

THE SIDES OF PSYCHOLINGUISTICS*

MIGUEL SIGUAN
Universidade de Barcelona

RESUMO

Nas páginas que seguem tentarei expressar minha insatisfação com a existência, na psicolinguística contemporânea, de duas escolas de pensamento opostas as quais, acredito, são individualmente insuficientes para explicar os multifacetados aspectos daquela ciência. Não ficaria bem sugerir que todos aqueles que estão envolvidos com a psicolinguística se mantêm claramente de um ou de outro lado da divisa. Alguns autores – especialmente no campo da psicolinguística aplicada – freqüentemente optam por um certo ecletismo fazendo uso indiscriminado de argumentos provindos de ambas as tendências. Somente quando a psicolinguística for presidida por um modelo que não só considera as dimensões cognitivas ou comportamentais do ser humano, mas considera-o como um todo – consciente, cognitivo e ativo – e que não só considera o homem como um indivíduo mas como um sujeito de uma teia de relações sociais, pode emergir uma abordagem verdadeiramente satisfatória de psicolinguística.

ABSTRACT

In the following pages I will try to express my dissatisfaction with the existence in contemporary psycholinguistics of two opposed schools of thought, both of which I believe are insufficient. I would, however, be unfair to suggest that all those involved with psycholinguistics are firmly on one other side of the fence. Some authors – specially in the field of applied psycholinguistics – frequently opt for a certain eclecticism, making indiscriminate use of arguments from both tendencies. Only when psychological research is presided by a "model" of man that considers not just the cognitive or behavioristic dimension but the man as a whole – selfaware, cognitive and active, and that considers that man not only as an individual but as the subject of a web of social relations, could a truly satisfactory system of psycholinguistics emerge.

INTRODUCTION

Thirty years ago, when I first began to be interested in language from a psychological perspective, the panorama was quite different from what it is today. It is true that some psychologists were working on language-related questions, especially for teaching or therapeutic purposes. But the dominant psychological theory of the time – behaviourism – was not directly interested in higher processes, and consequently there were no psychological studies of language. This omission is surprising, considering

* Este artigo constitui uma versão da comunicação apresentada na sessão em homenagem a Tatianna Slama-Cazacu durante o IV Congresso Internacional da ISAPL, realizado em junho de 1994, na cidade de Bologna.

PUBLICAÇÕES EDIPUCRS

- VIANNA, Tyrteu Rocha. *Saco de Viagem*. 1993, 112p. Poesias. Em co-edição com IEL.
- WAMOSY, Alceu. *Poesia Completa*. 1994, 154p. O autor, sem favor um dos maiores poetas de sua geração, por certo merece estar presente no acervo dos que apreciam a verdadeira obra literária, o verso trabalhado, sonoro, rico em metáforas e símbolos e cujo conteúdo concorre para o enriquecimento do espírito humano. Em co-edição com IEL e Alves Editores.

Os pedidos deverão ser encaminhados à:

EDIPUCRS
Av. Ipiranga, 6681 - Prédio 33
Caixa Postal 1429
90619-900 PORTO ALEGRE - RS
BRASIL
FONE: (051) 339-1511 Ramal: 3323
FAX: (051) 339-1564

that in many areas of cultural life concern with language was the centre of attention at that time. Werner's work introduced the "theory of communication", which was widely influential; Wittgenstein's work in analytical philosophy, based entirely on the analysis of language, was very highly regarded. At that time also, structuralism was emerging as a scientific model, and was applied to the study of "codes" even in fields far removed from linguistics.

Nevertheless, some psychologists were concerned by this omission. In 1953 Osgood organized a symposium at the MIT which aimed to discuss the possibility of a psychological study of linguistic structures. The volume in which the contributions to the symposium were compiled was entitled "Psycholinguistics", and in this way the new term came into being. Osgood was not alone in feeling this concern. In 1959, Skinner published "Verbal Behavior", an attempt to offer a behaviourist explanation of linguistic conduct and its acquisition. The book met with an acid response from Chomsky – already a linguist of repute – in which he rejected the idea that language could be learnt, or at least the idea that it could be learnt on the basis of a behaviourist explanation of learning. Chomsky's argument caused a great impression among many psychologists who were interested in language and who felt ill at ease with the conceptual frameworks of behaviourism – so much so that when the next symposium was held most participants showed their support for Chomsky's ideas. For a time, the term "psycholinguistics" became the watchword of the Chomskyan view of the psychology of language, and since then it could be said that there have been two clear currents of thought in psycholinguistics.

On the one hand, there is the current just mentioned, built around Chomskyan linguistics, which considers language in close connection with the mechanisms of information processing: it underlines its formal and structural aspects, common to all humans, and so inscribed in their own nature, or, if we prefer, in their nervous systems. Language is held to be innate, not learnt. The similarities between this way of understanding psycholinguistics and the cognitive paradigm which some time ago replaced behaviourism as the predominant doctrine in psychological explanation are clear. We may therefore call this paradigm "cognitive psycholinguistics".

