976). Although somewhat tainted by a cultural chauvinism and an overemphasis on the uniqueness of the alphabet, the central claim of the *literacy hypothesis* was eloquently expressed by Eric Havelock in a lecture delivered at the University of Toronto in 1976 and later republished in his *The literate revolution in Greece and its cultural consequences*:

The civilization created by the Greeks and Romans was the first on the earth's surface which was founded upon the activity of the common reader; the first to be equipped 4 OLSON

with the means of adequate expression in the inscribed word; the first to be able to place the inscribed word in general circulation; the first, in short, to become literate in the full meaning of that term and to transmit its literacy to us. (1982, p. 40)

A bold venture, indeed, but how has the venture held up to scholarly analysis? Not too well.

First, most scholars would now agree with Anthropologist Ruth Finnegan's observation that "no firm line can be drawn between the oral and the written" (Finnegan, 1988). Neither linguistic structure nor social functions split nicely down the line between the oral and the written. Almost everything that can or could be written could be said and vice versa. There is no grammar or vocabulary that is unique to one but unavailable to the other. Even speech acts such as asserting and promising, although varying somewhat from one society to another, are more or less universal with no speech act uniquely associated with the written tradition. Yet as Biber (2009) and Berman and Ravid (2009) have shown some specialized genre such as academic discourse tend to rely heavily on writting as oposed to speaking. As we all know, if you want to take part in any specialized discipline, such as Psychology, you have to learn how to read and write psychological articles and texts. All disciplines possess, as we say, a literature, and to participate one must know the literature.

Secondly, the relation between literacy and social development are far more complicated than had been suspected. Many social reformers beginning with such Renaissance writers as Erasmus and Martin Luther, on one hand, to UNESCO and most modern states, on the other, have insisted that making everyone literate was not only instrumental but essential to social change and personal development. A typical example: Kristol, in the New York Times (2008, November 23, p. WK 10) suggests that the nation of Pakistan be reminded that its "greatest enemy isn't India but illiteracy". Hence we have UNESCO's project for world literacy and we have the designation of literacy as a universal human right. Yet, the social advances hoped for in such literacy campaigns have been disappointing. Changing literacy levels in themselves do not produce social change; much more is involved including political and economic stability (Farrell, 2009; Triebel, 2001). Indeed, the entire project of development has its critics who point out that neither persons nor societies can be ranked on a single scale with ourselves at the top but rather societies should be seen in their own terms. Indeed, our enthusiasm for literacy may have blinded us to the social and intellectual competencies of the non-lettered (Chamberlin, 2002). Literacy is extremely important in some contexts but it is to be identified neither with intelligence nor with social competence.

Third, literacy takes many forms suited to particular social functions in particular social contexts. Indeed, the major critics of the literacy hypothesis have based their rejection of such bold and general claims on the observed facts that the literacy conducive to economic development may exist entirely independently of the literacy conducive to religious piety or political freedom. The literacy that is learned is assimilated primarily to ongoing social practices and while literacy may alter those practices in important ways, the practices themselves pre exist literacy and assimilate literacy to those practices. For example, social rules and norms exist in all societies and written law is more an expression of those existing norms than an original invention. Similarly, the contexts in which literacy instruction is particularly effective are those in which literacy is seen as useful to the goals and purposes of the learner or those who have control over him. Governing institutions have often found literacy as instrumental in both record keeping and in social control (Baines, 1983). In 17th century Sweden, when the ability to read Scripture was required if one was to obtain a marriage license, readership grew dramatically. Indeed, predominantly protestant countries to this day score more highly on tests of literacy than do predominantly Catholic ones, presumably, because of the early emphasis on reading Scripture for oneself. Doronila (2001) found that when marginalized Filipinos discovered that literacy skills were important to their economic futures, they took great interest in literacy lessons. Historians, too, have been less interested in the universals of literacy than in the diverse ways that literacy has been used by different societies at different periods of time. Thus, the role of literacy in social, religious, political, historical, and economic contexts has become obvious while, at the same, time resisting broad general conclusions (Brockmeier & Olson, 2009).

