Adaptative behaviors in aphasic conversational breakdown

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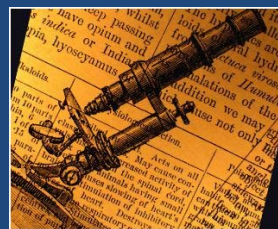 – Government impairment
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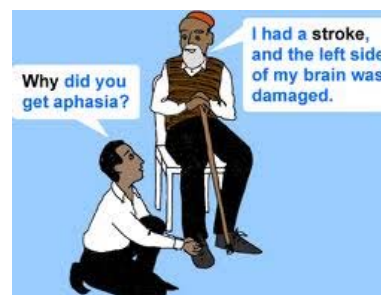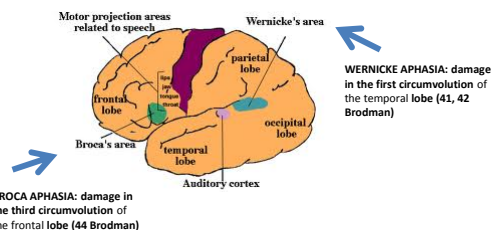
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1.1

THEORETICAL AND METHODOLOGICAL CONTEXT

Pragmatic approach in Clinical Linguistics and Aphasiology

- Context: since 2000, linguistic study of language pathologies, with special attention to APHASIA

- Aphasia: linguistic impairment due to brain injury in the left hemisphere

BROCA aphasia	WERNICKE aphasia
Expressive impairment	Receptive impairment
Non fluent aphasia	Fluent aphasia
Trouble with speech production	Trouble with speech comprehension
Articulatory effort	Normal articulation
Very short and simple sentences	Long sentences, sometimes without sense; disordered speech
Decreased production	Increased production (logorrhea)
Problems specially with "grammatical" and "functional" words	Problems with coherence
Locutive acts (more than propositional acts)	Severe cases: jargon
Lesion in the posterior part of the left third frontal circumvolution	Lesion in temporal lobe
Agramatism	Paragramatism

BROCA aphasia	WERNICKE aphasia
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(REDUCTIONIST) CLASSICAL OPOSITION

Pragmatic approach in Clinical Linguistics and Aphasiology

- The need of pragmatic approaches:

  "language use is not an exhibition of linguistic competence but a behavior primarily oriented toward communication. In normal conditions, the ordinary use of language in natural settings has as a major goal to make contact with other individuals." (Patry and Nespoulous, 1990: 21)

  Patry, Richard and Nespoulous, Jean-Luc (1990): "Discourse Analysis in Linguistics: Historical and Theoretical Background", in Yves Joanette and Hiram Brownell (Eds.): *Discourse ability and brain damage,* New York: Springer-Verlag; pp.3-27

Aphasic conversation

- Conversational interaction with aphasic participant: aphasia ceases to be a exclusive feature of this subject
- Adaptation
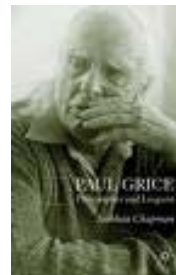- Conversational Guides for KCP

Aphasic conversation

- Cooperative principle (Grice 1975):

    "Make your contribution such as it is required, at the stage at which it occurs, by the accepted purpose or direction of the verbal exchange in which you are engaged."

    Aphasia:
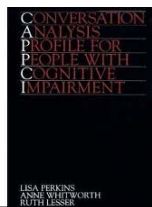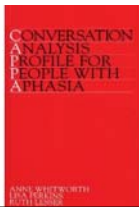   speaker / interaction

Aphasic conversation: Adaptation

- Adaptation to the context → **compensatory** adaptation to the aphasic impairment.
- Two participants: the aphasic speakers and their conversational partners

    "aphasic conversation", as the impairment conditions all the participants' behaviour.

Key Conversational Partner (KCP)

- Concept of Withworth, Perkins & Lesser: introduction of Conversational Analysis in language assessment
- Concept of Key Conversational Partner

Perkins, Lisa; Whitworth, Anne; Lesser, Ruth (1997): *Conversation Analysis Profile for People with Cognitive Impairment*, London: Whurr Publishers.

