



LANGUAGE AND LITERACY:
READING PAULO FREIRE EMPIRICALLY

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Introduction

In this paper, I start by discussing the context in which I first read Paulo Freire's work and the way in which I read his work given that context. I then point out that, though I read Freire as making a set of empirical claims about language and literacy, these claims were not at the time well supported by work in fields like cognitive psychology and linguistics. Moving to the more central part of the paper, I then argue that current work in cognitive psychology and supports what I originally took to be Freire's empirical claims. Thus, while many have tried to dismiss Freire's work as "merely political", and though some of his supporters have failed to engage with empirical work on language and literacy, my argument is that many of Freire's positions are not just politically motivated, but empirically sustainable.

I discuss current work in cognitive psychology and sociolinguistics first in terms of work on the connections between language and experience and next in terms of work on language as a perspective-taking device. In the end, I turn to the issue of politics--defined below in specific terms--and the ways in which the empirical sustainability of Freire's claims force us to confront politics as central to the data we collect, the theories we develop, and the academic work we do in regard to language and literacy.

Freire's Claims about Learning and Literacy

I first came upon Paulo Freire's work in his classic book The Pedagogy of the Oppressed (1995, orig., 1975) many years ago when I was beginning to transform myself from a rather typical Chomskian generative syntactician into a linguist interested in language, culture, and society. For reasons I need not go into here, I was then, for the

first time, being exposed to work on literacy, including work on adult literacy. I was surprised to find out that anyone studied literacy as an important topic, especially in regard to adults. I had thought of literacy merely as the ability to "read and write" and, in turn, thought of reading and writing as rather trivial skills involving decoding print and assigning "literal meanings" to words and sentences, skills learned by anyone and everyone early on in school. As an aside, I might mention that, since I had come from a home in which giving books to children or reading books to them played no role, I assumed that what went on at home prior to schooling was irrelevant to literacy. It never dawned on me then that schools did not rather easily compensate for whatever when on at home.

Chomskian linguists consider the oral form of language as the primary form of human language, a form whose basic design properties are instantiated in a human biological capacity or "instinct" for language (Chomsky, 1986; Pinker, 1994). Underlying the "superficial" differences among the worlds' languages is a common basic design dictated by a human biological capacity for language. This basic design unfolds in early language acquisition (though it needs to be triggered by experience) much like the growth of a biological organ such as the heart or an arm.

Literacy, on the other hand, appeared historically long after oral language had evolved in the human species, arose independently in only a very few cultures, and is not instantiated in any specific human biological capacity for writing or reading (literacy just hasn't been around long enough to have affected human evolution). Thus, generative linguists have never studied or focused on literacy as a central concern for linguistics. It is, as far as they are concerned, a mere by-product of "culture" and such products are not

thought to be open to authentic scientific study of the sort represented by generative linguistics or modern physics, for example (Chomsky, 1995).

Thus, I simply assumed that literacy was a relatively trivial "off shoot" of language learned early on in school--nothing as wonderful and mysterious as the human biological capacity for language unfolding in infants and toddlers. I certainly did not think that literacy carried any particularly important implications for the mind or society. At the time, I assumed that what made one "intelligent" was knowing the sorts of things that made up the content of schooling--things like math, science, and (yes) linguistics. I assumed, to what little extent I thought about the matter, that what would aid society most was getting lots of people to know such content-ful things.

In this framework, I did not, at least initially, read Freire as primarily "political" or as a species of revolutionary politics. I read him as developing a theory that had important empirical implications for the nature of literacy, learning, and schooling. I read Freire this way, perhaps, because we generative linguists were primarily interested in theories and their deductive consequences (though many generative linguists, perhaps imitating Chomsky, espoused a form of leftist politics, though one completely isolated from their academic work).

Having not at that time read the empirical literature on literacy and learning, I had no idea whether or not Freire's claims were widely accepted and supported or not. Of course, I soon discovered that, in that literature, they were not widely accepted and supported. In the many years since then, however, I have come to see that, nonetheless, Freire's ideas should have received such acceptance and support. The flaw was in the then current theories of literacy and associated empirical work, not in Freire.

Furthermore, and more importantly, I believe that theoretical and empirical work since then and current today--though rarely or never couched in Freirian terms--does, by and large, support his central claims. Thus, it is unfortunate that so much Freirian work, in the past and now, pushes Freire's ideas for their political implications alone and rarely engages with the theoretical and empirical issues, thereby leaving the center of many educational debates to those who would eschew Freire's political commitments.