The fact that literacy has played distinctive roles in such a wide range of social practices has given rise to the suggestion that we think of literacy not as a single basic competence but rather as a variety of *distinctive literacies*. We may rephrase this as a question: Is there one general literacy that may subserve many different functions or many literacies, each suited to a particular social function in a particular social context? Cole and Cole (2005, p. 321) argue that the overlap amongst literacy skills appropriate to various social practices is "modest at most and restricted to rather micro level junctures of skills, technologies, and goals". On the other hand, most advanced societies assume that there is some set of generalizable literacy skills and practices applicable to a variety of contents in a variety of contexts. These are the skills that, it is claimed, are taught and assessed by the school.

As Gee (2006) has wisely pointed out, while the issue of one literacy versus many literacies is one that can be debated, it is not a question that can be answered. Rather, as he suggests, because speech and writing go together in a particular context, it is often better to ask about a particular genre than about the role of writing per se. And because they go together in certain functions, it is often better to ask about the social practices involved rather than to ask about the role of writing. And sometimes it is best to ask about the relations between what, on the surface, may be thought of as entirely independent practices, such as Bible reading and early modern science, in fact, may be closely related in that they share a particular way of reading (Forshaw & Killeen, 2007; Olson, 1994).

Fourth, the modernist argument that the permanence of writing, that is, its existence through time and across space, creates a fixity of meaning unique to written texts, may have to be revised. Indeed, as J. P. Small has shown, the fixity of texts and a reliance on verbatim correctness had a long and slow evolution reaching a peak in the formation of legal and commercial contracts and laws. Because classical Greek and Roman culture lacked good methods of retrieval of texts, it was more important to memorize texts and then rely on memory rather than consulting sources. But even when devices such as indexes and page numbering made retrieval easy, the assumption that a fixed text produces a fixed meaning has been abandoned and replaced by the postmodern view that the meaning of a text is what readers make of it for their own purposes and in their own social context. This renewed interest in the reader, what she or he sees in a text in the light of her or his own background of knowledge and interest, has become the focus of much of recent cognitive psychology as well as in literary, cultural and historical studies. A clear historical example may be found in the way that early Christians appropriated the earlier Hebrew Scriptures, reading them in a quite different way than did the ancient Hebrews themselves; similarly, early Protestants appropriated the Catholic Scriptures, reading them in a very different way than did the official Catholic Church (Simpson, 2007). The history of reading is in part a history of misreading someone else's texts.

What remains less examined and less understood is how a reformer's idiosyncratic and personal readings ever get shaped into a shared conventional meaning within a large group of readers, a textual community. How social groups, whether in a school classroom, a religious community or a reading circle, arrive at some mutual understanding has become perhaps the most interesting domain of literacy research (Stock, 1983). To cite a specific, how is it that we, researchers of language and mind, come to hold a set of meanings more or less in common and yet at the same time nourish our own somewhat unique views? Written records, including professional journals, play a critical role (Bazerman, 1988) as does the oral discourse that surrounds those written records. The demand for originality is framed within these more conventional and shared understandings.

So what is left of the literacy hypothesis? In its favour it must be said that the literacy hypothesis has created an environment in which it is no longer possible to simply ignore writing, as linguists and psychologists have traditionally done. Writing and literacy have become essential aspects of understanding of language, mind and society. For my part, I continue to believe that writing and reading make unique demands and provide unique opportunities for thinking and, in addition, provide new resources that societies may or may not exploit for various purposes. I will conclude with three *biases* that writing puts on language and thought just because it is an essentially permanent representation of speech.

First, it invites and highlights the contrast between *it means* and *she means*. This is not the question of whether words have meanings as opposed to only persons have meaning, but rather whether and in what contexts and to what ends one may discuss the language as opposed to the intentions conveyed: what *it* means as opposed to what a speaker means by it. It involves, as we say, *going meta*. Asking what *it means* turns one's attention from the world towards one's language about the world.

Attention to language turns up in the standards applied for the measurement of intelligence. A child

6 OLSON

earns credit less for describing objects than for providing definitions. The question "What is a horse?" is quite different from the question "What does the word horse mean?" It comes down to whether or not the child can describe the animal in such a way that one could pick it out as opposed to providing a dictionary definition. A definition requires that the word be placed in the context of the network of words. That more sophisticated linguistic ability is what, in a modern society, is treated as an indication of intelligence. One may recall Dicken's Gradgrind denying that the farm lad knew what a horse was just because he could not define it as a domesticated quadruped. Although it is a useful skill to be able to think about language, it is a serious mistake to conflate intelligence with literacy as we members of literate societies tend to do.