Whitworth, Anne; Perkins, Lisa; Lesser, Ruth (1997): *Conversational Analysis Profile for People with Aphasia*, Whurr Publ., London

Key Conversational Partner (KCP)

- Goodwin and collaborators: importance of collaborative construction of meaning in aphasia;
- it is not only the aphasic speaker who adapts to their own limitations but so do all those involved:

   "Rather than affecting him alone, his inability to produce speech leads to changes in the ecology of sign systems used by multiple participants within conversation to accomplish meaning and action" (Goodwin, Goodwin y Olsher 2002: 3)

Goodwin, Charles; Goodwin, Marjorie Harness; Olsher, David (2002): "Producing Sense with Non-Sense Syllables: Turn and Sequence in Conversations with a Man with Severe Aphasia", en Ford, Cecilia E.; Fox, Barbara; Thompson, Sandra A. (Eds): *The Language of Turn and Sequence*, Oxford Univ. Press

Key Conversational Partner (KCP)

- Goodwin and collaborators

  "*His power to say something relevant and consequential resides not within himself alone, but instead is embedded within a social ecology of meaning making practices organized through ongoing processes of human interaction.*" (2000: 76).

Goodwin, Charles (1995). Co-Constructing Meaning in Conversations with an Aphasic Man. Research on Language and Social Interaction, 28(3), 233-260.

After several months of intense work with therapists there, he learned to walk with a brace, and to speak three words: *Yes, No, and And. (…)* Of all the words in a language why these three? Note that all three presuppose links to other talk. *And* ties other units of talk, such as clauses, to each other. *Yes* and *No* are prototypical examples of second pair parts (Sacks, 1992; Sacks, Schegloff and Jefferson, 1974 ; Schegloff and Sacks, 1973), used to build a response to something that someone else has said. Unlike the isolated island chosen by the Greek king as the primordial site for the observation of language in its pure state, (or the brain as an isolated, self-contained entity that was the focus of the neurosurgeons' attention), this vocabulary set presupposes that its user is embedded within a community of other speakers. His talk does not stand alone as a self-contained entity, but emerges from, and is situated within, the talk of others, to which it is inextricably linked.

1.2

DATA AND CORPUS

Data

- In order to develop clinical linguistics, we must have real speech samples from people with disorders.
- Conversational records (digital video camera) in a familiar context
- Now: aphasia (35 records), right brain damage (28), alzheimer disease (22), attention deficit and hyperactivity disorder (33), Asperger Syndrome (24), Williams Syndrome (6)

Empiric requirements in treatment of data

- *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'*". The cognitive dimension of language is necessarily personal, individual.
- *The perspective and internalising nature of the listener*: These facts, as dialogic facts, will always involve a minimum of two individuals: speaker and receiver.
- *Orality:* When researching clinical linguistics it must be clear that writing (and its syntactic models) constitutes a secondary system of representation
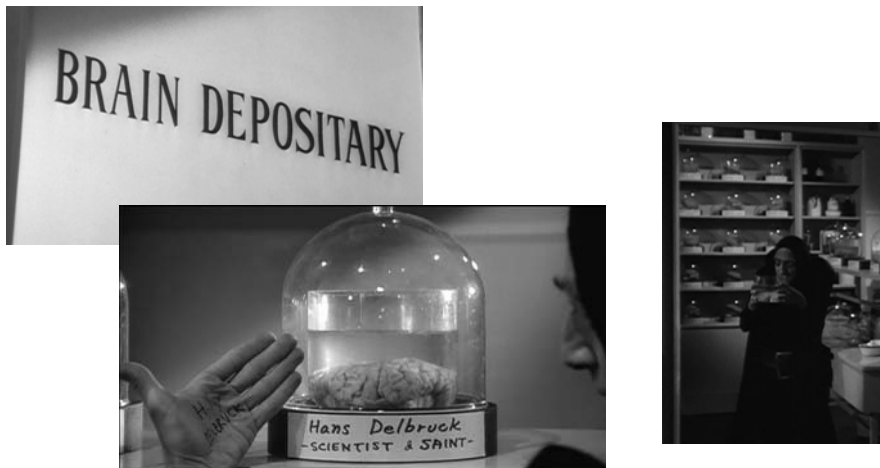
Natural and ecological data

- the study of speech in people with a pathology needs to incorporate the pertinence of context and of concepts such as **encyclopaedic knowledge**, **shared knowledge**, **relevance**, **inference**, etc.; in other words, it should take a pragmatic stance not centred just on "formal linguistic skills" but on the subject's social and communicative efficacy.

