
Literacy and Applied Linguistics

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Abstract

This paper contends that the aim of applied linguistics is to help those who work with language to do that work more efficiently, and in line with this aim applied linguistics has been particularly concerned with literacy. However, it suggests that linguists do not really know what literacy is since the process of reading is not fully understood. The language is at one remove from physical experience, often occurring in a personal, abstract context rather than one of social interaction, when oral processes are in use. Therefore, this paper argues that to come to a theory of literacy, an understanding of the functions of language is required. Once this understanding has been achieved then applied linguists can most fully assist educational planners.

Introduction

“The practical work of describing languages goes forward—to make dictionaries, assimilate minorities, provide bilingual instruction, train translators—with or without help from linguistic theory.”

(Dwight Bolinger, *Aspects of Language*)

Literacy is the reason for the existence of the profession of applied linguistics, the profession that “brushes up against the full spectrum of human behaviour (Venezky 1982: 270).” Several authors in *On The Scope*

of Applied Linguistics (Kaplan, 1980) argue forcefully that applied linguistics is linguistics employed to help people find answers to questions and solutions to problems.

“According to Jacob Mey, linguistics should be used to change the world. As he writes in his latest book, *Whose language. A Study in Linguistic Pragmatics* (1985), linguists should ask themselves “How can we make this world a better place in which to live?”

(Johansen 1986: foreword)

Traditional scholarly grammar, philology, structuralism, and all the Twentieth Century schools of linguistic theory have been used

by applied linguists to improve language teaching materials and to help translators to do their work. Thus foundational courses

of study in phonetics, morphology, syntax, semantics, and language history are basic to further linguistic pursuits, all of which provide information that is used to improve literacy teaching.

Yet the kind of applied linguistics that grew out of structural linguistics was for some time limited in scope to the recognized facts about languages that structuralism revealed. Previously, the development of the International Phonetic Alphabet and phonemic theory had facilitated the writing down of formerly unwritten languages. Jones, Volney, Pickering and Sweet gave anthropologists, missionaries and language planners a powerful tool. Field methods developed by Nida, Pike, and Gudschinsky, among others, gave the promises of literacy to millions of people. In applying structuralist theory to the teaching of reading, however, certain assumptions about the nature of reading were made. These assumptions seemed to ignore the psychology of reading:

1. Reading is producing sounds.
2. Language levels are isomorphic.
3. Phonemes are psychologically real

(Venezky 1982 : 268).

Just because structural analysis yields units, such as those of the rank scale (sentence, clause, phrase, word, morpheme) and units of phonology and graphology, it does not follow that people process language through them. It is a vexing fact that language remains a formal part of the mental world, much more complex than its physical, substantial manifestations.

It remains the case that "it is generally agreed that we do not understand the process of reading, or what happens when a child does or does not learn to read (Labov 1970 : 222)." Given "the incredibly confused

and inconclusive state of reading research (Frank Smith 1973 : 5)," it is not surprising that "very little of the great mass published on the subject of the teaching of reading is significant in contributing to a theory of literacy. Indeed much of it reflects the absence of a theory, and the absence of any awareness of the need for a theory (Mackay, Thompson, Schaub 1970 : 78)." Nothing is so practical as a good theory, without which solutions to problems tend to be *ad hoc* and temporary. We need one, a theory of literacy that is based on what we know about language and its psychological and social dimensions.

Old knowledge

Our aim as applied linguists is to help people who work with language to do their work better and more efficiently, and our method is to apply our knowledge about language as structure and system to the social tasks and management problems that language use entails. Applied linguistics has been concerned in particular with fostering literacy since the science of linguistics came into being in the early 19th Century with the publication of Erasmus Rask's *Investigation on the Origin of the Old Norse or Icelandic Language* (1818).