Attention to wording has long been a focus of schooling. Schooling, as Margaret Donaldson (1978) once pointed out, requires that children "pay scrupulous attention to the very words" rather than simply glossing the putative meaning. Formal tasks such as those assessed in advanced academic placement tests, like those involved in formal reasoning tasks, require such scrupulous attention to the very words. Recall Luria's (1976) much discussed peasant who was presented with the syllogism "All the bears in Novaya Zemlya are white. Ivan went to Novaya Zemlya and saw a bear there. What colour was the bear?" Rather than providing the standard answer "It must be white", Luria's individuals tended to reply "I've never been to Novaya Zemlya. You'll have to ask Ivan". Quite right, we say. Yet, we recognize the answer as a mistake. The individual apparently failed to recognize this as a school-like task in which one must pay particular attention to the wording of the task, especially the quantifier all. This is not to say, of course, that such understanding depends upon the words only, but as Gee (2006, p. 158) has pointed out on rather sophisticated knowledge of "what the conversation is about" that is, on the general knowledge of how such expressions in the language are conventionally to be understood. We have tended to confuse reasoning ability, a universal human competence, with our literate ability, a culturally specific trait acquired through long years of schooling. Yet this is not to disparage that school learning as it is essential to the writing and interpretation of the most formative texts of a modern society.

Conversely, the attention to the *very words*, or as I have described it, what *it means*, also draws attention to what *he*, the speaker, means or intends

by an utterance. The focus on meaning and intention provides distinctive attention to mental states such as the intentions of the persons producing and interpreting any utterance. Interestingly, children's understanding of mental states, such as beliefs and intentions, is brought into focus through its relation to and contrast with what the utterance, *it*, means. A careful analysis of the relation expression and intention is the route to a deeper understanding of mental life (Olson, 2008).

Second, children's literacy development involves an increased awareness of the properties of the language, not only of words and sentences, but of syllables and phonemes, as well as of semantic relations such as synonymy and antonymy. The relation between phonological awareness and reading an alphabet is well known. But the relation extends not only to the analysis of sound but also to more abstract constituents of language, such as words and sentences. Research by Ferreiro and Teberosky (1982) and by Bruce Homer and I (Homer & Olson, 1999) has shown how children come to clearly distinguish the expressions "Draw three little cats" from "Write three little cats", a distinction that children progressively work out (see Figure 1). I have suggested that they have to come to hear the intonation that is explicitly expressed by quotation marks in the case of writing. That is, when asked to write "three little cats", the quotation marks indicate that one is no longer talking about cats but about a linguistic expression. Writing, unlike drawing, indicates the latter. This is a sophisticated understanding that children must grasp if they are to understand what writing is.

Thirdly, and more generally, literacy enhances and highlights the activity of putting language "off line": suspending, to some extent, the usual communicative function of language. All languages have the capacity or the resource for quotation (Finnegan, 1988) as well as indirect quotation. Children exploit this resource in "tattling" on each other as well as in story telling and oral literature more generally. Yet this capacity for putting language "off-line" is highlighted in writing and reading just because much of writing imposes a space between writer and reader that contrasts markedly with the directness of most oral speech. John Stuart Mill (1833) noted this gap in an article entitled What is poetry?, where he suggested that while eloquence, that is persuasive speech, is *heard*, poetry is *overheard*. He continued: "Eloquence supposes an audience; the peculiarity of poetry appears to us to lie in the poet's utter un-