	BROCA	WERNICKE	CONDUCCION	GLOBAL	ANÓMICA	TRANSCORTICAL MOTORA	TRANSCORTICAL SENSORIAL	TRANSCORTICAL MIXTA	SEMÁNTICA
LOCALIZACIÓN	Área 44 clásicamente; region perisilviana prerolandica frontal lateral y se extiende a la sustancia blanca periventricular, por debajo de area de Broca.	Principalmente en tercio posterior de circunvolucion temporal superior (área de Wernicke- área 22 de Brodmann), en el territorio de la rama inferior de la arteria cerebral media. Suele extenderse a áreas 39 y 40 y por debajo hasta el área 37	parte posterior e interna de la cisura de Silvio, asociada a circunvolución supramarginal. Afeccion de fasciculo arqueado.	Lesión vascular grave en zonas pre y post rolándicas, en áreas perisilvianas y marginales	Región temporo-parietal; daño leve y localización variable.		Generalmente se produce en una zona profunda y posterior al área de Wernicke. Lesión en áreas 37 y 39.	Patologías mixtas, que en su mayoría parecen afectar zonas vasculares limítrofes del hemisferio izquierdo. Zonas que circundan áreas perisilvianas.	Región supramarginal (cortical y subcortical) . Lesiones en zonas terciarias parietooccipitales (o parietales inferiores) de la corteza del H.I
FRECUENCIA	20%	10 - 15 %	10 - 20%	20 - 25 %		5 - 8 %	2 - 5 %	1 - 2 %	
	NO FLUENTE	FLUENTE	FLUENTE		NO FLUENTE		FLUENTE		FLUENTE
DISPROSODIA	SÍ		NO		SÍ				
ANOSOGNOSIA	NO	SÍ	NO		SÍ				
REPETICIÓN	ALTERADA	INALCANZABLE	CASI IMPOSIBLE			PRESERVADA	Casi NORMAL / ECOLALIA	Preservada, aunque imperfecta	con parafasias semánticas
DENOMINACIÓN	ALTERADA	No realiza incluso de objetos simples		IMPOSIBLE			ESCASA	CASI IMPOSIBLE	AFECTADA
CÁLCULO	ALTERADO (puede escribir nums aisladamente)	Imposible a solicitud, puede haber espontáneo	Discreta alteración en operaciones avanzadas	IMPOSIBLE		Relativamente bueno	Puede realizar operaciones espontáneas	IMPOSIBLE	ACALCULIA (a veces)
MUSIA	ALTERADA	Espontánea, hay tarareo.	CONSERVADA	NO		CONSERVADA	ALTERADA	ALTERADA	CONSERVADA

Síndromes AFÁSICOS	Lenguaje de conversación	Repetición	Comprensión	Denominación
BROCA	No fluente	Alterada	Preservada	Alterada
WERNICKE	Fluente, Parafásico	Alterada	Alterada	Alterada
CONDUCCIÓN	Fluente, Parafásico	Alterada	Preservada	Alterada
GLOBAL	No fluente	Alterada	Alterada	Alterada
TRANSCORTICAL MIXTA	No fluente	Preservada	Alterada	Alterada
TRANSCORTICAL MOTORA	No fluente	Preservada	Preservada	Alterada
TRANSCORTICAL SENSORIAL	Fluente	Preservada	Alterada	Alterada
ANÓMICA	Fluente	Preservada	Preservada	Alterada

http://www.sld.cu/galerias/pdf/sitios/rehabilitacion-logo/4_afasias.pdf

Different speakers/ different brains

Representativity of the sample

- *"An initial approach to the subject of verbal pathologies shows us the huge heterogeneity with which impaired linguistic behaviour can manifest itself. (...) the heterogeneity of impaired linguistic behaviour does not refer only to the many syndromes through which it shows itself, but also to the unanimously accepted fact that individual behaviours can show a high degree of inconsistency or mood swings".* (Hernández 2002: 175)

Corpus

- Broad corpus as possible
- Typical situation: the aphasic speaker and the "key conversational partner" (Whitworth, Perkins and Lesser 1997)
- Researchers: intention of playing as small a role as possible, but the situation is completely unpredictable
- Expectations: interview

The transcription

- Transcription: adaptation of CA's ethnomethodological system (Gail Jefferson)
- Cosnier and Kerbrat-Orecchioni (1987: 371): there are two imperatives for a transcription:
  – readable
  – and accurate.

