

PSYCHOLINGUISTICS – AN INTERVIEW WITH LEONOR SCLIAR-CABRAL

Leonor Scliar-Cabral

Professor Emerita

Universidade Federal de Santa Catarina – UFSC

ReVEL – You have been closely involved in the development of Psycholinguistics in Brazil. What were the pioneering studies in Psycholinguistics in Brazil? Where does Psycholinguistics stand today in this country?

Scliar-Cabral – In Brazil, early influential research in Psycholinguistics began in the 1970's. It is possible to trace the evolution of the main lines of thinking in language acquisition research in the following doctoral dissertations and master thesis: Lemos (1987 [1975]), doctoral dissertation under the supervision of Lyons, University of Edingburg; Scliar-Cabral (1977a, b, c), doctoral dissertation under the supervision of Witter; and Albano (1975, published under Motta Maia), USP, master thesis under the supervision of Heye, UFRJ, and doctoral dissertation at Brown University. Albano investigated an empirical basis for Chomsky's theory with a study on the acquisition of negation, and Scliar-Cabral carried out an explanatory study of the models of Chomsky and Fillmore by compiling six grammars of a child's language at 20 months and 21 days, 22 months and 20 days, and 26 months and 8 days. Lemos, who was then strongly influenced by genetic epistemology, postulated the pre-existence of non-linguistic knowledge (LEMOS, 1978).

Today, Psycholinguistics is a well-established field; researchers who introduced the discipline in Brazil have contributed to its advancement, and young researchers have taken the lead in new centers of study, developing their own line of research. To have an idea of where Psycholinguistics stands today, here are a few of these researchers.

Among researchers following in the footsteps of Lemos, is Pereira Castro Campos (1978, now Pereira Castro) who studied the emergence of causal and conditional clauses from the angle of functionalism. In February of 2007, Pereira Castro concluded the project *A Interpretação e o conceito de língua materna na teorização sobre o interacionismo em aquisição de linguagem* (Interpretation and concept of maternal language in the theory of interactionism in language acquisition). Perroni Simões (1977) worked on the emergence of temporal categories by conducting 20 research sessions with a child between the age of 25 and 35 months. In 2003, Perroni adhered to the theories of Chomsky and worked on complement and adjunct in complex sentences. Figueira (1977) focused on studying the difficult stages in lexical acquisition with her child aged between 32 and 44 months. More recently (2003), this researcher concentrated on the first manifestations of linguistic reflexivity. Another researcher influenced by Lemos is Scarpa, whose research focuses on various prosodic features, like pitch, intensity, and rhythm. The work of Scarpa shows the prosodic strategies used to produce longer utterances and the use of cohesive intonation between utterances, the so-called “audio paragraphs”, or paratones (SCARPA, 1985).

The evolution in Albano’s thinking points to a line of research in language acquisition centered on phonology and phonetics. The focal point is the creation of a dynamic model that goes beyond the traditional distinction between the phonetic and phonological components of phonetic grammar (commensurability). The influence of Albano can be felt in the master’s thesis of Gama (1989) and Gonçalves (1989), who, every 2 weeks, videotaped a child between the age of 1 month and 21 days to 24 months and 17 days.

R.S. Santos, associated with the USP, is a promising young researcher who works on the acquisition of rhythm in Brazilian Portuguese; more specifically, she works on an interface between phonology and syntax. Some of her work is already published (2003, 2005).

From Rio Grande do Sul, Regina Lamprecht of the PUCRS and Cármen Matzenauer of the UCPel have produced significant work in the field of phonological component acquisition. Both researchers have adopted the Optimality Theory. Regina Lamprecht is the editor of *Pesquisas em Aquisição da Linguagem* (published by Editora da PUCRS), the only magazine in Brazil to specialize in language acquisition.

The most influential researcher at the UFBA is E.R. Teixeira, whose work is centered on phonological component acquisition and phonological disturbances.

Among the various groups of research on language acquisition, the contribution of Scliar-Cabral to the international data bank CHILDES must be mentioned. It is available at <http://chilides.psy.cmu.edu/data/Romance/Portuguese/florianopolis.zip>, the website provides recordings of children's utterances and their phonetic transcription.

Sicuro Corrêa created and now coordinates the Laboratório de Psicolinguística e Aquisição da Linguagem (LAPAL) at the PUCRJ, where she leads pioneering studies in Brazil on the processes in language acquisition. This group already published several scientific articles.

The master thesis of Del Ré on the understanding and creation of metaphors by preschool children (1998) was further developed when this researcher presented a doctoral dissertation on humorous discourse in children (2003).

To conclude this short review of present-day studies in Psycholinguistics in Brazil, the current research of Maia (2008) and França (Maia; Lemle; França, 2007) must be mentioned.

