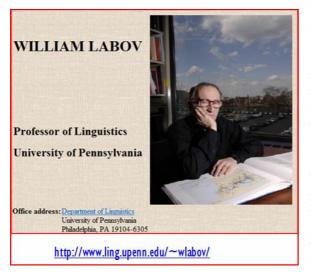
## 03. Commonplaces in Clinical Linguistics 03.07. Source of the data: empirical conditions for linguistic data.

Reference was made in section 03.01 to the distinction between Speech and Language, and to the impossibility of describing the abstract system of Language without using the basis of specific Speech data, however anecdotal, unsystematic and idiosyncratic such data may be.

This situation is theorised in 70s socio-linguistics under the concept of the "Saussurian paradox", put forward by William Labov<sup>1</sup> (as one of Chomsky's disciple he presumably avoided



using labels such as "generativist paradox" or "Chomskyian paradox"...).

In his thesis on Black English, Labov argues the impossibility of describing the linguistic system without the systematic observation of specific data provided by specific individuals of a specific linguistic community.

If these ideas are transferred to the field of clinical linguistics we have to admit that a impaired cognitive linguistic process can be identified from specific linguistic samples by the subject in question. Additionally, it will have to be assumed that those specific samples of impaired speech coexist in the same subject with others in which the

impairment is not noticeable (Hernández Sacristán 2006)<sup>2</sup>.

Corpus linguistics provides the theoretical premises that establish the suitability of a corpus. Dialectology, historical linguistics and structuralism were already "corpus linguistics" before the appearance of modern digital corpus, with which the term "Corpus linguistics" is usually associated.

[Suggested additional reading: You can consult Joaquim Llisterri's link on *Corpus Linguistics*: <u>http://liceu.uab.es/~joaquim/phonetics/fon\_met\_exper/corp\_tra</u> <u>b.html</u> and particularly: <u>http://liceu.uab.es/~joaquim/language\_resources/spoken\_res/Te</u> <u>xto\_oral.html</u>

A further quote from Chantal Pérez Hernández (2002)<sup>3</sup>, highlighting the importance of generativism in the rejection of studies of actual data:

"The linguist who argued most vigorously against the use of text corpora for linguistic research was the one who has undoubtedly had the greatest influence on linguistic thought over the last forty years on both sides of the Atlantic: Noam Chomsky. Chomsky launched a number of criticisms of corpora based principally

<sup>&</sup>lt;sup>3</sup> Hernández Pérez, Chantal (2002): <u>Explotación de los córpora textuales informatizados para la creación de bases</u> <u>de datos terminológicas basadas en el conocimiento</u>, Estudios de Lingüística Española, 18.



<sup>&</sup>lt;sup>1</sup> Labov, William (1972): *Modelos sociolingüísticos (Socio-linguistic models)*, Madrid: Cátedra, 1983. Translation by José Miguel Marinas Herreras.

<sup>&</sup>lt;sup>2</sup> Hernández Sacristán, Carlos (2006): Inhibición y lenguaje (Language and inhibition), Madrid: Biblioteca Nueva.

on his rejection of the structuralist paradigm, radically opposing the use of any descriptive methodology in linguistic theory: "[...] linguistic theory is mentalistic since it is concerned with discovering the mental reality underlying actual behaviour", Chomsky (1965: 4)<sup>4</sup>"

Today, the use of real data has gathered momentum with the traditions that are starting to take an interest in discourse, that is, in pragmatics; they are all from the same era as generativism and in some cases with precedents (for example, British discourse analysis is fed by the work of Firth and Halliday). The following is a fragment from <u>Análisis conversacional y</u> pragmática del receptor (Gallardo 1996) summarising this research scene:

The first concerns over conversational data that goes beyond the isolated speech act appeared in a systematic way in the early 70s. In the United States, ethnomethodologists under the tutelage of Harvey Stacks in Los Angeles University, carried out the first research on what is known as "conversational analysis" (C.A.). Prominent researchers included Gail Jefferson, Emmanuel Schegloff, Anita Pomerantz, Judy Davidson and Paul Drew. What characterised these scholars was their training in sociology, rather than linguistics, which led them to study language as a fundamental vehicle for everyday social interaction. Ethnomethodology is one of many sociological tendencies that, after the 60s, reacted against the excessively numerical and quantitative tendency of sociology and turned towards everyday problems or microsociology. Its principal theorists were Aaron Circourel and Harold Garfinkel, who discussed the way in which social agents organised and interpreted actions of everyday life. The data these researchers worked with consisted of recordings of everyday conversations, and their interest centred on questions such as turn taking, sequence types and organisation of priority (which they called "preference"). Sacks established that one of the requisites for analysis should be the non-existence of a metalanguage previous to the data. What happens is that such metalanguage is not systematised after analysis and thus the body of theory is not always sound. Basic notions (preference, sequence, even turn) are handled differently according to author, which leads to a general impression of a lack of coherence (and gives rise to lively debates on terminology in linguistics e-mail lists). However, it is a vital and very productive line of research, which in the 80s was progressively integrated into more "linguistic" studies, such as the latest publications on discourse analysis (for example, the manuals edited by Van Dijk) and on dialogic pragmatics (for example, Kerbrat-Orecchioni). In fact, using linguistic concepts from enunciative pragmatics enables terminological coherence to be restored.

The PALO ALTO SCHOOL began its studies on interaction a long time before this. The anthropologist Gregory Bateson carried out his research from the late 30s and cybernetics was consolidated in the 40s, essentially by means of a series of interdisciplinary meetings (the "Macy conferences") between mathematicians, anthropologists, Gestalt psychologists, psychoanalysts, neurologists, physiologists, control engineers, etc. This interdisciplinarity is the basis of Bateson's INTERACTIONAL APPROACH. In 1959 Donald Jackson founded the **Palo Alto Mental Research Institute**, which is still in existence today. In his doctoral thesis in 1936, Bateson had already stated that the objective of social psychology was the study "of individuals' reactions to other individuals' reactions" (Wittezaele and García, 1992: 51)<sup>5</sup>which coincides fully with the statements in the previous chapter about the relationship between speaker and listener (Jorques, 1995)<sup>6</sup>. Given the interdisciplinary wealth characterising this school's theoretical reasoning, it is interesting that they do not use linguistics at all, despite dealing intuitively with many notions of pragmatics. The data on which the theory is built come from field work (anthropological studies) and from psychotherapy (sometimes from literature data).

<sup>&</sup>lt;sup>6</sup> Jorques, Daniel (1995): *Dimensiones de un análisis de la comunicación y modos de relación interpersonal* (Dimensions of an analysis of communicatin and modes of interpersonal relations), Centro de Estudios sobre Comunicación Interlingüística e Intercultural, vol. 3.



Análisis lingüístico de las Alteraciones del Lenguaje Beatriz Gallardo Paúls. Curso 2008-2009.

<sup>&</sup>lt;sup>4</sup> Chomsky, N. (1965): Aspects of a Theory of Syntax. Cambridge. Mass: MIT Press.

<sup>&</sup>lt;sup>5</sup> Wittezaele, Jean-Jaques and García, Teresa (1992): *La Escuela de Palo Alto. Historia y evolución de las ideas esenciales* (The Palo Alto School. History and evolution of essential ideas), Barcelona: Herder, 1994. Translation by Luisa Medrano.

Studies in SOCIAL PSYCHOLOGY also deal with data that has been discussed since the 70s, but they are nearly always laboratory data, which conditions the analysis from the start. Despite the artificiality of the corpus, this work (Roger and Bull, 1989)<sup>7</sup> is interesting for the study of certain issues related to suprasegmental elements or to practical transcription problems.

DISCOURSE ANALYSIS (D.A.) in the Birmingham school also embarked upon the study of conversational data. Its main exponents included John Sinclair, Malcolm Coulthard, David Brazil and Michael Stubbs. The characteristic feature of these studies is the type of data with which they work, obtained mainly from didactic, and later commercial, interaction. The D.A. of Labov and Fanshel (1977)<sup>8</sup> also used situationally marked data, obtained from therapeutic interaction. This imposes restrictions on the analysis from the start, such as the fact that the superior units are the transaction and the lesson. A further limitation is the insistence on the description being wholly "linguistic". If ethnomethodologists lack a well-defined metalanguage, (British) discourse analysis establishes this metalanguage before analysing the data, so that the end inadequacies are similar in both schools. Using the units proposed by Halliday for the grammatical level establishes a series of parallel units that, according to his perspective, should deal with the discursive level. Among the most significant discoveries of discourse analysis is the notion of predictability, which enables types of interventions to be identified and conversational behaviour to be classified by reference to the same corpus elements (which is completely compatible with the perceptual approach defended here). From this notion it is possible to research the structure of the exchange, another of the topics studied in depth by this school.