However, not all contemporary systems of psycholinguistics start from this model. By this I am not suggesting the existence of a behaviourist system of psycholinguistics, but a set of traditions that deal with aspects of language that cognitivism tends to neglect. Among these aspects are the functional consideration of language as found in Bühler; the pragmatic consideration which developed in relation to analytical philosophy; the insistence that language is basically a dialogue immersed in turn in a

situational context as Slama Cazacu noted in "Language and context"; and Vigotsky's ideas on the social origin of language and its subsequent internalization. It is not a clearly defined model, but a set of interpretations which stress the functional and social aspects of language and its construction beginning with the first forms of communication in the child and continuing throughout his/her development. These interpretations might be called a genetic and social approach to psycholinguistics, or even "psychosociolinguistics".

2 – TWO OPPOSITE BUT COMPLEMENTARY PERSPECTIVES

As is often the case in scientific controversies, the two sides defend their position staunchly and refuse to recognize anything of worth in the other camp. But of course the situation is more complex than this: it can be approached from various perspectives. In my opinion the position becomes much clearer if we think that language fundamentally performs two functions. Firstly, it is an instrument for thought; it would be difficult to imagine a structure of knowledge, a science, which had no verbal form. Secondly, it is a means of communication with others – indeed, it is the means of communication *par excellence*. Cognitive psycholinguistics considers language mainly as an instrument of thought, and a pragmatic/social explanation of language sees it primarily as a means of communication between humans. But language performs the two functions simultaneously; they are closely linked, and therefore instead of attempting to choose one of the theories at the expense of the other, we should try to interpret them from a higher viewpoint.

My purpose in the considerations that follow is less ambitious – I will try to identify what in my view are the limitations of cognitivist psycholinguistics. I should stress that by identifying its limitations I do not mean to deny its value; on the contrary, my intention is to integrate it into what I see as a desirable, higher interpretation.

In spite of its apparent novelty, the cognitive approach to language is the oldest of all, and has had a greater impact on European thought than any other. Nearly twenty-five centuries ago, Socrates, influenced by the concerns of the Sophists, proposed the relationship of language and truth as the most important philosophical problem. His followers, Plato and Aristotle, attempted to explain the possibility of knowledge by stating *that reason is at once the foundation of the world – the world is rational – and the foundation of knowledge of the world – logic*. The great problems that they debated are those which cognitivism addresses today. Does reality become known through concepts, or ideas, as Plato thought, or through propositions, as Aristotle believed? From this perspective language is a re-

flection of logic, and the theory of grammar is an attempt to highlight the rationality of language.

This rationalist approach to linguistics is seen throughout the Middle Ages and later during the *Enlightenment*. Chomskyan linguistics represents a return to this tradition. We could add that cognitive psychology represents a return to the intellectualist tradition that has characterized western psychology since its earliest days and which is expressed in the fundamental definition that man is a rational animal.

We should not forget, though, that the nineteenth century introduced another way of understanding linguistics – language as a social and historical fact. The nineteenth century saw the emergence of an interest in language and its variations, both geographical (witnessed by the production of linguistic maps and the study of dialectology) and temporal (in the history of grammar, the derivation of languages, the origin of human language). Beneath this historicism, so typical of the nineteenth century, lies the theory of evolution. But at the same time as this emphasis on the historical and social character of language in general and of all spoken languages in particular, the romantic movement exalted the capacity of language for individual creation. This creative facet is especially clear in the case of poets, but exists in all humans. Though to a lesser extent, in the nineteenth century as well the strictly intellectualist model of scientific psychology began to fall apart, since humans are beings who have feelings, who make plans and who act. When I mention these dimensions that classical psychology neglected I am not referring necessarily to Freud, since even behaviourism stressed the *motivations for behaviour*.

I will attempt to show what appear to me to be the limitations of an exclusively cognitivist approach in various fields of psycholinguistics.

3 – LANGUAGE ACQUISITION AND COMMUNICATION

The arguments in favour of the predetermined character of language are well-known and easily described. All children go through the same phases at roughly the same ages while learning to speak. This regularity suggests that in language acquisition congenital, internal structures work together in a process of maturation. Therefore the ability to speak, and to speak in accordance with a set of grammatical structures, is innate rather than acquired.

However, the process is not so simple. When children begin to speak they speak not "in general", but in a particular language, the language spoken by the people around them. We should start by clarifying the relationship between language in general, i. e. what is innate, and what is unique to a particular language: are characteristics of these two phenomena learnt

in the same processes? Even more importantly, do the people in the child's environment only offer him/her the opportunity to deduce a set of rules from the verbal material that they produce, or do they offer something more?

