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Linguistics and Literacy: A new understanding

Abstract

A great literacy debate has been going on for some time, yet the debaters cannot agree on what they are talking about. The English teaching profession is in despair. Reading alone has not been proven to lead to higher-order cognitive skills. The acquisition of print literacy has not unfailingly led to social betterment and progress. Work on literacy should be informed by many disciplines, and especially by linguistics in which recent research on language in use is revealing definitions, and facts and insights into the nature of literacy.

The scientific study of language has been a major influence in the teaching of foreign and second languages, but little influence on the teaching of English native-language skills. This essay is a rationalist plea for turning to linguistics as a tool of psychology, sociology, and communication for the improvement of the teaching of reading and writing.

Many authors decry the sorry state of literacy and public education today.

With skills down, assignments down, standards down, and grades up, the American educational system perpetuates a hoax on its students and on their parents. (Copperman, 1978, dust jacket)

And it is not only young students who fail to live in a typographic world of full literacy.

An all-out literacy struggle on our own home soil . . . is also one of the few responsible starting points for any further efforts to be teachers to the teachers of the Third World. Until we demonstrate that we can come to terms with the catastrophe in our own urban ghettos and our rural slums, there does not seem much reason to expect that other nations will, or ought to, seek out our advice. (Kozol, 1980, p. 101)

However true may be the assumption that literacy brings the benefits of progress and wealth, we must also recognize "our conviction that literacy does make a difference" (O'Barr, 1984, p. 273). Most people are convinced that literacy is a paramount goal.

The problem is how to give functional literacy to everyone. "Within the context of a given culture, a literate person is one who can gain access to information and transmit it to others" (Power, 1983, p. 22), and ideally these literates can then participate in a sort of global literacy across national and cultural boundaries, a seemingly worthy goal. It is believed that literacy breaks the vicious cycle of low income, high birth rates, and slow development. Yet, the absolute number of illiterates in the world today is rising. The distribution of literacy skills seems to mirror the power structure. Thus women, poor people, people in the Southern Hemisphere, rural people, and colored people read and write less than do others.

The English teaching profession

While in North America remedial training in reading and writing for university students is becoming a commonplace, concerned professionals doubt whether English teachers are capable of solving the problems of a populace numbed by television and reduced to a kind of intellectual slavery by overpowering media. The experience of English teachers must be taken into account. They are frustrated, if not defeated, by the turns in our cultural life.

Research on the nature and acquisition of literacy is now being done in many disciplines: anthropology, linguistics, psychology and psychiatry, history, philosophy, literary theory, social and cultural history, and sociology. Few English faculty conduct or read broadly in such research; even fewer English composition programs are informed by it. Given their specialization, which is as narrow as that of any other discipline, I do not believe that English departments, as presently constituted or as likely to be constituted, will accommodate the research and training so obviously necessary to meet the needs of our students and our society. (Robinson, 1983, p. 18)

This assertion can be read as a challenge to the profession of applied linguistics. If professors of English literature and English composition will not or cannot meet the needs, others must do it. And who are better qualified by virtue of their having been for two hundred years in the middle of the study of language, mind, and society than the linguists?

Since the publication of C.C. Fries' *The Teaching of the English Language* in 1927, "an effort to interpret the modern scientific view of language in a practical way for teachers" (preface), applied linguistic knowledge has only gradually affected teacher training and English language curricula. By 1969 most of the major rhetoric texts and series had incorporated some linguistics, if only in appendices (Palmer, 1969). Today teacher training usually includes little more than an introduction to linguistics, if that. I would like to suggest that knowledge about language use in the world should be at the heart of teacher training, and that linguists, by virtue of their scientific objectivity and theoretical training, are the ones to help solve the pressing problem that has been described in these words:

Print is now merely a residual epistemology, and it will remain so, aided to some extent by the computer and newspapers and magazines that are made to look like television screens. Like the fish who survive a toxic river and the boatmen who sail on it, there still dwell among us those whose sense of things is largely influenced by older and clearer waters.

... I believe the epistemology created by television not only is inferior to a print-based epistemology but is dangerous and absurdist.