ReVEL – What kind of ties does Psycholinguistics maintain with Linguistics and Psychology?

Scliar-Cabral – Psycholinguistics, as the name shows, is a hybrid discipline. It came about from shared characteristics of Linguistics and Psychology, as well as from the theory of information. The similarity in the epistemological bases helped the development of Psycholinguistics during the 1961 summer seminar at Cornell University (held between 06/18 and 08/10 of 1961). Now that neurosciences play a predominant role in science, interdisciplinarity is essential.

ReVEL – Connectionism is an approach that has many followers in Brazil. How would you describe the contribution of connectionist models to Psycholinguistics and language study in general?

Scliar-Cabral – Connectionism is a current line of thinking that has been gaining supporters among renowned Brazilian scientists; Albano, to name one. José Marcelino Poersch introduced the connectionist approach to Psycholinguistics in Brazil and encouraged many of his graduate students to pursue their education in collaboration with leading international authorities in the field. One example of Poersch's contribution is the thesis of Celso Augusto Nunes da Conceição on artificial intelligence in the morphology of the Portuguese language; it presents a connectionist computer simulation of plural acquisition. Several other researchers have investigated language acquisition from a connectionist perspective (Cielo, 1998; Gabriel, 1998, 2001, 2004; Rossa; Rossa, 2004; Zimmer; Alves, 2006; Poersch; Rossa, A.A., 2007).

It is also important to mention the thesis of Bonilha (2005), under the supervision of Leda Bisol, which unites the optimality theory with connectionism.

ReVEL – In your opinion, what has been the main contribution made by psycholinguistics studies to Linguistics science and to the general understanding of how language works?

Scliar-Cabral – Up until the mid 20th century, Linguistics focused on the language as an object, without ties to language use by speakers and listeners, or writers and readers. At the time, Linguistics was under Saussurean influence, or, in the United States, viewed from a structural linguistics perspective. The greatest contribution of Psycholinguistics was to attempt to explain, through experimental methods, how listeners process voice acoustic signals and retrieve meaning, and how speakers process meaning into voice acoustic signals. The same applies to the processes involved in reading and writing. Thanks to the progress in MRI and electroencephalography, it has been possible to empirically demonstrate how the brain, in the highly specialized area of the left ventral occipitotemporal cortex, processes the invariance of letters. The invariance principle, postulated by the structuralists at the beginning of the 20th century, is definitely proved!

ReVEL – Could you make a few suggestions to our readers who would like to know more about Psycholinguistics?

Scliar-Cabral – Whether translated or from Brazilian authors, several books on language acquisition – and more specifically on Psycholinguistics – are available in Portuguese:

CORRÊA, L. M. S. (Org.); FRANÇOZO, E. (Org.). *Cadernos de Estudos Lingüísticos: Volume Temático Psicolingüística*. Campinas: UNICAMP, 2001. vol. 1.

CORRÊA, L. M. S. (Org.). *Palavra - Volume Temático Aquisição e Processamento da Linguagem*. First ed. Rio de Janeiro: Trarepa, 2000. vol. 1. 187 p.

KATO, M. *No mundo da escrita: uma perspectiva psicolingüística*. São Paulo: Ática, 1998.

- MAIA, M. A. R. (Org.); FINGER, Ingrid (Org.). *Processamento da Linguagem*. 1. ed. Pelotas, RS: EDUCAT, 2005. 535 p.
- PINKER, Steven. *The language instinct*. Nova York: HarperCollins, 1994.
- POERSCH, J. M.; ROSSA, A. A. (Orgs.). *Processamento da linguagem e conexionismo*. Santa Cruz do Sul: EDUNISC, 2007.
- ROSSA, A.; ROSSA, C. (Orgs.). *Processamento cerebral e conexionismo. Rumo à Psicolingüística Conexionista*. Porto Alegre: EDIPUCRS, 2004.
- SCLIAR-CABRAL, L. *Introdução à psicolingüística*. São Paulo: Ática, 1991.
- SLOBIN, D. I. *Psicolingüística*. São Paulo: EDUSP, 1980.