Let me make it clear that it is not my claim that current theoretical and empirical work on language and literacy in disciplines like cognitive psychology and sociolinguistics uncontentiously supports Freire's ideas. There is much controversy in these and related disciplines and I believe they are in the midst of a (potential) "paradigm shift" (using the Kuhnian term rather loosely). Rather, my point is that important currents in such work do, indeed, support some of Freire's central ideas. These currents, though controversial, are, nonetheless, "mainstream".

There is another way I can put my point: Even if one does not accept Freire's political positions and commitments (as I do), if one cares about evidence and coherent explanatory theories, a consideration of such evidence and theories in regard to current work on language and literacy could lead one (whatever one's political positions) to accept many of Freire's central claims. Ironically, however--as I will point out later--accepting these central claims forces one to face squarely Freire's political commitments (and one's own).

Let me briefly sketch out what, on my initial reading of Freire long ago, I took to be his central theoretical and empirical claims. I will then expand on these claims in terms of current research on language and literacy:

1. A "banking model" of learning does not, in several senses of the word, "work". By a "banking model" I took Freire to mean a model in which some "teacher" transmits *information* primarily in *verbal* or *propositional* form to a "student" who stores that information primarily in a *verbal* or *propositional* form. The important words here are "information", "verbal", and "propositional". At the time I read Pedagogy of the Oppressed (and, indeed, at the time Freire wrote it), lots of psychologists and linguists believed that the primary purpose of language was to transmit information. In turn, these psychologists and linguists believed that such information was stored and processed in the heads of speakers and hearers either as words and sentences of English (or some other natural language) or as "propositions". Propositions were logic-like expressions in some universal "language of thought" that represented the meanings of English (or other language) words and sentences. Propositions had a form very much like the words and sentences of a natural language like English, especially if one thought of English primarily in terms of basic grammatical structures like Subject-Verb-Object. Propositions were "conveyed" from one head to another via language (the speaker used language to encode propositions and the hearer used that language to decode it back into propositions). What I took to be important here was questioning the role and primacy of "information" in learning (and in using language, more generally) and the role and primacy of words and sentences

(verbal representations) and propositions (logical representations) in learning, thinking, and acting.

2. "Reading the world" and "reading the word" are deeply similar--at some level, equivalent--processes. One cannot learn to "read the word" in some domain unless one has learned to "read the world" in that domain and, furthermore, how one "reads the word" and how one "reads the world" are heavily dependent on each other and inextricably inter-dependent. What I took to be important here was that literacy could not, then, be seen as primarily or only a process that engaged with written texts. Furthermore, a theory of literacy could not restrict itself to the study of written language (to reading and writing), but had to include a study of the world as historically, socially, institutionally, culturally, and interactively perceived and interpreted.

3. Dialogue (that is, both face-to-face conversational interaction and conversation-like interaction at a distance through reflection on what one has heard or read) in which diverse viewpoints and perspectives are juxtaposed is, at several levels, essential for learning to "read the world" and to "read the word". What I took to be important here was that literacy could not, then, be defined primarily in terms of either "private" individuals (and their mental states) or single isolated texts. Multiple and diverse perspectives juxtaposed in talk or in reflection on multiple texts were essential to literacy. Freire seemed to be suggesting that if one could not (and did not) juxtapose one's specific reading of

the world or the word in a given case with other (compatible and incompatible) readings, then one, in reality, had no meaningful reading (thus, in the given case, one couldn't read). Let me note, as an aside, that to me as a linguist, far from seeming radical, this viewpoint seemed an application of Saussurian thinking at a discourse level: words and things have meaning only when considered against the relevant frame of alternative possibilities about what they could mean or be taken to mean.

4. "Politics" (in the sense of assumptions, attitudes, values, and perspectives about the distribution of "social goods" in society, where, by "social goods", I mean anything that is considered "good", "appropriate", or "right" to have, do, or be in the society) doesn't stand outside of and is not peripheral to literacy. Rather, politics, in the sense just given, and literacy are integrally and inextricably interwoven. This is so because "reading the world" always involves an interpretation of the "way things are" in terms of what is "appropriate", "normal", "natural", or "right" in regard to the distribution of social goods. Since "reading the world" and "reading the word" are inextricably interwoven, so, too, then, are politics and literacy. What I took to be important here was the way in which literacy then becomes inherently and straightforwardly connected to moral matters.

Mainstream empirical work in cognitive psychology and sociolinguistics on learning and literacy today does not, by and large, use Freirian language. Nonetheless, I believe that points 1-4 above are all strongly supported by some important currents in that work. I want now to discuss briefly what some of those currents are. They are beginning to integrate work on mind (from psychology) and society (from sociolinguistics and related work). At the same time, I believe such work holds out possibilities for renewing Freire's vision, at least as it applies to language and learning, and constructing broader and more powerful versions of "critical literacy".

