05. Linguistic analysis of impairment data.
05.03. Textual analysis of impaired speech samples.
05.03.03. Textual cohesion at the *lexic-semantic* level: correferential chains and lexical relationships.

# A. Textual cohesion: correference

According to Halliday and Hasan (1976) in their classic work Cohesion in English, **cohesion** is defined as "the set of linguistic resources that every language has (as a part of the textual metafunction) for linking one part of a text to another".

They are, therefore, syntactic-semantic elements, found in superficial structure, and manifested primarily in referential chains and connectors (Herrero 2005)<sup>1</sup>. This section analyses which of these semantic mechanisms appear in the text and what impairment situations are typically associated with errors of cohesion.

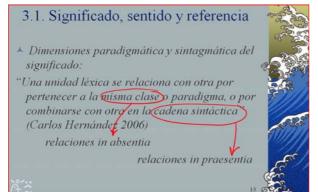
# ■ "The concept of cohesion is a semantic one; it refers to relations of meaning that exist within the text, and that define it as a text. Cohesion occurs where the INTERPRETATION of some element in the discourse is dependent on that of another. The-one PRESUPPOSES the other, in the sense that it cannot be effectively decoded except by recourse to it. When this happens, a relation of cohesion is set up, and the two elements, the presupposing and the presupposed, are thereby at least potentially integrated into a text" (Halliday & Hasan, 1976: 6). ■ "An important contribution to coherence comes from COHESION: the set of linguistic resources that every language has (as a part of the textual metafunction) for linking one part of a text to another" (Halliday & Hasan, 1989: 48). Michael A.K. Halliday and Rugaiya Hasan: 1976: Cohesion in English, Longman House 1979: Cohesion in English, Longman House

The basic mechanism that gives texts their semantic cohesion are the so-called **correferential chains**, made up of the series of lexical elements in a text that share the same referent; the first mention is the nucleus and the rest, the links.

The chains are formed by events of return-repetition that ensure the local continuity of every linguistic sequence (Adam 1990)<sup>2</sup>. The value of repetition arises precisely because it is one of the essential factors for guaranteeing the character of the text in a sequence of utterances; in Adam's words (1990: 45), "la textualité peut être définie comme un équilibre délicat entre une

continuité-répétition, d'une part, el une progression de l'information, d'autre part."

There are a number of mechanisms for correferentiality, that is, for mentioning the same referents throughout the syntagmatic chain. The previous section discussed the distinction between syntagma paradigm as correlative to the distinction paragrammatism between and agrammatism, between syntax morphology; in this section we will make use once again of same theoretical opposition within the field of semantics.



<sup>&</sup>lt;sup>2</sup> ADAM, Jean-Michel (1990): Éléments de linguistique textuelle: théorie et practique de l'analyse textuelle, Liege: Pierre Mardaga ed.



<sup>&</sup>lt;sup>1</sup> HERRERO BLANCO, Angel (2005): "Lenguaje y texto" (Language and text), in A. López and B. Gallardo, eds.: *Conocimiento y lenguaje (Knowledge and language)*, Valencia: Universitat.

When studying the possible semantic errors made by a speaker with impairment, we should ask ourselves if these errors refer to the lexical class (paradigm) or of they affect the sentence chain (syntagma).

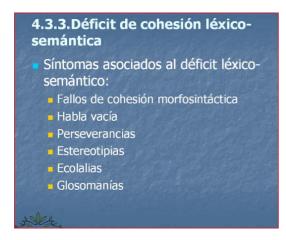
To carry out this analysis we must be aware that there are two basic types of correferential mechanisms: those that use alternative lexical designations for the same reality (lexical correference) or those based on grammatical techniques, such as phoric deixis, determination or basic alternants.

### 1. Lexical correference

This mechanism consists in using alternative lexical units for the same reality; it maintains a homogeneous continuum of meaning (minimum isotopy³) and at the same time ensures a certain progression with new specifications, updating within the discourse the virtual references of the lexemes mentioned. It is based on lexical relations:

- Synonymia: repeats a certain lexical element with a different lexical element that maintains a relation of "identity" with the first; can occur at a strictly lexical level (word 1 = word 2)<sup>4</sup> or at the syntagmatic level (including appositions). For example, Down's Syndrome (and other impairments) is typically associated with lexical poverty that makes using synonymia difficult.
- Hyponymy and Hyperonymy: relations of lexical inclusion; hyperonomy is the term
  used to designate the general class ('mueble' furniture) and hyponymy is used for a
  member of that class ('silla' chair).