Reference List

- ALBANO, E. (formerly MOTTA MAIA). A negação da criança. Reflexões sobre as bases empíricas da teoria gerativo-transformacional. 1975. Thesis (Master's in Linguistics) - Universidade Federal do Rio de Janeiro.
- CIELO, C. A. Arquitetura neuronal e construção do conhecimento. *Nosso Jornal*, vol. 12, pp. 6-6, 1998.
- DEL RÉ, A. Compreensão e produção de metáforas por crianças pré-escolares: relato de uma experiência. 1998. Thesis (Master's in Linguistics) – FFLCH, Universidade de São Paulo.
- _____. A criança e a magia da linguagem: um estudo sobre o discurso humorístico. 2003a. Dissertation (Ph.D in Linguistics) – FFLCH, Universidade de São Paulo.
- FIGUEIRA, R. A. Áreas de dificuldade na aquisição do léxico. *Anais do 2º Encontro Nacional de Lingüística*. Rio de Janeiro:PUCRJ, 1977. vol. 1. pp. 332-386.
- GABRIEL, R. A aquisição da sintaxe dispensa regras. *Signo*, vol. 23, no. 34, pp. 61-66, 1998.
- _____. Como aprender as construções passivas sem regras. *Letras de Hoje*, vol. 36, pp. 425-432, 2001.
- _____. Mecanismos cognitivos envolvidos na aquisição e processamento de construções passivas. *Cadernos de Estudos Lingüísticos*, vol. 45, pp. 89-98, 2003.
- _____. Uma leitura introdutória ao paradigma conexionista. *Signo*, vol. 29, no. 47, pp. 71-98, 2004.
- GAMA, A.J.A. Fala e ação no cuidado materno ao bebê. 1989. Thesis - Universidade Estadual de Campinas.
- GONÇALVES, M. de J. A construção da fala por uma criança. 1989. Thesis - (Master's in Linguistics) - Universidade Estadual de Campinas.

- LEMOS, C.T.G. Ser e estar in Brazilian Portuguese with particular reference to child language acquisition. Tubingen: Gunter Narr Verlag, 1987 [1975].
- _____. Jogos demonstrativos da estrutura de eventos no período pré-lingüístico: precursores ou pré-requisitos? Anais do 3º Encontro Nacional de Lingüística. Rio de Janeiro: PUCRJ, 1978.
- MAIA, M. A. R. Efeitos do status argumental e de segmentação no processamento de sintagmas preposicionais em português brasileiro. Cadernos de Estudos Lingüísticos (UNICAMP), vol. 50, p. 1, 2008.
- _____. LEMLE, Miriam; FRANÇA, A. I. . Efeito Stroop e rastreamento ocular no processamento de palavras. Ciências & Cognição (UFRJ), vol. 12, pp. 02-17, 2007.
- PEREIRA CASTRO (formerly CAMPOS), M. F. Como as crianças preferem falar sobre os fenômenos causais. Anais do 3º Encontro Nacional de Lingüística. Rio de Janeiro: PUCRJ, 1978.
- PERRONI SIMÕES, M.C. Emergência das expressões de relações temporais em crianças brasileiras. Anais do 2º Encontro Nacional de Lingüística. Conferências. Rio de Janeiro: PUCRJ, 1977, pp. 279-88.
- _____. A teoria gerativa nos estudos de aquisição do português brasileiro. Revista de Estudos da Linguagem, vol. 11, no. 1, pp. 174-196, 2003.
- POERSCH, J. M.; ROSSA, A. A. (Orgs.). Processamento da linguagem e connexionismo. Santa Cruz do Sul: EDUNISC, 2007.
- ROSSA, A.; ROSSA, C. (Orgs.). Processamento cerebral e connexionismo. Rumo à Psicolingüística Conexionista. Porto Alegre: EDIPUCRS, 2004.
- SANTOS, R.S. Traces, pro and stress shift in Brazilian Portuguese. Journal of Portuguese Linguistics, vol. 2, no. 2, pp. 101-113, 2003.
- _____. Strategies for the acquisition of word stress in Brazilian Portuguese. Working Papers in Linguistics - Leiden, vol. 2, no. 1, pp. 71-91, 2005.
- SCARPA (ex GEBARA), E.M. A emergência da coesão intonacional. Cadernos de Estudos Lingüísticos, vol. 8, pp. 31-43, 1985.
- SCLIAR-CABRAL, L. Emergência da função reportativa. Letras de Hoje, vol. 19, pp. 59-74, 1975.
- _____. A explanação lingüística em gramáticas emergentes. 1977a. Dissertation. (Ph.D in Linguistics). FFLCH, Universidade de São Paulo.
- _____. Alguns problemas metodológicos em aquisição da linguagem. Anais do 2º Encontro Nacional de Lingüística. Rio de Janeiro: PUCRJ, 1977b, pp. 289-305.
- _____. O modelo de Fillmore e as gramáticas emergentes. Rev. Bras. de Lingüística, vol. 4, no. 2, pp. 79-134, 1977c.
- ZIMMER, M.C.; ALVES, U. K. Os conhecimentos implícito e explícito, o input e o paradigma connexionista. 7º Encontro do CELSUL, Círculo de Estudos Lingüísticos do Sul, 18, 19 e 20 de outubro de 2006. Pelotas: UCPel, 2006, pp. 106-7.