Current Work on Learning, Language, and Literacy: Reading the World and Reading the Word

As I pointed out above, a model of language processing and thinking that was prevalent when Freire's Pedagogy of the Oppressed appeared went something like this (e.g., Dennett, 1969; Fodor, 1975; Newell & Simon, 1972; Pylyshyn, 1984): People formulate meaning in their heads in terms of *propositions*. Propositions are logic-like expressions instantiated in a universal "language of thought" (Fodor, 1975) that resembles, in some ways, a human language. For example, we might represent the meaning of an English sentence like "Socrates is wise or he is cunning" in terms of propositions something like this: [(SOCRATES **be** WISE) **or** (SOCRATES **be** CUNNING)] where the capitalized items represent not English words, but, rather, general concepts in the mind (i.e., WISE and CUNNING) or a name (or index) referring to an individual (SOCRATES). [(SOCRATES **be** WISE) **or** (SOCRATES **be** CUNNING)] is

one big proposition composed of two smaller ones, namely (SOCRATES **be** WISE) and (SOCRATES **be** CUNNING).

The bolded items in this proposition are also not English words. Rather, they represent logical terms defined in terms of the grammar of a logical system or logical language. For example, "**or**" is defined as follows: The whole big proposition connected together by "**or**" (i.e., SOCRATES **be** WISE **or** SOCRATES **be** CUNNING) is true if and only if either the first sub-proposition (SOCRATES **be** WISE) is true or the second sub-proposition (i.e., SOCRATES **be** CUNNING) is true, but not both (this is the "exclusive sense" of "**or**"; there is also another sense of "**or**"--the "inclusive sense"--in which the whole big proposition is true if and only if either one or both of the sub-propositions is true). The logical word "**be**" is a predicative connector that connects attributes to individuals (e.g., WISE to SOCRATES) and essentially means that the individual (in this case, SOCRATES) is a member of the set of individuals who have that attribute (in this case, WISE).

After formulating the propositions that will express their meanings in this mental logical language, speakers translate (in their heads) these propositions into English. Then they utter the English sentences corresponding to the propositions. The hearer hears and processes the English sentences, translating them back into the mental logical language of general concepts and propositions. Since the mental logical language of propositions is much like a human language, though a universal one translatable into any specific human language, this model is entirely *verbal*. People think and communicate in terms of verbal information, either expressed in a mental logical language or in terms of a human

language like English which, at a "deep" level, has a grammar not unlike the grammar of the mental logical language.

In this model, the meaning of a word, say a word like "bachelor" or "light", is some general concept or idea stored in the head, something like a "definition" or set of features that pick out things that are bachelors or illumination (Smith & Medin, 1981). The definition or features are represented in the mental language, not in terms of English words. For example, "bachelor" might be represented in the mental language as something like "NOT MARRIED **and** MALE", where "NOT", "MARRIED", and "MALE" are basic, universally available concepts that different languages represent in words in different ways (and "**and**" is a logical word in the mental logical language).

All of this certainly comports pretty poorly with Freire's ideas. However, today there are accounts of language and thinking that are quite different and which comport with Freire's ideas much better. Consider, for instance, these two quotes from some recent work in cognitive psychology:

... comprehension is grounded in perceptual simulations that prepare agents for situated action (Barsalou, 1999: p. 77)

... to a particular person, the meaning of an object, event, or sentence is what that person can do with the object, event, or sentence (Glenberg, 1997: p. 3)

These two quotes are from work that is part of a "family" of related viewpoints. For want of a better name, we might call the family "situated cognition studies" (e.g., Barsalou, 1992, 1999a, b; Brown, Collins, & Dugid, 1989; Clark, 1997; Engestrom, Mietinen, raij Punamaki, 1999; Gee, 1992; Glenberg, 1997; Glenberg & Robertson, 1999; Hutchins, 1995; Latour, 1999; Lave, 1996; Lave & Wenger, 1991; Wertsch, 1998; Wenger, 1998) While there are differences among the different members of the family (alternative theories about situated cognition), they share the viewpoint that meaning in language is not some abstract propositional representation that resembles a verbal language. Rather, meaning in language is tied to *people's experiences of situated action in the material and social world*. Furthermore, these experiences (perceptions, feelings, actions, and interactions) are stored in the mind/brain not in terms of propositions or language, but in something like dynamic images tied to perception both of the world and of our own bodies, internal states, and feelings:

Increasing evidence suggests that perceptual simulation is indeed central to comprehension (Barsalou, 1999a, p. 74).