The suspicion that the relationship with others plays an essential role is reinforced when we note that long before beginning to speak children are already communicating with those around them. If language were purely innate, and were learnt purely by a process of maturation, there would be a clear cut-off point between gestural communication and verbal communication. Psycholinguists of the cognitive persuasion act as if this were so, and ignore everything that comes before verbal language. Nonetheless, our experience of reality shows that there is a clear continuity between gestural and verbal communication.

Obviously we could also say that gestural communication is also to a certain extent innate. However, in this regard the role of others is even more evident, for one reason because the first attempts to communicate are specifically affective and involve an affective relationship with another person, but above all because communication involves the existence of another person and a connection between interlocutors.

This involvement of the other in the origins of communication can be followed throughout the process of verbal development. Learning to speak not only means increasing one's stock of verbal resources, but also applying these resources correctly in different situations.

4 – ANIMAL COMMUNICATION

The historical and social consideration of language highlights not only a continuity in the linguistic development of children, but a continuity also in its development in the human race. It draws our attention to the origins of language and humanity, and the hypothetical relationship of language with communication in animals. Discussions of this subject are not taken very seriously, due to their purely speculative character: nevertheless, modern experiments aiming to teach human languages to gorillas and chimps have aroused considerable expectations.

A common characteristic of all psycholinguistics manuals of a cognitivist type is their dismissal of the results of these experiments. They regard them as artifacts, no more worthy of attention than "HANS", the German horse who a century ago, amazed his spectators with his mathematical abilities. These criticisms are largely justified. Nonetheless, watching a dog and its owner, together it is plain that there is authentic communication between them. The communication is gestural and pragmatic and has a clear affective component, but it is also able to transmit information. It

does not seem legitimate to propose a general theory of language which ignores these forms of communication.

5 – THE INTERNALIZATION OF LANGUAGE

The "psychology of thought", so popular in the first third of this century, set out to analyze the workings of human thought, and to clarify whether the "stream of consciousness", to use W. James's term, consists of a series of images or verbal utterances, or rather abstract concepts without pictorial or verbal expression. Vigotsky's work is situated within this trend. It combines the social origin of language with the process of internalization that makes language into an instrument of thought and a regulator of action.

Introspection fell into disrepute as a scientific method and with the advent of behaviourist methodology these investigations stopped. More recently cognitivism has found a privileged place for the language of the mind. The language of the mind is made up by the formal structures of knowledge, which as I said before have been a central point in the theory of knowledge of rationalist philosophies.

The terms "language of the mind" and "internalized language" refer to internal forms of language, that is to say, to uses that are not directly communicative. But the differences between "language of the mind" and "internal or internalized language" are plain to see. The "language of the mind" is strictly formal and universal, like the basic programme of a computer, and is of course unconscious; it can only be deduced by reflection. "Internal language", in contrast, is specific, individual, and immediately conscious. I only have to concentrate on my own mental processes to know whether I am thinking verbally, and in which language. It appears then that in a discipline named psycholinguistics the study of the relationship between "language of the mind" and "internal or internalized language" should be a fundamental component. It is highly surprising that the cognitive school of psycholinguistics has systematically ignored it.

6 – BILINGUALISM

Even more surprising is the lack of interest of contemporary psycholinguistics in bilingualism. Individuals who possess not one but two language systems and are able to use them to think and to communicate with others would seem to be obvious candidates for psycholinguistic studies.

Particularly typical bilingual children are those who grow up in a family environment in which two languages are spoken and who learn to speak in both almost simultaneously. In this case the traditional explanations of language acquisition are insufficient, since from an early age the child can pass the same set of meanings from one language to another, and translate. When bilinguals are presented with a list of words or utterances and later asked to recall them, they remember the meanings more clearly than the language in which the word was expressed. This capacity makes us wonder what processes are involved in the acquisition and storage of these meanings that are common to the two languages. They cannot be internal processes of one of the languages in question; nor can they be identified with the "language of the mind".

In psycholinguistics manuals the outstanding chapters are usually those on verbal information-processing, in terms of both reception and production. But I have the feeling that the conceptual schemes used in the explanation are insufficient to account for the mental processes of bilinguals.

Thus far I have analyzed the most clearly cognitive aspect of bilingualism – the existence of meanings common to the languages that a bilingual possesses. But we should also look at the question from the opposite perspective. Meanings in different languages do not coincide exactly. Bilinguals are fully aware of this diversity of meanings and can translate from one language to the other though they know that the translation may not be perfect. The meaning of a word, proposition or text in a particular language cannot be reduced to grammatical elements, but depends on multiple sociocultural factors on the one hand and on the personal experience of the subject on the other. A strictly cognitive consideration of language is always insufficient, and the case of the bilingual makes this extremely clear.