[Suggested additional reading: "Caso de demencia semántica" (A case of semantic dementia), Marisol Reyes Nava 2006|



Strictly speaking, lexical impairment is anonymy, or difficulty in accessing words; its minimal manifestation, which is not necessarily pathological, is the well-known phenomenon of "on the tip of the tongue". There are other symptoms of lexical and semantic impairment, such as perserverances, stereotypes, echolalia, and glossomanias or preferred topics.

<sup>&</sup>lt;sup>4</sup> For example, Bernárdez includes here only the cases of a sole lexeme: *estatua* for *escultura*, *automóvil* for *coche*, *caminar* for *andar*, etc.



<sup>&</sup>lt;sup>3</sup> Textual isotopy: a concept formulated by Greimas to address intra-textual coherence of discourse (1976: 20) "the recurring appearance throughout a discourse of a bundle of categories justifying paradigmatic organisation". / "isotopy is a semantic property of the text that enables the homogeneous levels of meaning to be highlighted and is based on the redundancy and reiteration in several textual segments of some identical semantic elements; the latter constitute a base onto which the particular meanings of each text segment are inserted, but their specificity does not entail either the dispersion or the irreconcilability of the various meanings". (Lozano et al. 1986: 31) LOZANO, Jorge, PEÑA-MARIN, Cristina and ABRIL, Gonzalo (1986): Análisis del Discurso (Discourse analysis), Madrid: Cátedra.

### 2. Grammatical correference

In grammatical, non-lexical correference, the links in the referential chain refer basically to alternants, that is, the elements in the linguistic code that allude to previous referents by means of linguistic forms which, despite being explicit, do not transmit their own propositional meanings.

- Deixis: deictic elements are those that place the spatial and temporal text referents (demonstrative deixis) or by reference to other elements in the same text (phoric deixis). According to Bühler's classic distinction, there can be three types of deictic use:
  - 1) **ad oculos (exophoric) deixis:** a pragmatic category that occurs in the enunciative and textual field, and that serves to place the referents in the statement by reference to those in the content of the utterance, at spatial, personal and temporal levels. In any message there is a series of elements whose referential meaning depends on the communicative situation, of the HERE and NOW of the utterance; it is therefore an exophoric reference. Being native speakers of Spanish does not give us sufficient ability to correctly interpret message of the type *Te espero mañana donde siempre (I'll wait for you tomorrow in the usual place)*. Deictics serve to encode different types of elements that depend on the enunciative situation.
  - 2) phoric deixis (anaphoric and cataphoric): "Parmi les phénomènes d'enchaînement transphrastique assurant l'isotopie textuelle, conformément à la règle de récurrence dégagée par les grammairiens du texte, l'anaphore et la cataphore jouent un rôle prépondérant, en même temps qu'elles requièrent de la part des sujets qui les utilisent une compétence spécifique" (Reichler-Béguelin, 1988:15).
  - 3) deixis am phantasma or of imagination: refers to elements not present in the discourse, that is, based on memory or imagination: *cuando llegues a Correos giras a la derecha y a partir de ahí, la segunda bocacalle (when you get to the Post Office you turn right and from there it's the second turning)*.

|Suggested additional reading:

"La cohesión y la coherencia en la conversación del paciente con demencia: Un estudio discursivo" (Cohesion and coherence in the conversation of the dementia patient: a discursive study), Beatriz Valles González

"El efecto de la distancia en la comprensión escrita de los demostrativos con valor anafórico" (The effect of distance on the written comprehension of demonstratives with anaphoric value), Julio González, Tersa Cervera and José Luis Miralles, 1999

"Análisis de frecuencias de construcciones anafóricas en narraciones infantiles" (Analysis of the frequency of anaphoric constructions in children's stories), César Aguilar 2003

• **Determination:** the use of **indefinite or definite articles** gives different results. As H. Weinreich (1976: 169) argues that "For the listener, the indefinite article has the signic value of attracting their attention to forthcoming information. On the contrary, the definite



article signals that here, previous information is of interest". (trans. in Bernárdez, 1982: 136). For Halliday and Hasan (1976: 136), the definite article "indicates that the element in question is specific and identifiable; that the information required for identification can be recovered from somewhere. Where should this information be searched for? ... either in the situation or in the text. The reference is exophoric or endophoric". (trans. in Bernárdez, 1982: 136). Another common opposition distinguishes between the **presenting** determinators (un, uno, una, unos, unas) and the **recognising** determinators (el, la, los, las).