It is almost as if we "videotape" our experiences as we are having them, create a library of such videotapes, edit them to make some "prototypical tapes" or a set of typical instances, but stand ever ready to add new tapes to our library, reedit the tapes based on new experiences, or draw out of the library less typical tapes when the need arises. As

we face new situations or new texts we run our tapes, perhaps a prototypical one, or a set of typical ones, or a set of contrasting ones, or a less typical one, whatever the case may be, in order to apply our old experiences to our new experience and to aid us in making, editing, and storing the videotape that will capture this new experience, integrate it into our library, and allow us to make sense of it (both while we are having it and afterwards).

These videotapes are what we think with and through. They are what we use to give meaning to our experiences in the world. They are what we use to give meaning to words and sentences. But they are not language or "in language" (not even in propositions). Furthermore, since they are representations of experience (including feelings, attitudes, embodied positions, and various sorts of foregroundings and backgroundings of attention), they are not just "information" or "facts". Rather, they are value-laden, perspective-taking "movies in the mind". Of course, talking about videotapes in the mind is a metaphor that, like all metaphors, is incorrect if pushed too far (see Barsalou, 1999b for how the metaphor can be cashed out and corrected by a consideration of a more neurally realistic framework for "perception in the mind").

On this account, the meanings of words, phrases, and sentences are always "situated", that is "customized" to the actual contexts we are in (Gee, 1999). Here "context" means not just the words, deeds, and things that surround our words or deeds, but also our purposes, values, and intended courses of action and interaction. We bring out of our store of videotapes those that are most relevant to understanding our current context or those that allow us to create and construe that context in a certain way. We can see this in even so trivial example as this: if you hear "The coffee spilled, go get the

mop" you run a quite different set of images (that is, assemble a quite different situated meaning) than when you hear "The coffee spilled, go get a broom".

On this account, too, the meaning of word (the way in which we give it meaning in a particular context) is not different than the meaning of an experience, object, or tool in the world (i.e., in terms of the way in which we give the experience, object, or tool meaning):

The meaning of the glass to you, at that particular moment, is in terms of the actions available. The meaning of the glass changes when different constraints on action are combined. For example, in a noisy room, the glass may become a mechanism for capturing attention (by tapping it with a spoon), rather than a mechanism for quenching thirst (Glenberg, 1997, p. 41).

While Glenberg here is talking about the meaning of the glass as an object in one's specific experience of the world at a given time and place, he could just as well be talking about the meaning of the word "glass" in one's specific experience of a piece of talk or written text at a given time and place. The meaning of the word "glass" in a given piece of talk or text would be given by running a simulation (a videotape) of how the glass fits into courses of action being built up in the "theater" of our minds. These courses of action are based on how we are understanding all the other words and other goings on in the world that surrounds the word "glass" as we read it:

... the embodied models constructed to understand language are the same as those that underlie comprehension of the natural environment (Glenberg, 1997, p. 17).

We see, then, that in terms of this family of viewpoints, Freire's claim that "reading the world" and "reading the word" are, at an important level, equivalent processes or, at least, deeply implicated with each other, turn out to be plausible claims, apart from any political commitments whatsoever. Reading the world and reading the word are both embodied processes of situating ourselves, in reality or in simulation, into possible courses of action in the material and social world (and, of course, for Freire, these courses of action are often "political" in the sense of being implicated with the distribution, and assumptions about the distribution, of social goods). And we carry out this work of situating through thinking through and with our concrete experiences in the world, not primarily in terms of words and "facts" in verbal form.

Current Work on Learning, Language, and Literacy: Perspective Taking

For Freire, "reading the world" (and, thus, too, "reading the word") was a "perspectival" phenomenon. That is, reading the world was always done from the vantage point of one's individual, sociocultural, and sociopolitical positions in that world. Of course, Freire was well aware that one could speak and act from the point of view, not of one's own best social interests and actual experiences, but, rather, from points of view

unconsciously internalized from interactions with other people and institutions that might actually better represent the interests of others in the society (e.g., various sorts of elites).

Here, of course, politics does raise its head. But, once again, Freire's viewpoint is, in terms of current empirical work, not all that radical. It is, in fact, a fairly well grounded conception, one that is viewed, in much current work in cognitive psychology and sociolinguistics, in fairly apolitical terms (and I will return to this below, arguing that such an apolitical stance can't really be sustained).