... as typography moves to the periphery of our culture and television takes its place at the centre, the seriousness, clarity, and, above all, the value of public discourse dangerously declines. (Postman, 1985, pp. 27-29)

It is just this: "Whoever can't read or write his mother tongue is little more than a dead person" (quoted in Strauss, p. 98). Critical study of the nature of Western culture yields the conviction that with the advent of writing, language becomes an object of contemplation, and where language and reality intersect, the mind becomes an object of contemplation, and so modern consciousness makes modern philosophy possible. Literacy is what makes our world go around:

Literacy is for the most part an enabling rather than a causal factor, making possible the development of complex political

structures, syllogistic reasoning, scientific inquiry, linear conceptions of reality, scholarly specialization, artistic elaboration, and perhaps certain kinds of individualism and alienation. (Kathleen Gough, quoted in Bailey and Fosheim, 1983, p. v)

Is literacy reading?

Who but the highly literate can read Solzhenitsyn, D.H. Lawrence, Ezra Pound, or T.S. Eliot, and understand the reasons for their alienation? Literary discourse being "a self-contained unit, and in suspense from the immediate reality of social life" (Widdowson, 1975, p. 45), it is not our primary concern here. By contrast, our present danger lies in the general threat to our print culture posed by the newer media. Walter Ong (1982) claims that we have moved from a pristine oral culture to a writing culture to a print culture to an electronic culture, where "secondary orality" or "electronic orality" has created a new world-view unlike any that has come before. This world-view includes the print media, but it goes far beyond the boundaries of books to include cognition and spatial visualization as a component of computer literacy. Marvin and Winther (1982) explain this idea as follows:

...the definition of print literacy continues to plague everyone with a serious interest in it. This is because the only measure of literacy is success in interpreting messages, and success in interpreting messages will always be a socially constructed rather than an objective category. In the twentieth century in the West, literacy has come to denote a consensual level of competence in deciphering and manipulating written material. But literacy may be thought of in broader terms as decoding or manipulating whatever message systems particular cultures regard as important. (p. 210)

The print and computer media are similar but differing experiences. Orality and print literacy are similar but differing experiences. It is the similarities and differences between message systems that we must study in order to gain a firmer grasp of the place of literacy in learning and problem solving.

To this end, probing and delicate studies of literacy and orality shed light on the attendant problems and suggest solutions. For example, Deborah Tannen (1983) claims that while

...oral strategies may underlie successful production of written discourse, ... differences between them may in fact grow out of other factors: specifically, communicative goals and relative focus on interpersonal involvement. (p. 80)

Higher goals and less interpersonal involvement characterize the registers of language that are not primarily concerned with the speakers and listeners or writers and readers.

Walter Ong (1982) holds that oral folk cannot organize concatenations of causes in analytic linear sequences that can only be set up with the help of texts, and that, in fact, writing restructures consciousness. He quotes Jacques Derrida to the effect that writing is not a supplement to the spoken word, but a quite different performance. He asserts that with literacy consciousness evolves into a self-conscious, articulate, highly personal interiority that is different in quality from the consciousness of illiterates. He contrasts literate thought and expression with orally-based thought and expression. Oral thought and expression is:

1. Additive rather than subordinate
2. Aggregative rather than analytic
3. Redundant or copious rather than terse
4. Close to the human lifeworld rather than distant
5. Conservative or traditionalist rather than changing
6. Agonistically toned (warmly human) rather than dispassionate
7. Emphatic and participatory rather than objectively distanced
8. Situational rather than abstract
9. Homeostatic or equilibrated rather than evolving.

"Literacy opens possibilities to the word and to human existence unimaginable without writing" (Ong, 1982, p. 175), he asserts forcefully in examining the *noetic process* – the intellectual act of shaping, storing, retrieving, and communicating knowledge. This view of the effects of print literacy on the minds of its users suggests that it is the syntactic explicitness of the highly-elaborated code of essay-text literacy that we value most highly. In other words, we perpetuate an ideology of schooled literacy (Gee, 1986, p. 732).

However crucial print literacy may be to higher consciousness, it is evident that reading and writing are ways to get things done, just as speaking and understanding speech are language practices that determine one's place in a given society. We use language to construct our social realities (Scribner & Cole, 1981). Another way to look at this is to say that all ways of using language, from essay-text to voodoo chant, are socially constructed. Uses of language (discourse types) are *literacies* in which thinking creates language necessary to communicative tasks. The world views of differing realities follow the social construction of literacy (Cook-Gumperz, 1986). Yet the term *literacy* means different things to different people.