■ **Pronominalisation**: pronominal substitution uses specialised elements as substitutes, instead of autosemantic elements. Basic alternants (Bloomfield's concept) are defined as "linguistic elements whose function is to serve as a substitute for a lexical element in the same text". (Bernárdez, 1982: 105)<sup>5</sup>.

They include lexical basic alternants (pro-verbs, pronouns: *hacer*, *cosa*, *hecho*, *persona*), pronouns and pro-adverbs (*entonces*, *asi*). For personal pronouns, only those in third person can really be regarded as basic alternants, that is, textual substitutes of elements that have already appeared in the text or that will appear later (according to their anaphoric or cataphoric use). Basic alternants are frequently found in speakers with anonymy, as lexical access impairment is compensated by the over-exploitation of these empty categories.

1st and 2nd person pronouns are used with an exophoric or contextual function, that is, linked to the enunciative situation; endophoric use is only possible in the 3rd person. Other pronouns with a substitutive textual function are (Bernárdez, 1982:110) reciprocal, reflexive, relative, indefinite, possessive and demonstrative. In summary, Bernárdez argues that "all basic alternants set up a full reference identity, although they limit their value to indicating that what we find at a point in the text should be identified exactly with something that has previously appeared in the same text, or that we can identify extra-textually from our 'knowledge of the world' or of the context". (1982:116).

[Suggested additional reading: "Coherencia y cohesión en el discurso afásico" (Coherence and cohesion in aphasic discourse), Lourdes de Pietrosemoli, 1996 |

## B. Textual cohesion: connectors

- Together with correferential chains, there is a second cohesion mechanism that, for its importance, is sometimes dealt with separately: this is **connectivity**, defined as: the dimension of cohesion that deals with chaining utterances and/or sentences inside a text.
- A cohesion mechanism that is set up between two (and sometimes more) constituents of a sentence (INTRA-SENTENCE connection of compound sentences) or between two elements in the text (EXTRA-SENTENCE or TEXTUAL) and a connector, which displays the syntactic, semantic or pragmatic relation between these elements (Cuenca 2006: 13-14).

<sup>&</sup>lt;sup>5</sup> BERNÁRDEZ, Enrique (1982): *Introducción a la Lingüística del Texto (Introduction to text linguistics)*, Madrid: Espasa-Calpe.



# Diferencias entre Conexión y Referencia, a partir de Castellá 1991

Connexió	Referència
A connector B	A (antecendent), B (marcant de la referència)
Un connector uneix les unitats A i B	Una unitat B remet a una altra unitat A que és el seu
	antecedent
La relació entre A i B es fa explícita per l'ús del	B s'interpreta pel coneixement de'A
connector	
El connector és una marca formal de relació entre les	Si l'element A és a dins del text, el marcant de
unitats de sentir del text	referència B és una forma de repetició de sentit en el
	text
A i B són unitats intraoracionals, oracions o paràgrafs;	B és sempre un mot o un sintagma que remet a un
en algun cas, A pot correspondre a un esdeveniment	altre mot o sintagma, a una clàusula o oració o a un
extraling	element contextual (A)
El connector gramatical és fora de l'estructura bàsica de	El marcant de referència és dins de l'estructura bàsica
l'oració (subjecte-verb-complement)	de l'oració, n'és un constituent.

De M. Josep Cuenca (2006) : La connexió i els connectors. Universitat de Vic.

The analysis of stories written by children with ADHD provides a framework for studying connection in the area of pathologies. This impairment is manifest in the composition of incomplete narrative events, or in the use of connectors to incorrectly link some categories of

La gran isla dojerto

Una ser un soldado recibio un lle mada

La gran isla dojerto

y se lo dijo a un policia mero le grantio;

lista y lo signio hasta la isla desierto

que se diregia. El soldado bajo de la lanche

policia aranha dejaparelió y la del

ina isla andanto el policia bajo. En la

una Carta magica. Leyo y noma:

en eta carta podras savar todo lo que

y serre el mas fuerte. Entonese

y serre el mas fuerte. Entonese

uncharon el de nolicia.

the narration. We can see this in the following text by ITS, aged 11, with Combined type ADHD: *The big desert island* 

"Once a soldier received a call and he told a policeman, but he lied to him. It was a treasure, but the policeman was cleverer and he followed him to the desert island that he was going. The soldier got off the launch but the launch disappeared, and the policeman's [launch] when the policeman got off. On the island the soldier was walking and found a magic letter. He read and it said: in this letter you can get everything you want.

"-Then I'll conquer the world and be the strongest. Then he and the policeman fought".





(cf. Relevant chapter in *Pragmática para logopedas - pragmatics for speech therapists*).