Publications based on PerLA Corpus (PERception, Language & Aphasia)

Thanks

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PEDIÁTRICA

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CLÍNICO
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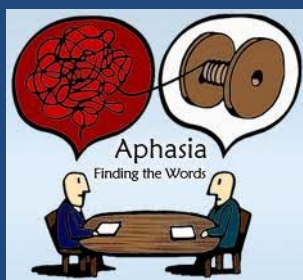 UNIV. VALENCIA

INIA NEURAL
NEURORREHABILITACIÓN

CENTRO CADAN
 NEUROPEDIATRÍA

2

PERCEPTUAL APPROACH TO LINGUISTIC IMPAIRMENT

➢IMPAIRMENT CLASSIFICATION

Linguistic impairment types

- Perceptive approach to Linguistic Impairment (correspondence with Wertheimer's Laws)
- Four levels in language (also in other approaches)
- Corresponding:
  - Government impairment
  - Agreement impairment
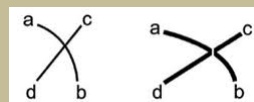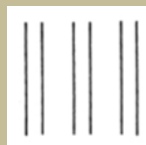 - Order impairment
  - Integration impairment

Perceptive laws

- **1. LAW OF CLOSURE:** stimuli tend to group together in closed sets. In the following picture, there "is" no square, but one is perceived:

- **2. LAW OF EQUALITY or of SIMILARITY**: in a complex perceptual universe, the same or similar stimuli tend to group together making a single figure. The top line is perceived as four groups of two whilst the bottom line makes four groups of two

Perceptive laws

- **3. LAW OF PROXIMITY**: stimuli that are close together tend to be seen as members of one figure, that is, of one coherent Gestalt.
- The vertical lines are grouped together in three narrow vertical bands or strips, separated by two larger spaces

- **LAW OF GOOD- GESTALT:** stimuli tend to group together according to conventional models that establish "good forms" accepted by the community and can enable a certain hierarchy to be applied to the other laws when they come into conflict:

Language Levels

- **Law of closure: logical subject: level of GOVERNMENT** that approaches sentences as a complete unit ("closed") around the subject doing the action. A governing relation between two language units supposes the compulsory presence of one from the appearance of the other.
- **Law of similarity: grammatical subject: AGREEMENT level**, where the similarity of certain morphemes enables the functional alignment of several units (verb and its subject, nucleus and its determiner) to be recognised. In perceptual terms, the concordance relationship is that in which two terms are joined along a border shown by both of them

Language Levels

- **Law of proximity: psychological or topical subject: LINEAR or ORDER level**, which adheres to formal criteria organising units according to their appearance in the chain (topical/comment). As is well known, linearity is a characteristic of the language sign, and is thus present of necessity in all components
- **Law of '*Prägnanz*' or good Gestalt: pragmatic subject: ENUNCIATIVE or INTEGRATION level**, in which the units are identified by reference to the context, that is, to the enunciation (focus or assertion, and presupposition).

Criterion	Semantic	Functional	Formal	Pragmatic
Subject	Logical	Grammatical	Psychological Topic	Emphatic Focus
Structure Generativist	Deep	Superficial	Linear	Enunciative
Jakendoff's parallel architecture 2007[10]	Propositional structure	Syntactic structure	Phonological structure	Informative structure
Linguistic LEVEL	Government	Agreement	Order	Integration
Perceptual Law	Closure	Similarity	Proximity	Good Form

Government impairment

- GOVERNMENT relationship between two linguistic units: if there is one of them, the other's appearance is mandatory
- In all the grammatical components
- GOVERN IMPAIRMENT: this relationship is broken
- Two manners:
  - Omission of one element
  - Substitution

Government impairment and AGRAMMATISM

- *"Agrammatism in English manifests itself **primarily as the omission of, or substitution for, functors**. Agrammatic speakers of English preserve word order, but omit free functors, like 'is', and inflections, like '-ing', while retaining a telegraphic skeleton ('She speak'). The agrammatic speaker is thus able to produce a degree of connected speech but is missing some required grammatical information."*

O'Connor, B., Anema, I., Datta, H., Singnorelli, and T., Obler, L. K., "Agrammatism: A Cross-Linguistic Perspective," The ASHA Leader, 2005.

Government impairment

A: She must be going about the-
(0.5)/ ss/ (1.0) ((MOVES HAND TO WRITE IN THE AIR))

NOT A COMPLEMENT (absence of a noun)

Syntax Government Impairment

I: por ejemplo/// eeh/// novela/// eeh/ Sudamérica
I: for example// eeh// novel// eeh/ South America
NOT A PREPOSITION: "**de** Sudamerica/ **of** South America")

I: pero es mucho más// te vas aa/ restaurante/ ¿eh?/
I: but it's much more// you go to-to/ restaurant/ eh?
(NOT AN ARTICLE: "a**l** restaurante")

Morphology Government Impairment

Government impairment

Nenia (*correct*: Denia)

datación (*correct*: natación)