Consider, in this regard, then, the following quote from Michael Tomasello's recent book The Cultural Origins of Human Cognition (1999):

...the perspectival nature of linguistic symbols, and the use of linguistic symbols in discourse interaction in which different perspectives are explicitly contrasted and shared, provide the raw material out of which the children of all cultures construct the flexible and multi-perspectival--perhaps even dialogical--cognitive representations that give human cognition much of its awesome and unique power (p. 163).

Let's briefly unpack what this means. From the point of view of the model Tomasello is developing, the words and grammar of a human language exist to allow people to take and communicate alternative perspectives on experience (see also, Hanks, 1996). That is, words and grammar exist to give people alternative ways to view one and

the same state of affairs. Language is not about conveying neutral or "objective" information; rather, it is about communicating perspectives on experience and action in the world, often in contrast to alternative and competing perspectives: "We may then say that linguistic symbols are social conventions for inducing others to construe, or take a perspective on, some experiential situation" (Tomasello, p. 118).

Let me give some examples of what it means to say that words and grammar are not primarily about giving and getting information, but, rather, about giving and getting different perspectives on experience. I open Microsoft's web site: Is it "selling" its products, "marketing" them, or "under pricing" them against the competition? Are products I can download from the site without paying a price for them "free", or are they being "exchanged" for having bought other Microsoft products (e.g., Windows), or are there "strings attached"--and note how metaphors (like "strings attached") add greatly to, and are a central part of, the perspective taking we can do. If I use the grammatical construction "Microsoft's new operating system is loaded with bugs" I take a perspective in which Microsoft is less agentive and responsible than if I use the grammatical construction "Microsoft has loaded its new operating system with bugs".

Another example: Do I say that a child who is using multiple cues to give meaning to a written text (i.e., using some decoding along with picture and context cues) is "reading" or (as some of the pro-phonics people do) do I say that she is "not really reading, but engaged in emergent literacy" (for these latter people, the child is only "really reading" when she is decoding all the words in the text and not using non-decoding cues for word recognition). In this case, contending camps actually fight over what perspective on experience the term "reading" or "really reading" ought to name. In

the end, the point is that no wording is ever neutral or just "the facts". All wordings--given the very nature of language--are perspectives on experience that comport with competing perspectives in the grammar of the language and in actual social interactions.

How do children learn how words and grammar line up to express particular perspectives on experience? Here, interactive, intersubjective dialogue with more advanced peers and adults appears to be crucial. In such dialogue, children come to see, from time to time, that others have taken a different perspective on what is being talked about than they themselves have. At a certain developmental level, children have the capacity to distance themselves from their own perspectives and (internally) simulate the perspectives the other person is taking, thereby coming to see how words and grammar come to express those perspectives (in contrast to the way in which different words and grammatical constructions express competing perspectives).

Later, in other interactions, or in thinking to oneself, the child can re-run such simulations and imitate the perspective-taking the more advanced peer or adult has done by using certain sorts of words and grammar. Through such simulations and imitative learning, children learn to use the symbolic means that other persons have used to share attention with them (one can see here, too, how we could empirically explicate Freire's concept of "internalizing the voice of the oppressor" or authority):

In imitatively learning a linguistic symbol from other persons in this way, I internalize not only their communicative intention (their intention to get me to share their attention) but also the specific perspective they have taken (Tomasello, 1999: p. 128).

Tomasello also points out (1999: pp. 129-130)--in line with our previous discussion that the world and texts are assigned meanings in the same way--that children come to use objects in the world as symbols at the same time (or with just a bit of a time lag) as they come to use linguistic symbols as perspective taking devices on the world. Furthermore, they learn to use objects as symbols (to assign them different meanings encoding specific perspectives in different contexts) in the same way they learn to use linguistic symbols. In both cases, the child simulates in her head and later imitates in her words and deeds the perspectives her interlocutor must be taking on a given situation by using certain words and certain forms of grammar or by treating certain objects in certain ways. Thus, meaning for words, grammar, and objects comes out of intersubjective dialogue and interaction: "... human symbols [are] inherently social, intersubjective, and perspectival" (Tomasello, 1999: p. 131).

This perspective on language acquisition as the learner's simulation of other people's perspectives, garnered from interaction and often compared and contrasted with the alternative perspectives the child initially took in the interaction, comports quite well with Freire's points above (at least, points 1-3). This viewpoint and Freire's both see language and interaction as socioculturally, dialogically-situated perspective taking. Of course, Freire sees the perspectives we take through using language and giving meaning to objects and experiences in the world as inherently political. I will return to this issue below. However, once again, I want to point out that, while Tomasello's work--and much related work--is contentious, as is all current work in an empirically driven field, nonetheless, it is well within the mainstream of work on language acquisition, cognitive development, and (cross-) cultural psychology.

