

THE PSYCHOLINGUISTIC APPROACH TO UNITY AND DIVERSITY

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Abstract

Some aspects of contemporary communication regarding unity and diversity will be examined as follows. On the one hand, globalization provided mainly by mass media, particularly by Internet and the on line electronic mail, will be scrutinized in relation to its psycholinguistic consequences: What are the differences that appear in human processing and how is the logical distinction between unity and diversity faced? How deep are the changes experienced by children, who are acquiring and learning their oral and written languages, using such media? On the other hand, despite globalization, the geometrical growth of science and technology brings with it a parallel lexical explosion: specific texts undermine the possibility of their comprehension by the outsider as if the text was written in a foreign language, and so, the unity of communication is broken and distortions may appear. Key-words: Globalization – Internet – lexical explosion.

The psycholinguistic approach

The psycholinguistic approach to unity and diversity in communication will be the focus of this presentation. Accordingly, I

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will begin discussing how a psycholinguistic approach may contribute to this discussion.

Accompanying the first definition given by Osgood and Sebeok (1954/1965, p. 4) where they state that "Psycholinguistics deals...with the process of encoding and decoding as they relate states of messages to states of communicators", we may infer that the Theory of Information underlies it. With some improvement, the model continues to be predominant for conducting research whose goal is to explain how human beings transform the speech signal into thought and vice-versa, producing different inputs and outputs along the net of connections of the neural system.

What has been sharply changed were the channels of communication, with deep and not yet perfectly known consequences for their users.

When the first group of scientists met at the Cornell University (June 18 – Aug. 10, 1951) and then in the summer of 1954, at the University of Indiana, to establish the principles and program of the new science, Psycholinguistics, the cannon form of verbal communication was the oral one, either when speaker and receiver were face to face, in the same space/time context or by phone, where the same space was not shared. In 1963/1973, p. 2, Denes and Pinson wrote "that no matter how many books and newspaper are printed, the amount of intelligence exchanged by speech is still vastly greater. The widespread use of books and printed matter may very well be an indication of a highly developed civilization, but so is the greater use of telephone systems."

In 1999, around half a century later, we observe the explosion of Internet communication: electronic mail is increasingly replacing phone calls, although voice may be added to the e-mail. What are the most important changes in the way people are processing information? If we believe as I do that the way we behave and act produces effects over the specialization of the high functions of the central brain system (see, for instance, Luria, 1979, pp. 19-42) , what are the new forms of

mental representations and strategies handled by new generations who are acquainted from childhood with communication via computers? Considering that the fundamental forms of conscious activity are complex functional systems, formed through a large historical development, that they are social in their origin and complex and hierarchical in their structure and that they are based upon a complex system of methods and means as Luria affirms (op.cit. p. 29), following Vygotsky's ideas (1960/1981), the new format introduced by computers to obtain and disseminate information will have important consequences for the way such complex systems function.

Psycholinguistic research must explain:

1) what pragmatic reasons move a receiver of an electronic mail and/or an Internet navigator to stand in front of his/her computer in order to read a text;

2) which are the specific characteristics of pre-reading in the case of Internet texts, since their formats and cues are different from the ones books usually show: pre-reading in the case of Internet begins with possible choices a menu allows and/or keywords that guide a search, both accompanied by links until the desired text is found;

3) whether there are some differences in decoding (i. e. word recognition) in a computer text, although apparently it does not depart so much from the traditional way words are recognized when they are written in a paper medium;

4) whether comprehension follows the same paths (again it must be pointed out that multimodal tools available to an Internet navigator enrich the text information with many different extralinguistic contexts, such as pictures, drawings, music);

5) what happens with interpretation; and finally,

6) how retention of macro-structures in long term memory occurs, after processing computerized texts.

On the other hand, psycholinguistic research must also explain how computerized texts are produced, either when the writer uses an electronic mail or when she/he prepares a text. In the first case, the

simple situation of almost on-line interchange raises interesting pragmatic questions the consequences of which may be found in a different use of time deictics if we compare it with what happens when there is a large gap between the time when somebody writes a letter and delivers it and the time when the receiver reads it.

Bühler (1950) developed the first theory about deixis, explaining that language begins with the act of pointing to objects (*demonstratio ad oculos*) which are in the immediate context, gradually developing in the direction of symbolized forms: linguistic expressions acquire stability and autonomy and become self-referentiated (*Nennfunktion*).

Pierce (1931-1935, p. 58), although using a different label (index), makes clear the difference between the stability of words against absence of self-reference: "That a word cannot in strictness of speech be an index is evident from this, that a word is general – it occurs often, and every time it occurs, it is the same word and if it has any meaning as a word, it has the same meaning every time it occurs; while an index is essentially an affair of here and now, its office being to bring the thought to a particular experience, or series of experiences connected by dynamical relations. A *meaning* is the association of a word with images. An index has nothing to do with meaning, it has to bring the hearer to share the experience of the speaker by showing what he is talking about. The words *this* and *that* are indicative words, they apply to different things every time they occur".

In addition, Vernay (1974, p. 53) points out that "Expressions which function inside the *Zeigfeld* always need accordingly the aid of an extra-linguistic support."¹

An already noticed change is the extremely casual style employed by e-mailers and the exaggerated use of new forms of abbreviations, which, by the way, are understood by them: it seems that e-mailers are not worried about the Latin proverb "*scripta manent, verba volant*".