PHONEMIC SUBSTITUTION

bablar (*correct*: hablar)

p**o**blecito (*correct*: pueblecito)

de**ir**gadita (*correct*: delgadita)

s**rou**brina (*correct*: sobrina)

PHONEMIC DISTORTION
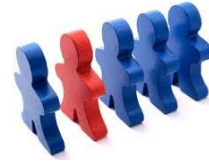
Phonology
Government
Impairment

gasto (*correct*: agosto)
etudar (*correct*: estudiar)

PHONEMIC OMISSION

Agreement impairment

- In AGREEMENT relationships one element changes its form depending on other(s) element(s) to which it relates
- DISAGREEMENT impairment: without formal evidence of certain grammatical relationship

Agreement impairment

I: cuando vienes/ María Josée/ y
Raúl

*I: when Maria José and Raúl/ come
[2nd plural person morpheme,
not third]*

PERSON DISAGREEMENT

I: antes/ mucho hablar/
¿no?/ pero era→/
I: before/ I speak a lot/ but
I was
INFINITIVE (Correct: PAST
TENSE)

Morphology Agreement
Impairment

I: És igualet que l'altra que tenia (SEÑALA)
I: It is equal[masculine] than other[femenine] that I had
GENDER DISAGREEMENT

Agreement impairment
SAMPLES

vienen

I: cuando vienes/ María Josée/ y
Raúl

*I: when Maria José and Raúl/ come
[2nd plural person morpheme,
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PERSON DISAGREEMENT

I: antes/ mucho hablar/
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I: És igualet que l'altra que tenia (SEÑALA)
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GENDER DISAGREEMENT

**Agreement impairment
SAMPLES**

vienen

I: cuando vienes/ María Josée/ y Raúl

I: when Maria José and Raúl/ come [2nd plural person morpheme, not third]

PERSON DISAGREEMENT

Morphology Agreement Impairment

hablaba

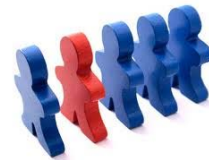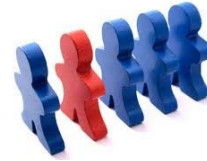I: antes/ mucho hablar/ ¿no?/ pero era→/

I: before/ I speak a lot/ but I was

INFINITIVE (Correct: PAST TENSE)

I: És igualet que l'altra que tenia (SEÑALA)
I: It is equal[masculine] than other[femenine] that I had
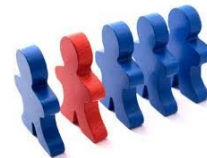GENDER DISAGREEMENT

**Agreement impairment
SAMPLES**

vienen

I: cuando vienes/ María Josée/ y Raúl

I: when Maria José and Raúl/ come [2nd plural person morpheme, not third]

PERSON DISAGREEMENT

Morphology Agreement Impairment

hablaba

I: antes/ mucho hablar/ ¿no?/ pero era→/

I: before/ I speak a lot/ but I was

INFINITIVE (Correct: PAST TENSE)

l'altre

I: És igualet que l'altra que tenia (SEÑALA)
I: It is equal[masculine] than other[femenine] that I had
GENDER DISAGREEMENT

Order impairment

- Order impairment: breackdown of the normal order of the elements
- All the grammatical components
- Word order has different importance in every language
- Spanish and Catalan: more incidence in phonology than morphology or syntax

Order impairment

I: ¡ah!/ es donde están los Nóbel→dando
*I: ah!/ it's where they are giving the
    Nobels*
[aux + object+ gerund, correct:
    aux+gerund+obj]

Morphology Order
Impairment

Order impairment

I: ¡ah!/ es donde están los Nóbel→dando
*I: ah!/ it's where they are giving the
    Nobels*
[aux + object+ participle, correct:
    aux+part+obj]

Morphology Order
Impairment

gol**o**peda (*correct*: logopeda)

a**g**ui**m**o (*correct*: amigo)

Phonology Order
Impairment (metathesis)

Integration impairment

- Integration level: pragmatic appropriateness of statements
- Informativeness of utterances (new and given information)
- INTEGRATION impairment: lack of adjustment between text and context

Integration impairment

- Language specialists in dementia have described the speech of persons with severe Alzheimer Disease as "dissolution" (Grodzinsky)
- Also in severe Wernicke Aphasia

Grodzinsky, Y. (1990): Theoretical Perspectives on Language Deficits, MIT Press.