Until linguistics came along people could not read many old texts with much understanding. Scholars often had difficulty determining the language that texts were written in, much less *when* they were written and *where*; and to get at the intended meaning of an old piece of writing was sometimes impossible. But the work of scholars like Rask, Jacob Grimm and William Dwight Whitney, the comparative philologists, soon revealed principles about natural

language that enabled them to show that languages change constantly and that modern languages have genetic relationships to one another that illustrate how they were related in the past and how similar they are today. Thus came the notion of the Indo-European family of languages, and by extension, of other language families. The idea that change is not corruption but a regular rule-governed process is a powerful one. It enabled scholars to look at languages objectively, the way they really were. What they saw is that language is not speech or writing. It is rather an abstract formal entity that exists in the minds of its users. This was and is a startling, extremely useful and productive notion. It is the basic notion in the theory of language. It underlies the discipline of linguistics. A linguist is not merely someone who uses several languages, but one who studies how languages work, the processes and practices of language users.

The tremendous body of knowledge about language that scholars have discovered and created since the early years of the 19th Century is unknown to most of the general population. Popular attitudes toward language are informed by ignorant traditions, superstition, and defensiveness. The traditional views of language are based on cultural traditions that were established in the 17th and 18th Centuries concurrent with the rise of capitalism, the industrial revolution, the spread of public education, and the consequent necessity of standardizing national languages. The processes of standardization necessitate the prescription of certain forms and the proscription of others. Grammar books which told people what they should and should not say or write were the best-sellers of their day. In cases

of divided usage the authors decided what was correct on the basis of their own personal practices, on the basis of usage in Greek and Latin, and on the basis of logic (two negatives make a positive, etc.).

Samuel Johnson, Thomas Sheridan and Nathaniel Bailey published dictionaries of English that standardized to a large extent the spelling of words. In all of these cases the operating principle was a capricious and arbitrary imposition of authority. The set of mind that was created by persistent correction in schools is the set of mind toward language of the general public today. Most people are self-conscious and defensive about their own use of language to the point where a psychological block causes them to reject learning to use more elaborate, older or different forms that give deeper meanings, esthetic pleasure and intellectual stimulation to the fully literate.

A major task of the applied linguist is to spread the new learning about language and to perpetuate the benefits of the work that was done in the past. Many of the discoveries of linguistics have been directly applied to literacy problems. For example, the great modern dictionaries, the *Deutsches Wörterbuch* and the *Oxford English Dictionary*, would have been impossible of achievement before linguistic principles were understood. The principle that usage is correctness allowed dictionary makers to use as illustrative examples the actual written words of identified writers whose texts meant what was being exemplified. Previously, examples in dictionaries did not necessarily show how particular meanings were intended, and the dictionary makers passed judgments on the suitability and status of words according to their own taste -- a most

unscientific practice. For example, Dr. Johnson wrote that *fun* was "a low cant word," and *excepting* "an improper word". The earlier word books, it should be noted, listed only hard words, ignoring the basic lexicon as if the stuff out of which language is expounded were of little consequence.

Advances in the study of articulatory phonetics led to the creation of the International Phonetic Association and gave a technique for capturing permanently the sounds of words in print, so that learners did not have to guess at the pronunciation of words new to them. Historical linguists discovered that pronunciation is relatively stable but all languages undergo general, regular, gradual, unconscious changes in pronunciation. Therefore there is nothing bad about variant pronunciation; neither is there one correct pronunciation of a given word. They also discovered that common words have many meanings. Of the 500 most often used words in English, according to the Thorndike count, the O.E.D. lists 14,070 separate meanings (Fries 1962: 57). Thus there is no one correct meaning or original correct meaning, the assertion of which is the so-called etymological fallacy. For example, ignorant purists may insist that only stone buildings can be dilapidated because the root *lapid-lapis* in Latin means stone.

Linguistic geography grew into the understanding that regional dialects are not inferior, but merely different, reflecting the settlement history of the regions. A new tolerance of and respect for regional and social peculiarities of word choice and pronunciation reflect the great pleasure and understanding that word lovers find in variations in the lexicon and pronunciation. The

opposite of this tolerance and respect can be found in those who look down on people whose speech shows them to be ethnically different. For example, French speakers often laugh at such Quebecois expressions as *la fin de semaine*, which Quebecers use instead of the more tony and newly-borrowed Continental French *le week-end*. An informed knowledge of the historical, geographical and class circumstances of vocabulary and pronunciation gives an appreciation of and depth of meaning to the word hoard of the language. People who do not have such knowledge are impoverished intellectually and socially. They cannot experience the joys of relatively full literacy, they cannot learn as much, they cannot think as well as those who valorize and cherish the language in all its beautiful diversity. This knowledge and its potential for fostering higher literacy came directly from linguistic science.

