

to see in it a contribution to a more profound study of an area where the convergence of different perspectives will help us to know even more about a certain domain.

In fact, if we consider the area *language disorders*, we have a domain where it is impossible to avoid the convergence and interrelationship of several areas of knowledge. In other words, we cannot help but accept the complementarity of certain branches of knowledge when some areas like language disorders are under discussion.

In 1994, at the 4th ISAPL International Congress, Markova had already drawn our attention to the fact that the study of impaired speech should also take into account the new high technology systems of communication. This implies that those who work with impaired speech must be in continuous contact with the latest achievements of highly developed technological communicative systems so that they may not only take advantage of them but also evaluate the extent of their relevance according to the different kinds of difficulty of communication (see Markova 1995, 114-117).

In this area of research it makes sense to use T. Slama-Cazacu's words: «The «multidisciplinary connected») concept might become a new name - a perspective, a gateway - to the present and future systematizations of sciences, replacing the «interdisciplinary» approach of the preceding «modern» decades» (Slama-Cazacu 1994, 213).

On the threshold of the year 2000, psycholinguists must demonstrate the importance of their achievements in the study and rehabilitation of people suffering from brain injuries and language and speech disorders and take advantage of the technological advances in the neurosciences and other areas of science. As a matter of fact, the classical assessment techniques in the domain of neuropsychology as descriptions of behaviour and subsequently of language and speech must now be carried out in conjunction with the different *in vivo* brain imaging techniques (Bigler et al. 1997, 163) in order to get a more profound knowledge of the living brain (ibidem, 164) and to contribute to the design of more sophisticated neuropsychological models of neural processing (Shuren 1997, 51) (see, for instance, as far as the serial processing and the parallel distributed processing are concerned Shuren 1997, 44). Among the most commonly used brain imaging technique are computerized tomographic imaging (CT imaging), magnetic resonance imaging (MR imaging), positron emission tomography (PET), single photon emission computed tomography (SPECT), activation or functional MR imaging (fMRI), MR spectroscopy, quantitative electroencephalography (EEG) and brain mapping and magnetoencephalography (MEG) (Bigler et al. 1997, 165-189). Some are less invasive than others (ibidem, 183), and some more often used as research tools than clinically (ibidem, p. 180).

Although the information obtained through neuroimaging has its «drawbacks» (Shuren 1997, 45), it helps to give us a more dynamic view of the brain and, as far as neurological disorders are concerned, to provide more sophisticated diagnostic criteria and techniques of intervention (Bigler et al. 1997, 189).

In the «decade of the brain», psycholinguistics must also be of great help if we consider that period of time as a moment of challenge where the stage belongs to the «the interface of anatomy, physiological function, and behavior» (Bigler et al. 1997, 183).

Now let us look not forwards but backwards.

A century ago, some neurologists (Wernicke, Lichtheim, Bastian, etc.) were labelled *diagram makers* by Head, because they used diagrams to visualize the theories they proposed, based on localisationism and associationism (see Howard, Hatfield 1987, 55, 87, 145).

Could this outstanding group have foreseen, in spite of the endless attacks they suffered, that their work would be considered the forerunner of the current neuropsychological information-processing models? (Cf. Shuren 1997, 35.)

Could they have foreseen that clinical observations and autopsy studies would become *Inadequate* and that new technologies allowing us to observe the brain *in vivo* (see Shuren 1997, 45) would no longer be ignored in their area of research?

Could they have guessed that the «emphasis (...) [would shift] from lesion localization to diagnosing disease etiology (...), behavior management, and behavior rehabilitation (...)» (Shuren 1997,36)?

Could they have imagined that language disorders would also be studied systematically by scholars outside the medical field? (see the observation made by De Bleser 1987, 189). Or, in a multidisciplinary approach, as stressed by T. Slama-Cazacu?

How far were they sensitive to the reactions to the «aphasiology centred around the word» (De Bleser 1987, 189) in connection with their psychophysical approach and to the proposals of replacing the «psychophysical aphasiology of the word (...) by psychological aphasiology, which takes the sentence as the unit of language» (De Bleser 1987, 194)?

For our part, can we imagine how much will be expected from psycholinguists in a century's time - on the threshold of the 22nd century - bearing in mind the endless highly sophisticated developments in communication technologies?

Can we foresee the role of psycholinguistics in the study of language processing and imagine that the different fields linked to sophisticated technology will continue to give us more and more information about humans and their language and communicative environment?

I should like to quote E. Shuren's words and add that, with psycholinguistic studies, «the (...) limitations to their potential successes appear to be those of the human mind itself» (Shuren 1997,53).

Language processing is inherent to humans and the object of research of psycholinguistics. As humans are such complex entities, they deserve that psycholinguistics should be a multidisciplinary connected science processing data from different perspectives, and it is up to us and our imagination to make psycholinguistics a reference science.

I hope the content of the papers in the Proceedings of ISAPL/97 will help us to contribute to further research in the different areas connected with language acquisition and processing, and provide many cues to the next millenium so that future generations will mention us and feel proud of us.

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