Impairment distribution

Impairment distribution in a Spanish corpus of aphasia (N= 700)

	AGREEMENT	INTEGRATION	ORDER	GOVERNMENT
NON FLUENTS	48	20	6	281
FLUENTS	82	44	8	233

3

ADAPTATIVE BEHAVIORS

3.1

ADAPTATIVE BEHAVIORS IN APHASIC SPEAKERS

Adaptative behaviors in AP ("impairment traces")

1. Resorting to **suprasegmental elements** (intonation, intensity, syllabic length)

44 L: ¿qué vas a hacer en vacaciones/
       Carmen?
45 C: no lo sé (NEGACIÓN)^R
46 L: ¿no?
47 C: (NEGACIÓN)^R no lo sé (2.0)
48 A: e– es [que→]
49 C: [Neniaa/] (m)e gus ta ría ir a
       ((Ne nia↑))
50 L: ¿a dónde?
51 C: ¡a NENIA!// (ASENTIMIENTO)^R ¡DENIA!

44 L: *what will you do for holidays, C?*
45 C: *I don't know (NEGATION)^R*
46 L: *no?*
47 C: *(NEGATION)^R I don't know (2.0)*
48 A: *i-is [because→]*
49 C: *[Neniaa]* **I would li ke to go
       to** *((Ne nia↑))*
50 L: *where?*
51 C: *to NENIA!// (ASENT)^R ¡DENIA!*

Loudly speaking, articulatory effort...

Adaptative behaviors in AP ("impairment traces")

2. Emphasis of **gestuality**, even in common cases of hemiplegia;

- emblematic use of gestures that in other situations may act as illustrating or adapting;

- emphatic use of some *regulatory* gestures in floor management

Adaptative behaviors in AP

3. **Exploitation of the conversational partners'
   inferential ability**, either by the use of non-explicit
   expressions or by recourse to sequential organisation
   of the conversation.

   3.1. **Dissociation** between the purely locutionary
   dimension of the speech act and the propositional
   dimension, based on lexis and grammar: **inference
   activator acts**:

   - interjections
   - locutive acts

   the dialogic, cotextual environment serves as a
   propositional frame giving meaning to utterances

Locutive acts (without words)
Man with Broca Aphasia

0378	M:	[a ver] qué te preguntaa→// ¿te gustaba Australia?/// ¿eh? (she's asking you, did you like Australia?)
0379	I:	((faarf fuuh ff)) (MANO IZQUIERDA ⇔R, RESOPLA)
0380	M:	Frankfurt no (not Frankfurt)
0381	I:	yaaa↓
0382	M:	**A de lai de**↓
0383	I:	ahj (NEGACIÓN, SE GOLPEA LA PIERNA CON LA MANO IZQUIERDA)
0384	M:	tch (⇒E)
0385	E:	¿y en Alemani– eeen→/ Australia↑ en qué hablaban↓? 8and in Germ- in Australia, what language did you speak?)
0386	I:	(2.0) ooh ooh (NEGACIÓN)
0387	M:	a ver↓/ qué↑/ ¿cómo hablábamooos?// (2.0) ¿um? (let's see, what, how we speak?)
0388	I:	bff (NEGACIÓN, MOSTRATIVO)
0389	M:	¿cómo hablábamos en A– en Australia?// en ingléees↑
0390	I:	(⇒ M) aooo↑ oooh→ [ooh→]
0391	M:	[hoy] también has habla'o inglés↑
0392	*I:*	aaah↓

27

Locutive acts (without words)
Man with Broca Aphasia

0378	M:	[a ver] qué te preguntaa→// ¿te gustaba Australia?/// ¿eh? (she's asking you, did you like Australia?)
0379	I:	((faarf fuuh ff)) (MANO IZQUIERDA ⇔ᴿ, RESOPLA)
0380	M:	Frankfurt no (not Frankfurt)
0381	I:	yaaa↓
0382	M:	A de lai de↓
0383	I:	ahí (... ... ...NO IZQUIERDA)
0384		
		...en→/ Australia↑ en qué hablaban↓? 8and in Germ- in ...ralia, what language did you speak?)
		(2.0) ooh ooh (NEGACIÓN)
0387	M:	a ver↓/ qué↑/ ¿cómo hablábamooos?// (2.0) ¿um? (let's see, what, how we speak?)
0388	I:	bff (NEGACIÓN, MOSTRATIVO)
0389	M:	¿cómo hablábamos en A– en Australia?// en ingléees↑
0390	I:	(⇒ M) aooo↑ oooh→ [ooh→]
0391	M:	[hoy] también has habla'o inglés↑
0392	I:	aaah↓

Aparently, there is no language, but there is CONVERSATION

Adaptative behaviors in AP

3.2. **Overlapping turns**, that is, simultaneous speech with partner's turn, and recourse to repetitions.