DIALOGIC PRAGMATICS (D.P.) is the term chosen to include the work of the GENEVA SCHOOL (with authors such as Eddy Roulet, Alain Trognon, Antoine Auchlin, Sylvianne Rémi-Giraud, Jacques Moeschler and Anne Zenone) but also of other tendencies in the French-speaking field, such as INTERACTIONAL LINGUISTICS defended by Catherine Kerbrat-Orecchioni, Robert Vion and Jacques Cosnier, and the TOPOI THEORY of Oswald Ducrot and Jean Claude Anscombre. As for units, the inventory drawn up by British authors is generally used (act, intervention and exchange), but the data is now less restrictive. Together with situationally marked interactions, data from what we shall call everyday conversation is also used. These studies clearly lean towards linguistics, as they attempt to integrate the contributions of enunciative pragmatics from the outset. A very productive line of research is that which goes into the strategies and peculiarities of argumentative discourse.

In the clinical field (Gallardo 2007; Gallardo and Hernández, e.p.)<sup>9</sup>, treatment of data can be characterised by three empiric requirements that respond to some of the commonplaces discussed here:

- Individual accessibility of the social fact: it is understood that the social dimension of language emerges "insofar as the social can be processed 'on an individual scale'". Insofar as the cognitive dimension of language is necessarily personal, individual, filtered by the self, we must assume that psycholinguistic interest should focus on the domain of individually accessible verbal facts. Only through this individual access can the social reality of linguistic facts be possible.
- The perspective and internalising nature of the listener: These facts, as dialogic facts, will
  always involve a minimum of two individuals: speaker and receiver ( in the topic
  dealing with speech pragmatics, this idea is developed using Benveniste and Speech
  Act Theory).

<sup>&</sup>lt;sup>7</sup> Roger, Derek and Bull, Peter (eds.) (1989): *Conversation: an interdisciplinary perspective,* Clevedon: Multilingual Matters.

<sup>&</sup>lt;sup>8</sup> Labov, William and Fanshell, David (1977): *Therapeutic Discourse: Psychotherapy conversations,* New York: Academic Press.

<sup>&</sup>lt;sup>9</sup> Gallardo Paúls, Beatriz (2007): *Pragmática para logopedas (Pragmatics for speech therapists),* Cádiz: Publicaciones de la Univ. De Cádiz.

Hernández Sacristán, Carlos and Gallardo Paúls, Beatriz (e.p.): "Tres condiciones de empirismo para los hechos del lenguaje, de interés en un enfoque cognitivo", in press.

The consideration of linguistic data has to be compatible with the listener's position, without this being an exclusively passive dimension; when referring to the listener's position, the marked dimension of the speech act is referred to. This requisite (based on the classic theories of Saussure) also appears as methodological requirement of ethnomethodological conversation analysis and the Palo Alto School. Empirically, it can be said that the speaker is always the first listener of their words, which leads to the need to consider a contextualised meaning, in use.

Orality: "what is required is, at least, to establish the distinction between oral and written products, and not to assign to writing a pre-eminent role as a source of data for a theory of language". When researching clinical linguistics it must be clear that writing (and its syntactic models) constitutes a secondary system of representation. This does not mean excluding written data, but rather eliminating them as an exclusive reference in the description; analysis obtained from written data has to be understood, in this sense, as the analysis of marked data.