The development of structural linguistics gave tools and techniques for many jobs. The languages of the American Indians were studied in great detail. Alphabets and syllabaries for writing the languages were invented. The people were given literacy as the key to their development in the modern world. Missionary work and public education around the world were strengthened by the application of phonemic theory and structural grammar to problems in writing, dictionary making, language standardization, and bilingual education. The principle that systemic structural units of language are as important to expressing meaning as the vocabulary itself yielded new ways to learn to read both mother tongue and foreign or second languages. Yet most people today still believe that the language is in the dictionary, and the way to learn a language is to memorize the

vocabulary. The knowledge that the forms, the arrangements, the patterns of the language, with accompanying function words and inflections, make meanings possible allowed teachers and materials writers to tackle the problems from a fresh perspective: language consists of words and phrases arranged in structural units that contrast with one another; one makes systemic choices from among the contrasting possibilities of patterned pieces of language structure. Words are not at the center of language; structures are.

New Knowledge

Even though she was deaf, dumb and blind, Helen Keller became literate. Though not unique, Miss Keller was one of the few people who had ever lived without participating in an oral culture. Participation in an oral culture is the common experience of most of mankind. Even the deaf who use sign language read lips. A majority of people today take part in the activities of cultures that are both oral and literate, with literacy being laid atop a residual orality. Indeed, many young people today, because of the media explosion, can be said to have developed a secondary or electronic orality that accompanies the traditional orality of the entire culture, and that gives them new kinds of cognition and spatial visualization (Ong 1982). In addition to possessing electronic orality, the new generation could possibly surpass preceding generations in literacy. In fact, some critics look forward with positive expectations. According to Robert Logan (1986) we are now witnessing a resurgence of literacy because of word processing. He claims that the current generation that grew up between television and the micro-computer is a lost generation, but there will be a blooming of literacy in

the next generation because the word processor makes composition so easy. Children using a word processor do not even have to know how to form letters. They simply sit down and write.

In order to talk and write about literacy in an unambiguous and principled way, we must make sure that the terms orality, oracy, literality, and literacy, are well defined and capable of being extended in delicacy as new ways of looking at the topic of literacy are developed.

ORALITY : generally the quality or state of being oral, an ability to talk; more precisely, an ability to speak and to recognize spoken words and phrases

For example, after some three years' residence in Thailand, a native-English-speaker acquired and learned a certain orality. He knew some words and phrases by their sounds and typical contexts, and could use them in everyday situations. His orality extended only to phatic and instrumental functions of the simplest kind. He could not participate in complex interactions. He was not orate.

ORACY : an ability to speak and understand spoken language with fluency; rhetorical skill

For example, British school curricula for decades have emphasized speech skills as a concomitant and prerequisite to literacy skills.

LITERALITY : an ability to read words and phrases aloud and/or silently

For example, a native-English-speaker studied a programmed course in reading

modern standardized Arabic. He went to Egypt and found that he could read headlines, names, street signs, advertising posters and numbers, but he could not understand much of what he could read because he did not know Arabic. That is to say, he had achieved an uncertain level of literacy, but he was not at all literate. Similarly, it is easy for people who are used to the Roman alphabet to learn to read aloud with considerable accuracy those languages written with that alphabet that are also phonologically and morphologically relatively simple, such as Spanish, Italian and Turkish.

“...between 1640 and 1700, the literacy rate for men in Massachusetts and Connecticut was somewhere between 89 percent and 95 percent, quite probably the highest concentration of literate males to be found anywhere in the world at that time, (The literacy rate for women in those colonies [was] as high as 62 percent in the years 1681–1697).”