Goodwin (2000: 74): ability to use the distributional environment to infer meanings = "anchoring".

Adaptative behaviors in AP

3.3. **Use of the direct style** (over-explotation of Grice maxims)

0035	E:	cuando las demás personas hablamos contigo↑ ¿qué notas que hacemos maal→? ¿o a ti qué te gustaría que no hiciéramos→?
0036	I:	hablar hablar
0037	E:	explícame más
0038	I:	buff *¡venga! ¡venga! hablar↑ hablar↑*
0039	E:	¿darte prisa meterte prisa?
0040	I:	síi

0035	E:	when other people talk to you, what do you note we do wrong? Or what do you wish we did not ?
0036	I:	to speak/ speak
0037	E:	tell me more
0038	I:	buff *come on!, come on! Speak!, speak!*
0039	E:	to urge you?, to rush you?
0040	I:	síi

Adaptative behaviors in AP

4. Lastly, in the specific sphere of conversational turn taking, we find strategies such as

4.1. a generalised **slowing down** of turn taking (Turn Taking Agility, TTA)

	TTA Colloquial Spanish Corpus	TTA Fluent Aphasia	TTA non Fluent Aphasia
3 speakers	14,9 turns/minute	5,5 turns/minute	23,5 turns/minute
4 speakers	16,1 turns/minute	11,1 turns/minute	16,9 turns/minute

Adaptative behaviors in AP

4.2. the emphatic recourse to **appendices and tag questions**, often as fillers inside the turn and at other times as passing the turn.

I: yo→// tengo laa→ pasión/ de la música/ o sea/ te puedes imaginar/ ¿no?/ la **sin fónica**/ ¿no?/ del Palau/ ¿no? (SEÑALA CON LA IZQUIERDA HACIA LA VENTANA)/ entonces/ yoo/ mee→ quedo aquí (CIERRA LOS OJOS Y SEÑALA HACIA DELANTE)/ y tengoo→ laa→ or– laa orquesta/ ¿eh?/ el→/ toca la gente/ // fenomenal/ pero de repente yoo→ ssh→ yo– yo/ yo te lo cuento/ pero no tee– no te/ o sea/ no te lo he dicho a nadie// porque no/ no me gusta haaablar/ ¿no?/ entonces mira↓/ eeh– la orquesta→/ aquí/ ¿no? (COMIENZA A MOVER ALGUNOS OBJETOS ILUSTRANDO LA DISPOSICIÓN DE LA ORQUESTA)// el director// los violines// el violonchelo/ eeh→ tal/ ¿no?// entonces/ aquí por ejemplo está eeel→ piano/ ¿no?/ por ejemplo/ ¿no? (⇒E) *(más minos)*/ ¿no?/ entonces// si tú supriras laa→ *(xx xx)*

I → / / I have the passion   jj / of music / that is / you can imagine / no? / the **sim phonic** / no? / Palau / no? (POINTING TO THE LEFT TO THE WINDOW) / then / yoo / mee - stay here (close his eyes and points forward) and / or I have the the the orchestra / huh? / The → / people play / / / great / but suddenly I- I- I ssh / I'll tell you / but not / or / I haven't told it to anyone / / because /I do not like to speak/ no? / then look -/ eeh → the orchestra / here / no? (HE BEGINS TO MOVE SOME OBJECTS ILLUSTRATING THE LAYOUT OF THE ORCHESTRA) / / director / / violins / / cello / eeh- such / no? / / Then / here for example is theee piano / no? / for example / no? (LOOK AT E) * (more minos) * / no? / Then / / if you would know the→ * (xx xx) *
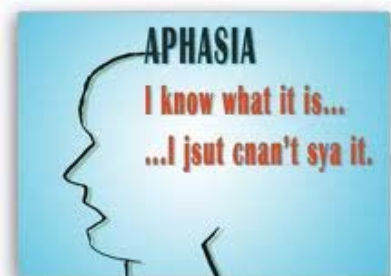
3.2

ADAPTATIVE BEHAVIORS IN KEY CONVERSATIONAL PARTNERS

Adaptation in KCP: prejudices

- Aphasia: relatively frequent pathology , but almost unknown.
- Identification of the communicative impairment with a cognitive or mental impairment.
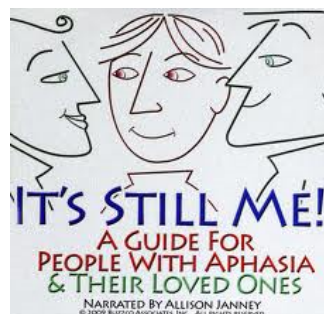
APHASIA
I know what it is...
...I jsut cnan't sya it.