Statistics and impressions

The lack of understanding of just what literacy consists in doing can be seen in the following:

... a study published by the University of Texas in 1975 suggested that one in five Americans cannot read well enough to perform the simplest tasks. Of 15,000 tested, 20% could not write a check without an error so serious that a bank could not cash it; 22% were unable to address an envelope well enough to ensure postal delivery; 40% could not figure correct change from a store purchase; and more than half had at least some trouble with reading or writing. "We're talking about half the U.S. population being in a borderline or worse situation," says Texas Researcher Jim Cates, who directed the study. "There is no threat to the U.S. greater than that." (*Time*, May 5, 1986, p. 59)

The above figures are given in an article devoted to a U.S. Department of Education report on a basic literacy test administered by The Bureau of the Census (presumably in 1986). This test of "bedrock inability to read" suggests that 17 to 21 million adults in the U.S. cannot read. It contradicts a 1979 Census Bureau study that said that only one-half of 1% of Americans over 14 are illiterate. Contradictions and refutations are apt to occur when precise definitions are lacking. We must take all such figures with a grain of salt, realizing that numbers are often projections of hunches and impressions. To say that 85% of offenders who appear in juvenile courts are disabled readers (Copperman, 1978, p. 22), for example, is to say that a "lot of kids" who get into trouble with the law probably are not able to apply primary academic skills to the cultural and intellectual record of the society: history, literature, science, and mathematics. They lack sound decision-making abilities. They cannot participate actively in realizing their human potentials, and so on. The assumption of cause (illiteracy) and effect (trouble with the law) is specious and thus no more than a half-truth.

Further muddled thinking surrounds the belief that freedom, democracy, and literacy are somehow interdependent and necessary for economic development, modernization, and westernization, as if change in a given society does not depend upon differing cultural, social, and historical factors (Kaplan, 1984, p. vii). What are we to make of the literacy rates of Iceland, Cuba, Israel, Switzerland, and Japan (said to be 100%)? Are the United States and Canada Third World countries by comparison? Until we know more precisely in each case what part literacy plays in indigenous education, communication, transportation, technology, trade, investment, and so on, we cannot make valid comparisons or even talk about economic

and language development with any validity. This point was very well put by Harvey Graff (1981):

The belief in a modernization theory that social and economic progress follow from a change in persons from illiterate to literate is not only unconfirmed, but reflects a misplaced and exaggerated estimation of the power of literacy by itself. We do better to conceptualize literacy's correlates in more flexible, less unidirectional, and less causal ways. (p. 19)

How are we to conceptualize the correlates of literacy when the word *literacy* has so many senses and referents that it is often impossible to know what is meant by the term?

Interdisciplinary cooperation

We must get at sound definitions. Linguists should cross disciplines and insist on interdisciplinary cooperation. Scientific methodologies, resting on substantial knowledge, must reach out, accept and integrate interdisciplinary studies. Every linguist knows that there is much more to linguistics than empirical observation and objectivity. All science is based on intuition, hunches, and fortuitous discoveries. We all must try to use knowledge from other paradigms to help answer our questions.

The chances of gaining insight must surely increase as we look into substantial fields other than our own. The consequences of literacy in the past is a field of study that is yielding insight into the consequences of literacy today. For example, Kathleen Gough's study (1968) of literacy in traditional China and India contrasts myth in India with history in China, the Chinese written records stretching back 4000 years, the Indian only since the advent of Islam. She claims that Chinese rationalism influenced the rise of modern European science, in spite of the lack of an alphabet, because of early Chinese humanistic studies, magnetics (the compass, an 11th century invention), botany, zoology, and pharmaceuticals. Moreover, it is hard to generalize from literacy to political structure, for western individualism came not from literacy, but from capitalism (p. 83). This is the sort of understanding that we must search for.

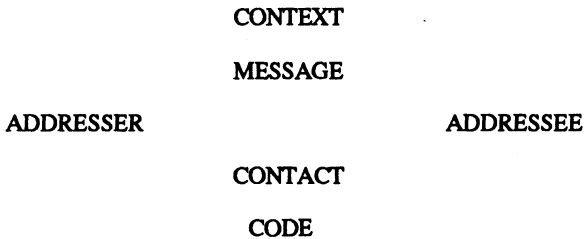
Similarly, and in a more practical vein is Stubbs' study (1980) of how the individual is affected by the necessity and desirability of literacy. He outlines the requirements for a theory of literacy based on the formal and functional characteristics of language in use in social settings, urging that work on literacy should be integrated with several disciplines. Because linguists and educationists cannot do each other's work, "it seems that linguists have the responsibility of trying to present in a helpful way those

parts of the subject which would be of use to others" (p. x), even though the relation between linguistic theory and educational practice will be indirect.