"I just wish experts in the field would get together and compose the Defective Speech Anthology (DSA). The DSA would consist simply of raw samples of speech by all the different brands of aphasics and dysphasics, with several samples for each condition. The most superficial reading on, say, Broca's aphasia, is enough to show that a very wide range of syntactic impairment is included under that label. For each subject we'd need a full description, type and precise extent of trauma, age now and at onset, and so forth. A colossal task, sure. But why take it on? Because the vast bulk of work in this area is, very naturally, from a clinical perspective, and therefore of limited use to anyone trying to find out how language is instantiated in the brain. But we now know enough about language to be able to determine the linguistic nature of defects rather precisely, and one hypothesis would be

that if two individuals show an identical defect, even if they have been diagnosed under different syndromes, the same thing has gone wrong for them somehow. Of course, that couldn't be the whole story. Maybe they would turn out to have things wrong with them in addition to what caused the linguistic impairment. Maybe two different conditions would (among other consequences) affect the same part of the brain in the same way. Maybe damage or loss in two different places could cause identical impairments. We don't know. But until we look at the evidence from this new perspective, we're not likely to find out. At worst, we'd find out a lot more about how the brain works".

> Derek Bickerton, (2000): "Darwin and Chomsky, together at last", in *Lingua Ex Machina*, pp.208-209

A further clarification should be made regarding contrast, which is particularly relevant when analysing data obtained from children. The most well-used diagnostic manuals, such as the DSM (Diagnostic and Statistical Manual of Mental Disorders) and the ICD (International Classification of Diseases) contain an extremely rich taxonomy of disorders labelled as different according to their aetiology or to the symptoms they produce; this sometimes leads to linguistic contrasts being proposed between two or more of these medically labelled groups. The problem in these cases is the lack of completeness and representativeness. For example, if an analysis is carried out on verbal samples from 15 children with ADHD, they cannot be compared as a control group, with other groups of children presenting a different diagnosis; at least if complete studies are not available on this second group. In these cases, studies on language acquisition in children with typical development would have to be used (Serra et al. 2000) and samples from the subject group would have to be compared with what is observed in groups with typical acquisition. The ADHD group could only be compared with, for example, an Asperger's Syndrome group, or a Language Impairment group (LI, sometimes called in Spanish TEL, Dysphasia or SLI - Specific Language Impairment) or a Learning Difficulties group: when these other pathologies have also been completely studies with reference to groups with normal development.

This precaution can avoid the false generalisations sometimes found in the literature, where not particularly representative contrasts are nevertheless presented as being generally valid. In the case of ADHD, as has already been discussed in <u>\$03.04.Language</u>, grammar and pragmatics, the dearth of complete descriptive studies on the language of a particular group<sup>10</sup> means the literature wavers between considering linguistic impairment (LD) to be symptomatic of the disorder (it appears by definition in all children diagnosed with ADHD) or to be of an independent nature (aetiology).

"Age, sex, and severity of ADD do not seem to provide direct roles. Similarly, we cannot be sure whether the SL impairments associated with ADD are secondary to the ADD or whether they are true linguistic impairments in themselves arising independently." (Baker and Cantwell 1992: 12)<sup>11</sup>.

In the face of this lack of definition, they establish the following percentages for subgroups of speakers in their group of children with ADHD, although the methodology for elucidating when a particular error belongs to one or the other subgroup is unclear.

"By definition, all of the children had some type of SL problem: 78% had speech articulation impairments; 58% had expressive language impairments; 34% had receptive language impairments; and 69% had language-processing" (1992: 8-9)

Later, however, the persistence of the usual labels is such that it led the authors themselves to contradict their initial statement, admitting (as does almost all the literature<sup>12</sup>) the possibility of there being children with ADHD **without** language disorders (they nevertheless do not provide any figures in their article):

"We do not know why some children with ADD have SL deficits whereas others do not." (1992: 12).

<sup>&</sup>lt;sup>10</sup> When we refer to complete studies we mean that they attempt a description of all the components of a particular language, from phonology to semantics in addition to the categories of pragmatics, and not more or less broad brushstrokes on a particular verbal usage, certain problems of semantic interpretation, etc. And this, clearly, with a representative number of subjects; perhaps this is a utopian aspiration, but nevertheless it is one to aim for.

<sup>&</sup>lt;sup>11</sup> Baker, L. and Cantwell, D. (1992): "Attention deficit disorder and speech/language disorders", *Comprehensive Mental Health Care.* Vol.2. pp. 3-16.

<sup>&</sup>lt;sup>12</sup> For example, of the 37 children studied by Ygual (2003: 141) he states that 17 show some sort of language disorder.