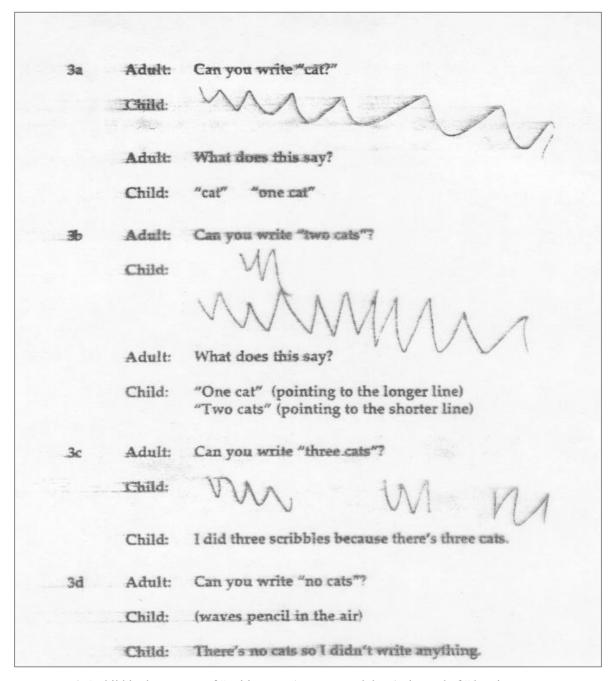


Figure 1. A child in the process of "writing cats (one, two and three)" instead of "drawing cats".

consciousness of a listener" (p. 102), thus a kind of soliloguy, speech for oneself.

I would like to transpose that claim into a hypothesis about writing and reading. Reading is more like *overhearing* than it is about *hearing*. In fact, the reader has a choice. The reader may read the text as if it were intended for him or her as a member of the

audience, as the reader would if handed a personal note. Or, and here is my point, the reader may read the text as if it not directed at him or her but rather as if he or she is a bystander overhearing the expressions directed to someone else. This is an assumption shared by the writer and reader. The reader has retreated from being simply an *audience* into a newly

8 OLSON

defined stance as a *reader*. Just as writing allows the distinction between the author and the narrator, so too writing encourages the distinction between the audience and the mere reader. The relations may be shown graphically:

Speaker/
Author → Addressee/
Audience (Direct)

Narrator/
Reporter → Reader/
Overhearer (Indirect)

It is this stance as reader rather than as audience that frees the reader to take the text more or less as he or she pleases. The reader is less the addressee than an innocent bystander who just happens to overhear the discourse and is free to take it in any way that he or she chooses. My point may be expressed this way: they take what they read as if it were in quotation marks. The writer moves from author to narrator and the reader shifts from audience to reader. I find evidence for this shift both in children's learning to write as when children begin to ask what the reader (the abstract non person) will know or think and when they begin to learn to summarize, paraphrase and criticize what they read, imposing their own perspective on what they read. Here is an example provided by Julie Comay (2008) of how early writers come to consider their abstract audiences and revise their text to honour not the persons present, the real audience, but an abstract reader:

Child 1: (dictating). She grew up to be a lovely girl.

Child 2: You can't say 'she'. They won't know who she is.

Note that *they* in this case is an abstract audience; those present already knew who *she* was.

The distinction between assertion and quotation is systematically taught, if somewhat misleadingly, in such child games as *Simon says*, in which the children have to discriminate between direct commands and quoted ones. And it is manifest I suggest in children's somewhat late grasp of the *opacity* of quoted expressions (Kamawar & Olson, 1999). While these resources are available in speech, they are highlighted and taught and practiced in the school in the process of becoming literate.

The literacy hypothesis, far from having outlived its usefulness, has set in motion a wide range

of research and theory, both challenging earlier overgeneralizations about literacy's uniqueness and causal effects, and helping to reveal just what all is involved in our being and becoming literate.

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## Note

David Daniell in The history of the word in English claimed that 16th century readers were hungry for the Word of God and Tyndale's translation of the Bible into English just filled the bill. James Simpson in Burning to read: English fundamentalism and its reformation opponents contrasted the ways of reading of English Protestants, exemplified by William Tyndale, with that of the Church of England as exemplified by Saint Thomas More. Tyndale and More, both of whom were killed by each others followers, differed primarily in the way that they read and understood Scripture. Tyndale, following Luther, believed the Bible was the only authority in religious matters whereas More and the established Church insisted that texts could never encompass the entire Christian message and that consensus could be achieved only by appealing to the historical traditions of the church. Indeed, we find the same contrasting attitudes to reading text among the judges in the US Supreme Court, some, resolutely sticking to the text of the US Constitution, the others, interpreting it in the light of tradition and context. Simpson goes so far as to argue that Tyndale was the first fundamentalist, a tradition that has done much to fuel hatred around the world, although as Anthony Grafton has shown in What was history?: The art of history in early modern Europe, that true literalism took shape only in what historians call Protestant Orthodoxy.