There is another question which, in my view, is the most important of all. From a cognitive perspective, the centre of the individual personality and the guarantee of its coherence is the cognitive linguistic system known as the "language of the mind". This may be stated confidently as far as monolinguals are concerned, but the situation becomes extremely complicated in the case of bilinguals. A thorough investigation of the relationship between language and personality in bilinguals would be of enormous psychological interest.

7 – APPLIED PSYCHOLINGUISTICS

Up to this point I have tried to show that today in theoretical psycholinguistics there is one predominant theory, which, in spite of its ad-

vantages, cannot account for the complexity of all the subjects which it addresses. But when we look at the field of applied psycholinguistics, the situation is even more curious. Many researchers who deal with matters of applied psycholinguistics in the most diverse fields are familiar with the prevailing theoretical orientation. But at the same time the psycholinguistic applications refer always to personal and social situations in which the context is as important as the formal and cognitive traits of the language. This disparity often produces eclectic treatments which put together descriptions and explanations which are not really compatible but which happen to be juxtaposed. On occasion the explanations are contradictory. For the sake of brevity I will mention only one example, taken from the field of language teaching, a field which has become highly sophisticated in recent times. As is well known, the predominant focus today is called the communicative approach, given this name because it introduces the new language via comprehensible communicative situations which aim to interest learners in much the same way as their interest was aroused when they acquired their first language. Reflections on this method should, it would appear, stress situational and personal factors; what we find, however, is that theorists involved with these methods base themselves explicitly on Chomsky's ideas of language acquisition.

8 – A NEW PARADIGM

In these pages I have tried to express my dissatisfaction with the existence in contemporary psycholinguistics of two opposed schools of thought, both of which I believe are insufficient. It would, however, be unfair to suggest that all those involved with psycholinguistics are firmly on one or other side of the fence.

I mentioned that many authors – especially in the field of applied psycholinguistics – frequently opt for a certain eclecticism, in the negative sense of the word, and make indiscriminate use of arguments from both tendencies. There are other authors though who make great efforts to maintain an independent position from which it is possible to integrate arguments and viewpoints from both sides.

Tatiana Slama Cazacu is a good example. Her training in functionalism (with Bühler) and structuralism (with Jacobsen) made her aware of the formal and invariable aspects of language as studied by the field of linguistics, but also that language is always a dialogue, and a dialogue that occurs in a particular social context. This dual loyalty was presented in her first book; she has retained it throughout her teachings and it is especially clear in her *Manual of Applied Psycholinguistics*, a book which is a model of balance.

Unfortunately, hers is rather an isolated case. Most work in contemporary psycholinguistics follows the lines that I mentioned above. We may be moved to ask why. Scientific investigation is always based on a particular idea of what the object under study constitutes and of what a valid, scientific explanation may be. For some time we have given the name "paradigm" to these basic assumptions of science in general or one science in particular. In the case of psychology we have seen how the behaviourist paradigm was replaced by the cognitive paradigm, the popular version of which is the computer metaphor. It is clear that the behaviourist paradigm was extremely limited. I have mentioned its greatest shortcoming, its inability to deal with the *higher behavioural functions*. In this regard, cognitivism represents a substantial advance. But this new paradigm also presents limitations.

It centres on the cognitive aspect of the human being, and its greatest achievements are to do with the explanation of information-processing and also deals with the problem of meaning. All human behaviour has meaning, and language more than any other. But cognitivism is limited here by the subjectivity of knowledge. All knowledge refers to something, it has meaning, but at the same time it is conscious knowledge, which somebody possesses.

Cognitivism as a psychological doctrine has difficulty explaining consciousness. In the case of psycholinguistics, it has difficulty explaining the relationship between the "language of the mind" and "internal language" – or, at a deeper level the relationship between the psychological and the linguistic subject.

Centring on the cognitive aspect of the human being, the new paradigm forgets that humans are essentially active and that every moment of their behaviour not only has meaning, as I have just said, but also looks forward, and is a link between the future and the past. Although knowledge can be considered atemporally, it is always the result of an action, and prepares, implicitly or explicitly, for future actions. The same can be said of language. This is the reason for the inability of cognitivist psycholinguistics to cover the language of praxis, the dependence of language on the situation which gives it meaning.

Finally, the great limitation of the cognitive paradigm is that it considers the human being exclusively as an individual. This is justified on the organic level, but not on the psychological level, since a human being is only constituted as such in contact with others. This contact is not a mere complement but affects the structure of his/her functions as a human. This is the reason for cognitivism's inability to deal with social forms of behaviour and above all its failure to explain the genesis and development of language and the relationship between language and communication.

The conclusion seems to be clear. Only when psychological research is presided by a "model" of man that considers not just the cognitive dimension but the man as a whole – self-aware, cognitive and active, and that considers that man is not only an individual but the subject of a web of social relations – could a truly satisfactory system of psycholinguistics emerge.