(J.D. Hart, quoted in Postman 1985 : 31)

Responsible social criticism depends on the accuracy of estimates such as those made by Hart. In a set of observations

“Whatever else may be said of those immigrants who came to settle in New England, it is a paramount fact that they and their heirs were dedicated and skillful readers whose religious sensibilities, political ideas and social life were embedded in the medium of typography.”

(Postman 1985 : 31)

Such is the new knowledge that historians have gained about the centrality of literacy to life in former times. The sort of literacy that was based on popular culture and served as the means of transmission of information before the creation of the modern media has been called *commonplace literacy*. Literacy was an integral part of most people's lives in Western Europe and North America during the eighteenth and nineteenth centuries. Literacy then had not yet developed into specialized varieties that mark the social,

LITERACY : – an ability to sign one's own name
– an ability to respond to the practical task of daily life
– an ability to read a simple passage and answer questions about it
– a highly acculturated ability to read and write

Some historians extrapolate from handwritten signatures on deeds and polling lists the proportion of literate people in a social group in the past, the estimates being abetted by surviving personal letters and records of the number of books sold during a given period of time. For example :

about life in colonial New England, Postman asserts that

economic and cultural stratification of society today in the West. The Western literacy of today can be called *schooled essay-text literacy* to distinguish it from the earlier, more general kind (Cook–Gumperz 1986a)

Everyone has a kind of *proper literacy*, an ability to explain coherently their own social and linguistic experiences. Schools, on the other hand, set out to destroy this *commonsense literacy* in favour of *schooled literacy* :

“...commonsense explanations won't do ever. It's really much simpler, the school says, experience should be understood linearly not hierachically; (sic) it's all there on the surface, not deeply and complexly organized (O'Neill 1970 : 262).

No matter how tenuous this observation about the meanings of *literate* may be, very good attempts at pinning the concept down have been made : Literacy is

1. the ability to crack a code : to make sense of marks on paper ;
2. the ability to derive information from that code ;
3. the ability to derive personal, social, cognitive meaning from the information derived ;
4. the ability to act on such meanings ;
5. the ability to make inferential and other cognitive structures from the

“Learning to read and write is not equivalent to learning other instrumental skills, for literacy is a metacognitive process that makes other cognitive and social developments possible (1986b : 3).”

Thus there are many kinds of literacy that must be defined in terms of their social construction, not in terms of objective categories (Marvin and Winther 1982 : 210).

Oral Versus Written Language

It is easier to learn to read a language that one speaks than it is to learn to read a language that one does not speak, everything else being equal. One learns to read the native language or languages or the learned or acquired second languages with somewhat more facility than one learns to read a language that one cannot understand or speak. Furthermore, since bilingualism can indeed enhance the cognitive development of children (Hakuta 1986 : 10), people who speak two or more languages most

meanings acquired in order to find new meanings.

(Robinson 1983 : 16)

This precise and delicate definition leads to an understanding that literacy is a functional ability that may consist of only being able to read but most probably in discussions of social and economic development will mean *functional literacy*, that is, reading and writing abilities defined in terms of years of schooling. Addressing this point in a discussion of the social bases of literacy learning, Cook-Gumperz maintains that

probably find it easier to learn to read than do monolinguals. I do not know of research that supports this observation, however obviously true it seems to be. What seems to be operating in such cases is a metalinguistic awareness that enhances learning.

Consequently, for the structuralists knowing a language was first of all being able to speak and understand it. Speech is prior to writing; understanding speech is prior to understanding written language. It follows that to know a language one must first speak it, and since speech and writing are patterned sorts of behaviour, we may teach language by getting people to overlearn, that is, to utter patterned language without thinking about the language. Language is

taught inductively through the presentation of points of attention, not through the application of rules. Accuracy is stressed. Mistakes are not tolerated.

However, both structural grammar and behaviourist psychology ignore the fact that one can learn to read a language that one cannot speak or understand at all or with difficulty. Speaking and understanding spoken language are contingent upon the physical experience of people speaking and understanding. On the other hand, writing and understanding written language are contingent upon private personal experience. What one does with a book is not quite what one does with people.