It follows that what linguists can do is to make known their understanding of the social and psychological bases of language in use. They can and must share their knowledge about language in order to help educationists think more clearly about the various kinds of literacy. In the following section, a pragmatic theory of literacy is postulated.

A pragmatic theory of literacy

The great Russian linguist, Roman Jakobson, stated in 1960 that the six functions of language depend on six factors of communication. In any language in use we find the following:



Any recognizable piece of language in use, one with a beginning, a middle and an end, that is, a **discourse**, can be seen as a text. Many of the features of any text are known in advance by accomplished listeners and readers. Texts exhibit typical linguistic features of vocabulary, grammar, cohesion, style, intonation, punctuation, coherence, emphasis, order, unity, and so on, according to the **register** of each (Palmer, 1981). Register is defined as a describable variety of language that is found in particular situations. Register varies according to field, mode, and manner of discourse:

1. Field: its purposes
2. Mode: its medium (e.g., spoken or written)
3. Manner: its social function and style.

So we might describe a special register, say scientific reporting, as follows:

Fields

- a) Narration of sequence of processes already completed
- b) Description of results
- c) Interpretation of results

Mode

Written, to be read silently

Manner

- a) Formal, impersonal, objective tenor
- b) Specialist, technical province

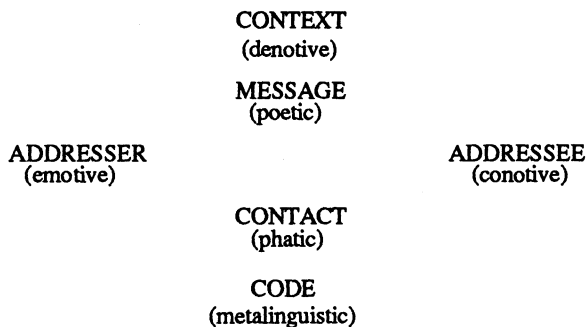
The able reader expects to find the typical features of this register in a scientific report. Scientific reporting is a very predictable register. Its characteristics can be quickly taught and learned. The special technical knowledge expressed in it is, however, another matter. Emphasis on this knowledge is what makes scientific reporting typical of one of six functions that underlie language in use – the **denotive** function.

In the denotive (or referential) function the language allows a reader to share a world of knowledge that may lie outside immediate experience. The function is referentially cognitive: it concerns itself with facts and ideas about the sociophysical world, its context. It is sufficiently impersonal to be interpretable by anyone with a proper background of knowledge. This impersonal, denotive function serves the purposes that most of us have in mind when we read in foreign languages, or when science and technology students learn to read special subjects in their native languages.

But the denotive is only one of six functions that must be to some degree interwoven in a given discourse. The other five are as follow:

1. Phatic (small talk)
2. Emotive (about me)
3. Conotive (about you)
4. Metalinguistic (about language)
5. Poetic (about itself)

The six functions correspond to the six factors of communication:



The phatic function serves to keep the channels of communication open. It removes threats while reassuring its users that they belong to the same group. It assures contact between the addresser and the addressee. It may be the first function that one masters. For example, we quickly learn that "How are you?" is not a question.

The emotive function is expressed in language about the speaker or writer. It concerns his or her emotions, beliefs, values, knowledge, and desires. Tone of voice helps carry this function along. It is sometimes so personal that special knowledge is required to interpret the casual or intimate information in it. Think of the text of a typical elementary school composition, "My Summer Holiday." Often the writers do not see why the readers don't understand what they were getting at because they don't realize that others do not share their knowledge, beliefs, and experiences completely.

The conotive function emphasizes the person(s) to whom the discourse is addressed. Using it we give commands, advice, directions, or make requests. A cookbook is strongly conotive and denotive at the same time. So are the assembly instructions that accompany toys and electrical equipment. My favourite conotive discourse is engraved on tiny plaques on the iron bars on the windows of the Erawan Hotel in Bangkok: "PUSHING ON THIS BAR HARDLY WILL MAKE A FIRE EXIT." A love letter may be both particularly emotive and/or conotive.