Current Work on Learning, Language, and Literacy: Perspective-Taking and Moral Reasoning

Freire's point 4 above seems, on the face of it, the least likely to find support in mainstream empirical work, given the way in which most academic fields eschew issues like politics and morality. However, connections between morality and language as perspective taking learned in dialogical interactions have been drawn since at least Piaget's 1932 book The Moral Judgment of the Child. Here, in regard to moral reasoning, however, the sort of dialogue that appears to be most important is not that between the child and more advanced peers or adults, but, rather, dialogue with and between equals.

For Piaget, moral reasoning is not about following rules dictated by authority figures, "but rather it is about empathizing with other persons and being able to see and feel things from their point of view" (Tomasello, 1999: p. 180). Piaget argued that what was most crucial for the development of moral reasoning was *discourse interactions with peers* (and not authority figures). Moral reasoning evolves from children's empathetic engagement with others as they attempt to transcend their own personal perspectives, take the perspectives of their interlocutors, and put themselves "in their shoes":

Rules carrying rewards and punishments from adults do not foster this experience, and indeed in many ways impede it. It is in social interaction and discourse with others who are equal in terms of knowledge and power that children are led to go beyond rule-following and to engage with other moral agents who have thoughts and feelings like their own (see also Damon, 1983). Note again that it is not the

content of the language that is crucial--although some of children's moral development surely does consist of explicit and verbalized principles passed to them from others--but the process of engaging another mind in discourse dialogically (Tomasello, 1999: pp. 180-181).

In interaction with more advanced peers and adults, children learn to use language to take new perspectives on experience, but they may not question those perspectives very deeply (nor deeply enough compare and contrast them to their own previous perspectives to see whether they really do want to give up their own perspectives or not). In dialogue with equals, children appear to compare and contrast perspectives more deeply and reflectively, learning thereby not only how to take particular perspectives through language, but also how to reason about such perspectives and perspective taking.

I want to stress that this view of the connections between moral reasoning and peer-based dialogue are empirically supported. A variety of studies have shown that in peer-peer discourse, children are less likely simply to defer to the authority of the other's viewpoint, more likely to seek some rational way to deal with differing viewpoints and perspectives, and more likely to actually change their own viewpoint for reasons they understand (Piaget, 1932; Damon, 1983, Dunn, 1988).

Kruger (1992) is an interesting study that shows the importance of peer-peer interaction (that is, interaction among equals), as against interaction with adult authority figures. Kruger (1992, see also Kruger and Tomasello, 1986) assessed seven- and eleven-year-old children on their moral reasoning skills as measured by the complexity

and sophistication of their argumentation about a story in which there was a question about how to divide up rewards among a group of people who had made different contributions to a task. Some of the children then had further discussions with a peer, while other children had further discussions with their mothers. After the discussions, the children's moral reasoning skills were again assessed. Children who had carried out discussion with a peer made greater gains than did the children who had carried out the discussion with their mother.

Kruger discovered that in the peer groups much more reflective discourse (that is, discourse in which one person talks explicitly about the view expressed by the other) took place and that such reflective discourse was correlated with the progress individual children made. In reflective discourse children make comments or ask questions about the beliefs and desires of others or themselves--e.g., "Does she think I like X?" or "I don't want her to want my X" (Tomasello, 1999: p. 181). As they engage in such talk, children simulate what other people have said and done in relation to their own words, desires, perspectives, and deeds, thereby seeing what the world and themselves look like from the perspective of the other. Interestingly, young children often think that they themselves have said or done what was actually said or done by a peer with whom they collaborated (Foley and Ratner, 1997).

Politics

I want to close with an argument that, once we accept perspectives on language and literacy like those above, perspectives that are empirically motivated and yet akin to Freire's central claims, we must confront Freire's (and our own) political agenda.

Furthermore, we must confront politics not as a peripheral concern, but as centrally implicated in the data we collect about language and literacy and in the theories we construct about language and literacy.

By "politics", as I said above, I mean any situation where the distribution of social goods or assumptions about the distribution of social goods are at stake. "Social goods" are anything that a society considers worth having or being. Thus, social goods always involve issues of power, desire, hierarchy, and public-sphere social relationships among people in a society, since people who have more social goods are considered and treated as if they were "right", "normal", "valuable", "worthy", or "powerful" (or whatever the case may be in respect to a given social good like money, "intelligence", literacy, education, etc..).

The viewpoints on language and literacy that I have developed above, based on work on situated cognition, argues that words and the world are given meaning by simulations of courses of situated action and interaction (including dialogue) in the world. In turn, these simulations come from and are rooted in our experiences in the world. These simulations always involve taking a perspective on experience in contrast and comparison to alternative perspectives encoded in other possible simulations (based on other experiences we have had or the experiences of other people we have heard or read about).