Reading is, of course, an interaction through a text that depends on a reader's being able to derive a discourse by pretending to some degree that he is engaged in a dialogue between himself and the writer whose persona is to some extent in the text. Dakin (1973) maintains that a reader holds in his mind a dialogue that reconstitutes the roles of addresser and addressee. The imaginary dialogue causes the reader to relate meanings in the text to his knowledge and experience. To a certain extent, this is obviously true. Furthermore, Coulthard (1977: 181) holds that full stops (periods) and presumably other terminal punctuation marks are points where "the writer thinks the reader needs to stop and ask questions about the previous sentence..." in a process of predicting and hypothesizing as the reader's "cognitive map" (Widdowson, 1975) changes. This metaphor of a reader-writer dialogue is an attractive way of explaining what goes on at some levels.

However, reading and writing are cognitive processes that occur at one remove

from physical experience, and unlike speaking and understanding spoken language, they depend upon imagination and the mind's eye for description, narration and argument rather than upon immediate socio-physical contexts. Consider Lowell Muehler's teaching himself, at age 60, to read Russian in order to write abstracts in English of papers on photographic chemistry written in Russian. What went on then? He brought to the task a profound knowledge of a highly specialized field of research. His job was to take cognizance of what was already known and assumed to be the case, and by a process of the elimination of possibilities to determine what was new. The function of a scientific report is to utter propositions about a fully-recoverable socio-physical context that has about it none of the features one associates with language, about the writer himself, about the reader himself, about social control, that is poetry, or language about language. It is objective, recoverable, universal, permanent, a part of a large world that educated literate people may share. Those who teach us have known for a long time that much of our language skill is subjective and not social. Consequently, as an English-reading student I was made to learn to read linguistics in French and in German. I recently reviewed a book containing papers in German (e.g., "Was kann der Reckner für uns tun?"). I could not have read the German papers without the use of a dictionary. Such experiences led me to see that some uses of language resemble conversation hardly at all, but are much more personal and abstract than any social interaction. How can this be?

Functions of Language: A Theory of Literacy

In defining and understanding the applied linguists' tasks it is very helpful to keep in mind the profound insight into language use that is provided by Jacobson's functions (1960). In order to describe the socially-constructed differences between spoken and written language varieties, it is necessary to place specific instances of language in use in their contexts of situation (see Firth 1957). Jacobson's functions provide a scheme of classifying discourses according to particular aspects of language use (Palmer, 1981 a: 81). These aspects can be expressed as the extent to which a discourse is about very general, personal social control, at one end of a continuum that scales down to discourse that is about itself, that is to poetry. Let us look at the most general interpersonal uses of language, uses that determine the very nature of the resulting text with all of its features of lexicon, grammar, cohesion, coherence, style, intonation, punctuation, emphasis, order, and unity, etc., that is, of all the linguistic traits that the applied linguist seeks to describe in order to assist educators in improving literacy learning.

The most general interpersonal function is the *phatic*. In phatic discourse the strongest determinant of textual features is the interpersonal macrofunction. Ideational and textual determinants are secondary to the need to keep the channels of communication open. Nearly all informal conversation, whether intimate or casual, is formulaic. It is learned in connection with social roles. It is mostly automatic and unconscious language use. For example, try to think of the last time you heard someone say something original about the weather, and if you

can, what did it mean? Phatic communion makes it possible to live with people without being threatened by them, without threatening them, and in effect ignoring them except as members of the same polity as ourselves. It keeps the contact available in case we need it. Note that it is learned in clause-size chunks. Students do not have to analyze the typical utterances of phatic language. They merely learn them whole. Written phatic communion may take the form of greeting cards or the notes we ritualistically send to family members. The information content of such discourses is usually very small.

Such a discourse frequently serves other functions at the same time that it is functioning phatically. The next most general functions that may combine with the phatic in conversation and in written communication are the *emotive* and *conative*. When the discourse is about the speaker or writer (emotive), it expresses his values, knowledge, beliefs and emotions. When the discourse is about the person(s) to whom it is addressed (conative), then it most probably gives commands, advice or directions, or makes requests. For example, a love letter may be both strongly emotive and/or conative.