On the independence of ADHD and linguistic impairment, they tend to believe that it is an independent, non-motivated co-occurrence, for which they put forward two basic reasons:

"First, there was a wide diversity of linguistic deficits found in the ADD children in the present study, and these paralleled those found generally among SL clinic patients. Second, there were no clear associations between types of SL deficits and features of ADD (such as severity or concurrence with other psychiatric syndromes)." (1992: 12)

The "types of SL impairments", however, are established from rather questionable theoretical bases, both for the ADHD group and for the supposed LI group, with no in-depth grammatical description of the various components. In addition, on the majority of occasions children are assessed by separating semiotic skills and trying to find a word-to-word association with grammatical components; this link is favoured by the morphological "weakness" of the English language and is supported by two basic associations: expression-phonology, understanding-syntax.

However, other contrasting elements are frequently included, such as "reading disabilities" (Purvis and Tannock, 1997)<sup>13</sup>:

"Research has demonstrated a high prevalence of language impairments (LI) and reading disabilities (RD) in children with attention deficit hyperactivity disorder (ADHD). Since RD is also associated with LI, it is unclear whether the language impairments are specific to ADHD or associated with comorbid RD." (1997: 133).

And also "Language Learning Disabilities" (Javorsky 1996: 247)<sup>14</sup>:

"Whereas LLD is a significant deficit in expressive and/or receptive language abilities, ADHD is a deficit in rule-governed behaviour related to linguistic deficiencies".

Tannock (2005) points to the paradox of clinical practice and, although she sometimes attempts to take a global and holistic view of the linguistic act, she continues to use data based on reductionist practice (that is, with no ecological validity):

"Paradoxically, although the psychiatric diagnostic classification of 'Communication Disorders' implies a focus on language and social communicative system, clinical/medical investigations rely almost exclusively on standardized language tests purported to measure the abstract linguistic computational system."

Redmond (2005)<sup>15</sup> also reflects variations in the literature:

"Epidemiological studies suggest that significant levels of language impairment can be expected to co-occur in 35-50% of children who present with ADHD symptoms and rates as high as 90% have been observed in studies using clinically referred samples. (...) very little information exists on the performance of these children on the three clinical markers of language impairment." (Redmond 2005: 113).

<sup>&</sup>lt;sup>13</sup> Purvis, Karen L. and Tannock, Rosemary (1997): "Language Abilities in Children with Attention Deficit Hyperactivity Disorder, Reading Disabilities and Normal Control", Journal of Abnormal Child Psychology, 25, pp. 133-144.

<sup>&</sup>lt;sup>14</sup> Javorsky, J. (1996): "An Examination of Youth with ADHD and Language Learning Disabilities: a Clinical Study", *Journal of Learning Disabilities 29/3, pp.* 247-258.

<sup>&</sup>lt;sup>15</sup> Redmond, S. M. (2005): "Differentiating SLI from ADHD using children's sentence recall and production of past tense morphology", *Clinical Linguistics and Phonetics*, 19(2), 109-127.

Rennie (2003)<sup>16</sup> can be considered as an example of a wider reaching linguistic approach, as it includes narrations, deixis and informativity in its linguistic characterisation as ADHD, but it continues not to offer global descriptions:

"The research literature regarding ADHD and language shows that ADHD children have most difficulty planning and organizing stories in order to retell them (...) but are able to recall the main idea in stories (...). Children diagnosed with ADHD are more likely to misinterpret information and use more ambiguous references and inappropriate word substitutions (...), which indicates problems monitoring their own communication (or self-monitoring)". (Rennie 2003: 72).

In summary, all the variation and contradiction described here and based on some of the most solid and representative work on ADHD, is due to the fact that the studies carried out focus on partial aspects, with reduced sample sizes, using data obtained in very heterogeneous situations and with criteria that are incompatible in terms of definition of impairments and, on occasions, of the disorders involved. Linguistic research into clinical data must be absolutely scrupulous and not perpetuate this type of incoherence, therefore it must always have to hand the studies carried out on language acquisition and use in speakers with typical development (Serra, M. et al. 2000).

<sup>&</sup>lt;sup>16</sup> Rennie, Terry J. (2003): "The Communicative Competency of Boys with Attention Deficit Hyperactivity Disorder", in W.M.Roth (Ed): *Connections* '03, pp. 69-89.