However, our experiences in the world are always stored in an "edited" fashion. By this I mean that we always foreground certain aspects of our experiences and background other aspects (and even leave parts out). We value and evaluate our experiences (appreciate them) in certain ways and this shows up in how we store them

and use them. When we, in turn, bring these experiences, in the form of simulations (mental videotapes), to bear on a new experience, that new experience is seen through and edited through the lens of those simulations and the way in which they themselves have been edited. We have seen above that part of how we edit our experiences and what simulations we bring to bear on new experiences are caused by our interactions with "authority" (more advanced peers and adults) to which we may defer.

To the extent that the editing process is carried out in terms of--and, in turn, creates--assumptions about what is "right", "normal", "appropriate", and/or "valuable" or not, it is inherently political, in the sense developed above. At the same time, it is hard to think of any editing of experience--any foregrounding and valuing of what is worthy of attention in experience and backgrounding of what is less worthy--that is not replete with assumptions about and implications for what is "right", "normal", "appropriate", and/or "valuable". Thus, all meaning (whether this involves "reading the world" or "reading the word") is political, as Freire said it was.

Furthermore, as we have seen above, thanks to the role of internalizing the perspectives of authority figures, all meaning has the potential to represent a deferral to authority and the *status quo*, rather than an alternative perspective that may represent our own interests--or society's--better in terms of creating a better and fairer world. In turn, it appears that dialogue among equals (whether among children or adults) may be important for the development of alternative, more moral perspectives--thus, the importance of creating more space for equality in society.

Let me end with a concrete example, taken from William Hanks's excellent book, Language and Communicative Practices (1996), another piece of current, controversial,

but quite mainstream empirical work. Hanks is describing a mundane encounter among Mayans in Yucatan, Mexico. A local shaman, named Don Chabo, is eating a meal with his son (Manuel) and daughter-in-law (Margo). They are sharing this meal at the son and daughter-in-law's house (the meal is a light one and is referred to by a Mayan word that means "drinking", as opposed to "eating", which is reserved for times where heavier meals are eaten). Don Chabo's own house is close by, within the same walled compound as his son and daughter-in-law's house. A young man, named Yum, comes up to an open window and asks Margo whether Don Chabo is available for a consultation (note that Yum addresses the daughter-in-law and not Don Chabo, who is also sitting at the table). Margo responds by saying in Mayan what can be translated in English as (Hanks, 1996: p. 157):

Go over there. He's drinking. Go over there inside.

Mayan has two ways to say "over there" (words like "there" are known as "deictics", "indexicals", or "pointers"). One of them means "close by" and the other means "far away". Margo uses the form that means "far away", despite the fact that her father-in-law's house is close by. She uses the "far form" to index her distance from him (and things that represent him, like his house), not in physical space, but in social space:

... Maya [household compounds] are typically surrounded by physical barriers (like stone walls) and internally subdivided by social barriers that have powerful effects on people's behavior. Don Chabo would never enter Margo's kitchen, for instance, without an explicit invitation, and this would not happen without the consent, tacit or expressed, of her husband, Manuel. Similarly, she enters his living quarters only when she has reason to be there. Hence, the referent of her deictic, her father-in-law's home, is in a space that excludes her in the relevant sense--even though it is no more than 10 meters away, within the same walled household [compound] (p. 164).

Hanks goes on to say: "... the indexical components encoded in the words of this exchange force [Margo] to situate herself in relation to her father-in-law, in the very act of answering Yum's question" (p. 165). Typical of mainstream work, Hanks never discusses the political implications of his phrase "force Margo". Nonetheless, the point is clear. Whether in Mayan or English, or any other language, we cannot give meaning to words or the world other than through perspective-taking devices (words, grammar, and edited simulations) that constantly "force us" (or encourage us or allow us, whatever the case may be) to situate ourselves in relation to others in our social groups, other social groups, and society at large. And this situating is always caught up with the distribution of social goods (and things like power, desire, solidarity, and status) that, in the end, actually constitute social relationships in society.