It is easy to see that these three functions, the phatic, emotive and conative, are the main uses of spoken language. It can be claimed that one is *functionally literate* when he commands the use of these functions in reading and writing. This insight gives language course planners a theoretical basis for their job of specifying syllabuses within curricula, particularly in those for beginners.

The next function that one moves to in improving one's knowledge of a language

is the *denotive*. This function allows one to share a larger world of knowledge outside immediate experience. It is referentially cognitive. It concerns facts and ideas about the sociophysical world. It is essentially ideational and textual. It is sufficiently impersonal to be interpreted by anyone with the necessary background. When one can use this function, he may be said to be literate in the sense of being educated or acculturated in a Western scientific sense. It is with this function in mind that one learns to read a language that he does not speak. It is also with this function in mind that most science and technology students learn to read a language that they speak. They are after the facts, Ma'am. Style, tone, elegance, subtleties of phrasing, irony, beauty, or originality may be ignored or simply not noticed at all.

When Lowell Muehler read photographic chemistry in Russian and when I read linguistics in German, what we were doing was decoding--extracting the bare propositional content that the denotive function made available to us, and stringing it together with textual clues. The phatic, emotive and conative were essentially absent from those discourses, and hardly any of the information carried by the remaining two functions, if indeed any was present, was comprehensible to us.

The two additional functions that most people engage in to a large degree are the *metalinguistic* and *poetic*. Most people unselfconsciously talk about language (meta-language), if only to observe that someone else sounds strange or uses bad grammar. Others selfconsciously create metalinguistic discourses like the one you are reading now. In addition everyone is to some degree aware

of the poetic function, if only to be seduced by advertisers or to be amused by comedians. In the poetic function the language is about the message contained in the discourse itself ("A poem should not mean, but be"). It is a narrow gateway to deeper meanings and cognitive structures. Very often the higher-level task of getting at deeper meanings requires a knowledge of language and culture that is acquired by relatively few people, who may be called highly-literate intellectuals. To be literate at this higher level means, for example, to know that "Had you been here before dinner, we could have gone out" is not a question, "Come and meet my beautiful wife" is ambiguous in a polygamous society, "The following sentence is false. The preceding sentence is true" is a self-referencing paradox.

On reflection, it can be seen that the six functions depend directly on the kinds of contexts that require their use. All language features are determined by context. For example, shouting "Fire!" in a theatre is an act of breaking a conventional context.

The context of the phatic, emotive and conative functions is interpersonal management.

The context of the denotive function may be record-keeping; systems management; reporting, as in journalism and scientific writing; argument, as in political and cultural debate and criticism; definition, classification, description, or narration of something that is impersonal to the extent that anyone else with the necessary background can understand it.

If the function is metalinguistic, then the context is bound to the language itself.

Paradoxically, it is language about language, perhaps a necessity for language learning, although we do not really know for sure. Talking or writing about language seems to be a perennial pastime that everyone indulges in. One thing applied linguists can do is to try to raise the general level of such discourses by spreading scientific facts, the Old Knowledge and the New Knowledge about language. A further question which we must address is to what extent and in what contexts is language teaching aided by talking about language, for in many language classes the characteristic feature is *teacher talk*, most of which is metalinguistic.

When the context of the function is poetic we get a discourse that is about its own information. For example, "I'm trying seriously not to take myself seriously" is

funny. It is marked by linguistic deviation. Such deviation is the mark of the poetic function. This function permeates such typical registers (Palmer, 1981b: 64–73) as song, verse, advertising copy, humour and metaphysics, registers that create their own contexts. They are not generalizable and most probably they are untranslatable.

Conclusion

The insights that applied linguists give to educational planners consist in seeing just what one does with language under which circumstances. We describe as exactly as possible the forms and functions of registers of language. The relationship of this knowledge to literacy teaching is indirect but indispensable.

Notes

1. See Walker Percy's *Message in the Bottle* for a discussion of some of the philosophical and psychological implications of this wondrous series of events.

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