The phatic, emotive, and conotive functions are the principal uses of spoken language. These are the first functions we master when we learn our native language(s). Their main use is interpersonal management. When we learn to function phatically, emotively, and conotively in the written mode we may be said to be **functionally literate**. Of course, all of these three functions must accompany the denotive function to some degree in a discourse. But then the denotive may be nearly absent, too. Thus much of the elementary school curriculum concerns social behaviour, personal development, and linguistic interaction with others. Only incidentally does it concern knowledge, and that knowledge often is the same old stuff. In this regard, it is useful to look at studies of the relationship between literacy and cognition.

In their important study of the psychological effects of literacy among the Vai people of Liberia, Scribner and Cole (1981) found good reasons to doubt that literacy is associated with higher-order cognitive skills. They found in particular only that "school fosters abilities in expository talk in contrived situations" (pp. 242-43. See Gee's article for discussion.). I would submit that the Vai use their languages (Vai, Arabic, and English) mainly for the phatic, emotive, and conotive functions, and

that these functions seldom involve taxonomy, syllogism, or other types of abstract reasoning.

Two other functions that people use to a greater or lesser degree are the metalinguistic and the poetic. The metalinguistic function is language about language. We use it frequently when we ask others what they mean or what they have just said. Schoolteachers spend a lot of time in classrooms talking about language, especially in English classes. In foreign or second language classes there is even more teacher talk. The accuracy and utility of teacher talk are two matters of concern. How much should teachers know about language in order to work effectively? To what extent and in what circumstances should teachers talk about language? Could the students learn more and faster if the teachers would shut up?!

All of us are aware of the poetic function. We are caught by clever advertising copy, amused by comedians, charmed by song lyrics, entertained by stories (if only on television or at the movies). But not everyone is good at creating discourses the language of which is about the messages contained within them. Nor can many people get at the deeper meanings in the self-contained wholes of serious poetry, fiction, criticism, or metaphysics, meanings carried by the poetic function that are essentially not translatable. These are the meanings that a translator has to find analogs for in the other language, for they cannot be had outside the language they are expressed in. It is at the level of true acculturated literacy that one appreciates with ease and great profit the subtleties, style, tone, elegance, phrasing, irony, beauty, and originality of imaginative discourses. Without much practice in and knowledge of the metalinguistic and poetic functions, one cannot attain to what has been variously called essayist literacy, humanistic literacy, and aesthetic literacy. Without these sorts of literacy the world of the mind would be truly mundane, practical, transitory, and ordinary, and higher-order cognitive skills would be rare.

REFERENCES

- Bailey, Richard W. & R.M. Fosheim (Eds.). (1983). *Literacy for life: The demand for reading and writing*. New York: The Modern Language Association of America.
- Cook-Gumperz, J. (1986). Literacy and schooling: An unchanging equation? In J. Cook-Gumperz (Ed.), *The social construction of literacy*. Cambridge: Cambridge University Press.
- Copperman, Paul. (1978). *The literacy hoax: The decline of reading, writing, and learning in the public schools and what we can do about it*. New York: William Morrow.
- Fries, C.C. (1927). *The teaching of the English language*. New York: Thomas Nelson and Sons.