One of the consequences of the perspectives on language and literacy that I have developed here (out of current mainstream work) is that all uses of language are, in some sense, "deictic" or "indexical". Words like "here" and "there" are overtly so. But a "content" word like "reading", in actual use, is always used relative to "local standards" (i.e., the standards of a given place, time, and social group) and indexes those standards. We have argued above that the meaning of a word is always customized to actual contexts of use (through simulations of relevant experience) and always also a way of taking a perspective on that experience. In some contexts and in terms of some "local standards" (e.g., certain pro-phonics proponents), as we mentioned above, "read" means that one must be recognizing words only through decoding, while in other contexts and in terms of different "local standards", "read" allows for cases where someone is recognizing words through multiple cues. Just as in the case of Margo and Don Chabo, either use of "read" simultaneously indexes values and perspectives that are political, since they have implications for who does and does not read or read "well" or read "normally"-or "really read"--in our society, an obvious social good.

On the ground of use and action, meaning is political. Failing to discuss the implications of this fact is a political omission that is also an empirical and theoretical omission, given the "fact" that meaning *is* political. But, if we were to face the political dimensions of meaning in the world as central to our empirical and theoretical work on language and literacy, we would have to face our own political agendas and commitments, as well as those held by other people and institutions in our society and global world.

After all, I myself, as a scholar of language and literacy, have to use, in my own talk and writing, words like "read". In confronting which "local standards" I am using the word in relation to--in deciding what simulations of experience, my own and others, I will use to customize the meaning of "read"--I am confronting, indeed choosing, my political position. So it is with all language and all academic work on language and literacy. And, in choosing my political position, I am both "reading the world" and, for better or worse, transforming it. That, too, long ago, I took to be Freire's point.

REFERENCES

- Barsalou, L. W. (1999a). Language comprehension: Archival memory or preparation for situated action. Discourse Processes 28: 61-80.
- Barsalou, L. W. (1999b). Perceptual symbol systems. Behavioral and Brain Sciences 22: 577-660.
- Brown, A. L., Collins, A., & Dugid (1989). Situated cognition and the culture of learning. Educational Researcher 18: 32-42.
- Chomsky, N. (1986). Knowledge of language: Its nature, origin, and use. New York: Praeger.
- Chomsky, N. (1995). The minimalist program. Cambridge, MA: MIT Press.
- Damon, W. (1983). Social and personality development. New York: Norton.
- Dennett, D. C. (1969). Content and consciousness. London: Routledge.
- Dunn, J. (1988). The beginnings of social understanding. Oxford: Blackwell.
- Engestrom, Y., Miettinen, raij Punamaki, Eds. (1999). Perspectives on activity theory. Cambridge: Cambridge University Press.
- Fodor, J. A. (1975). The language of thought. Cambridge, MA: Harvard University Press.
- Foley, M. & Ratner, H. (1997). Children's recoding in memory for collaboration: A way of learning from others. Cognitive Development 13: 91-108.
- Freire, P. (1995). The pedagogy of the oppressed. New York: Continuum.
- Gee, J. P. (1992). The social mind: Language, ideology, and social practice. New York: Bergin & Garvey.
- Gee, J. P. (1999). An introduction to discourse analysis: Theory and method. London: Routledge.
- Glenberg, A. M. (1997). What is memory for. Behavioral and Brain Sciences 20: 1-55.
- Glenberg, A. M. & Robertson, D. A. (1999). Indexical understanding of instructions. Discourse Processes 28: 1-26.
- Hanks, W. F. (1996). Language and communicative practices. Boulder, CO.: Westview Press.

- Hutchins, E. (1995). Cognition in the wild. Cambridge, MA.: MIT Press.
- Kruger, A. (1992). The effect of peer and adult-child transactive discussions on moral reasoning. Merrill-Palmer Quarterly 38: 191-211.
- Kruger, A. & Tomasello, M. (1986). Transactive discussions with peers and adults. Developmental Psychology 22: 681-685.
- Latour, B. (1999). Pandora's hope: Essays on the reality of science studies. Cambridge, MA: Harvard University Press.
- Lave, J. (1996). Teaching, as learning, in practice, Mind, Culture, and Activity. 3: 149-164.
- Lave, J. & Wenger, E. (1991). Situated learning: Legitimate peripheral participation. New York: Cambridge University Press.
- Newell, A. & Simon, H. A. (1972). Human problem solving. Norwood, NJ: Prentice-Hall.
- Piaget, J. (1932). The moral judgment of the child. London: Kegan Paul.
- Pinker, S. (1994). The language instinct: How the mind creates language. New York: William Marrow.
- Pylyshyn, Z. W. (1984). Computation and cognition. Cambridge, MA: MIT Press.
- Smith, E. E. & Medin, D. L. (1981). Categories and concepts. Cambridge, MA: Harvard University Press.
- Tomasello, M. (1999). The cultural origins of human cognition. Cambridge, MA: Harvard University Press.
- Wenger, E. (1998). Communities of practice: Learning, meaning, and identity. Cambridge: Cambridge University Press.