Quite different procedures are available to computer text writers. We may cite some:

- 1) Faster and broader use of quotations, copying what may be found either in one specific field, using the Internet search help or what is already registered in the writer's hard disk and/or diskettes;
- 2) Faster rearrangements of stretches already written, cutting and transposing them to other places;
- 3) Immediate catching of spelling errors and consequent correction through the help of the orthographic tool (this particular help proves that it is useless nowadays to spend so many hours dedicated to spelling lessons in the classroom);
- 4) A faster access to synonyms;
- 5) Birth of new genres and/or different formats for the existing ones;
- 6) What I believe is more important, is the facility of discussing with partners the preliminary drafts of any paper to be presented and/or published, including the possibility of advising students on their dissertations or theses even if they live far away.

Internet communication means a total revolution in education: on the one hand, it made possible long distance education; on the other, the central goal of education now is teaching how to learn permanently.

If we define literacy as "the functional use of conventionalized systems which allow the comprehension and production of language dependent, verbal coded written texts" (Scliar-Cabral, 1995, p. 89), one important question to be discussed is how much the conventionalized systems have changed.

Unity and diversity in the new millenium

If we have a look to what is going on in human communication nowadays, the conclusion will be that globalization has spread all over the world more and more, but although globalization could be meant as a world without frontiers, where each community would contribute equally with its own culture to a total sum, what really happens is the imposing of a dominant culture, the American one, disseminated by

means of its language, English, suffocating the weaker communities: what we observe is that diversity is being threatened by the American culture, where the predominant profile is a “childish consumer” (McLuhan, 1983, p. xvii), with “an annihilation of identity and thus of thinking and the compulsory need of being absorbed by the group and of behaving without questioning, adhering to stereotypes imposed by mass media.” (Scliar-Cabral, 1997, p. 147).

The control of mass media “assumed nowadays the form of the powerful industry of advertising, abbreviated by its professionals as *adv*, where billions of dollars are involved, and integrating marketing, in its ampler sense “a system that can provide products, services and ideologies from the source to a given target” ... “We are living in a world that produces, sells, changes or tries to persuade people to have a given lifestyle or a defined *status quo*” (Scliar Cabral, E.J. 1992, p. 2).

This situation is aggravated by the fact that “despite the constant mass of written material surrounding our daily life, the number of people who cannot read is enormous: The 1990 edition of the *Compendium of statistics on illiteracy* published by UNESCO, which adopted the very low and unreliable criterion of considering literate a person who answered yes to the question: “Can you read and write?” estimated for the year 2000, 935 millions of illiterates aged 15 and over.” (Scliar-Cabral 1995, p. 96).

Specialization

The exponential growth of science and technology in the last century determined in parallel the exponential growth of specialized lexicons and semantic fields, in such a way that it is quite difficult to understand a text even written in our native language if we are not acquainted with the subject. This important characteristic of contemporary life which tends to be more and more impressive has two important consequences. The first one is the existence of real impenetrable specialized language varieties and the second is the impossibility of a universal knowledge which could tie together in a

Renaissance or encyclopedia way what mankind has produced. Its practical counterpart is the difficulty of building hierarchical, logical and accessible taxonomies to be handled by Internet navigators. Its educational counterpart is what we have already presented to this audience: the central goal of education now is teaching how to learn permanently. The great challenge is how to face the exponential growth of specialized lexicons and semantic fields.

New senses may be also attributable to an expression through the senses net coherently construed in any text, guided by a specific scheme or frame. Linguistic communities tied either by professional and/or socio-cultural and/or age factors share the same schemes or frames where words acquire their specific senses. Green (1996, p.13), for instance, cites the sense conveyed by archeologists and computers personnel to the word *screen(s)*, respectively "sieves" and "video display".

The semantic explosion caused by the exponential growth of science and technology in the last century parallel to the massive injection of English borrowings due to globalization poses increasing complex questions, establishing professional linguistic ghettos. Things are not so simple as the polysemic /homonymic and transparent referents attributable to the word "bank" cited so many times in the current literature (Pustejovsky and Boguraev, 1996, p. 2; Buvacà, 1996, p.113; Mineur and Buttelaar, 1996, p. 129, for instance).

Conclusions

The new kind of e-mail and Internet communication, where the bonds between producers and receivers are virtual, calls our attention to the cognitive and emotional differences the new generations will show.

We have seen in this presentation that, basically, the definition of Psycholinguistics stated by its founders has not changed. What has been sharply changed were the channels of communication. Instead of the canonic form of verbal communication, the oral one, either when speaker and receiver are face to face, in the same space/time context or

by phone, where the same space is not shared, people communicate virtually through e-mail and Internet. Its cognitive and emotional consequences are not yet perfectly known. Quite different procedures were signaled comparing the canonic forms of verbal communication and the computerized ones. They determine a total revolution in education: long distance education and the displacement of its focus towards teaching how to learn permanently. Nevertheless there are many challenging problems to be solved such as the bad distribution of knowledge and the growth of specialized lexicons and semantic fields.

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