- Gee, James P. (1986). Orality and literacy. From "The savage mind to ways with words," *TESOL Quarterly*, 20(4), 719-46.
- Gough, Kathleen. (1968). Literacy in traditional China and India. In J.R. Goody (Ed.), *Literacy in traditional societies*. London: Cambridge University Press.
- Graff, Harvey J. (Ed.). (1981). *Literacy and social development in the West: A reader*. New York: Cambridge University Press.
- Jacobson, Roman. (1960). Closing statement: Linguistics and poetics. In Thomas Sebeok (Ed.), *Style in language*, pp. 350-77. Cambridge: The Technology Press of MIT.
- Kaplan, Robert B. (Ed.). (1984). *Annual review of applied linguistics* (on literacy). Rowley: Newbury House.
- Kozol, Jonathan. (1980). *Prisoners of silence: Breaking the bonds of adult illiteracy in the United States*. New York: Continuum.
- Marvin, Carol & Mark Winther. (1982). Computer-ease: A twentieth century literacy emergent. In William Frawley (Ed.), *Linguistics and literacy*. New York: Plenum Press (Proceedings of the 3rd Delaware Symposium on Language Studies, 1981).
- Ong, Walter. (1982). *Orality and literacy: The technologizing of the word*. New York: Methuen (New Accents Series).
- O'Barr, William. (1984). Asking the right questions about language & power. In Cheri Kramarae, Muriel Schulz, & William O'Barr, (Eds.), *Language and power*. Beverly Hills: Sage Publications.
- Palmer, Joe D. (1969). *The grammars of English and curriculum reform*. Ph.D. dissertation. The University of Michigan. University Microfilms. Ann Arbor.
- Palmer, Joe D. (1981). Register research design. In Mackay and Palmer, first published in *Proceedings of the Fifth AILA Congress*. (Association internationale de linguistique appliquée). 1978.
- Postman, Neil. (1985). *Amusing ourselves to death: Public discourse in the age of show business*. New York: Viking
- Power, Sarah G. (1983). The politics of literacy. In Richard W. Bailey & R.M. Fosheim, (Eds.), *Literacy for life: The demand for reading and writing*. New York: The Modern Language Association of America.
- Robinson, Jay L. (1983). The users and uses of literacy. In Richard W. Bailey & R.M. Fosheim, (Eds.), *Literacy for life: The demand for reading and writing*. New York: The Modern Language Association of America.
- Scribner, S. & M. Cole. (1981). *The psychology of literacy*. Cambridge, MA: Harvard University Press.
- Strauss, Gerald. (1981). Techniques of indoctrination: The German reformation. In J. Harvey Graff (Ed.), *Literacy and social development in the West: A reader*. New York: Cambridge University Press.
- Stubbs, Michael. (1980). *Language and literacy: The sociolinguistics of reading and writing*. London: Routledge and Kegan Paul.
- Tannen, Deborah. (1983). Oral and literate strategies in spoken and written discourse. In Richard W. Bailey, & R.M. Fosheim, (Eds.), *Literacy for life: The demand for reading and writing*. New York: The Modern Language Association of America.

Time Magazine. (1986, May 5). p. 59.

Widdowson, H.G. (1975). *Stylistics and the teaching of literature*. London: Longman.

BIBLIOGRAPHY

- Bendor-Samuel, David. (1984). On the study of literacy. In Robert B. Kaplan (Ed.), *Annual review of applied linguistics* (on literacy). Rowley: Newbury House.
- Cashdan, Asher, (Ed.). (1986). *Literacy: Teaching and learning language skills*. Oxford: Blackwell.
- Deely, John. (1982). *Introducing semiotic: Its history and doctrine*. Bloomington: Indiana University Press.
- Frawley, William, (Ed.). (1982). *Linguistics and literacy*. New York: Plenum Press (Proceedings of the 3rd Delaware symposium on language studies, 1981).
- Goody, J.R. & Ian Watt. (1968). The consequences of literacy. In J.R. Goody (Ed.), *Literacy in traditional societies*. London: Cambridge University Press..
- Jaynes, Julian. (1976). *The origin of consciousness in the breakdown of the bicameral mind*. Boston: Houghton Mifflin.
- Kindell, Gloria. (1984). Linguistics and literacy. In Robert B. Kaplan (Ed.), *Annual review of applied linguistics* (on literacy). Rowley: Newbury House.
- Kramarae, Cheri, Muriel Schulz & William O'Barr, (Eds.). (1984). *Language and power*. Beverly Hills: Sage Publications
- Mackay, Ronald and Joe D. Palmer, (Eds.). (1981). *Languages for specific purposes: Program design and evaluation*. Rowley: Newbury House.
- Merritt, John. (1986). What's wrong with teaching reading? In Asher Cashdan (Ed.), *Literacy: Teaching and learning language skills*. Oxford: Blackwell.
- Mertz, E. & R.J. Parmentier, (Eds.). (1985). *Semiotic mediation: Sociocultural and psychological perspectives. (Language, thought and culture; advances in the study of cognition)*. New York: Academic Press.
- Mitchell, Richard. (1979). *Less than words can say*. Boston: Little, Brown & Company.
- Pelletier, Kenneth R. (1978). *Toward a science of consciousness*. New York: Dell.
- Postman, Neil. (1979). *Teaching as a conserving activity*. New York: Dell.
- Sebeok, Thomas, (Ed.). (1960). *Style in language*. Cambridge: The Technology Press of MIT.
- Smitherman, Geneva. 1984). Black language as power. In Cheri Kramarae, Muriel Schulz & William O'Barr, (Eds.), *Language and power*. Beverly Hills: Sage Publications.