Adaptation in KCP: prejudices

- Negative situation for aphasic speakers
  - *"Interaction with a person with severe aphasia also has a moral dimension. It would be easy to treat someone who can't speak as something less than a full fledged person, someone whose efforts to communicate can be dismissed or not taken seriously." (Goodwin, Goodwin y Olsher 2002: 32)*

Goodwin, Charles; Goodwin, Marjorie Harness; Olsher, David (2002): "Producing Sense with Non-Sense Syllables: Turn and Sequence in Conversations with a Man with Severe Aphasia", en Ford, Cecilia E.; Fox, Barbara; Thompson, Sandra A. (Eds): *The Language of Turn and Sequence*, Oxford Univ. Press.

Adaptation in KCP: minorization

- Gumperz: *Minorization* = to build derogatory cultural stereotypes from misunderstandings in communication
- Impaired speech is interpreted in terms of specific characteristic of the other speaker; even mental characteristic
- Pejorative effect on the development of the interaction.

Gumperz, John J. (1989): "Linguistic and social characteristics of Minorization / Majorisation in verbal Interaction", en B. Py & R. Jeanneret (Eds.): Minorisation linguistique et interaction, Genève: Librairie Droz SA, pp. 21-37

Adaptation: conversational management

- Gricean Cooperative principle: conversational partners adapt to the difference in abilities assuming that non-aphasic speakers should be the ones to take charge of dialogue management (Ferguson 1996).

    Ferguson, Alison (1996): "Describing competence in Aphasic/Normal Conversation", Clinical Linguistics and Phonetics 10, 1, Jan-Mar, pp. 55-63.

Adaptation in KCP: gloss function

- Basic function assumed by the KCP in our recordings: **gloss**
- He/She repeats the message of the aphasic speaker (expanding, repairing, "translating")
- Sometimes, they also gloss the message of non aphasic person

Gloss for non aphasic speaker

0328 N: ¡mira!/ ¡la perra↑!// ¡la perra↑!

0329 I: mira tú// mira tú uuh (MIRADA REPROBATORIA, EL GESTO DE RECHAZO Y LA ENTONACIÓN DE RIÑA AL NIETO)

0330 N: ¡la perra!

0331 M: (⇒N) quiere decir que te vayas↑ que está hablando con ella// (⇒I) ¿uh um?

0328 N: look!/ the dog ↑!// the dog ↑!

0329 I: look you// look you uuh (DISAPPROVING GAZE, REJECTION GESTURE AND INTONATION, IT IS EVIDENT THAT HE'S QUARRELING WITH HIS GRANDSON)

0330 N: the dog!

0331 M: (⇒N) he means you to go ↑ because he's speaking with her// (⇒I) uh um?

⇒Gaze   N: aphasic's grandson
↑ intonation   I: aphasic speaker
                      M: wife of aphasic speaker

Gloss for both participants

0016 E: ¿cuándo tiene que ir al logopeda?
0017 I: aah
0018 M: mañana// Antonio→/ ¡ANTONIOO! (PONE LA MANO EN SU HOMBRO)
0019 I: aah↑ (⇒M)
0020 M: al logopeda/ (SE SEÑALA LA BOCA) mañana// cuándo tienes que ir↑// mañana/ te está preguntando↑(2.0)
0021 I: aah (EXPRESIÓN CONFUSA)
0022 M: que cuándo tienes que ir [al Clínico↓=]
0023 I: [aah─ ah]
     M: = a la logopeda/// (SE SEÑALA LA BOCA) mañana (INDICA POSTERIORIDAD CON LA MANO)
0024 I: aah (ASENTIMIENTO)

0016 E: when do you have to go to the speech therapist?
0017 I: aah
0018 M: tomorrow// Antonio→/ ¡ANTONIOO! (SHE PUTS HER HAND ON HIS SHOULDER)
0019 I: aah↑ (⇒M)
0020 M: to the speech therapist/ (SHE POINTS TO HER MOUTH) tomorrow// when must you go ↑// tomorrow/ she is asking you ↑(2.0)
0021 I: aah (EXPRESIÓN CONFUSA)
0022 M: that when do you have to go to [the Clínico↓=]
0023 I: [aah─ ah]
     M: = to the speech therapist / (SHE POINTS HER MOUTH) tomorrow (HAND GESTURE FOR "LATER")
0024 I: aah (ASSENT)

⇒Gaze   I: aphasic speaker
↑ intonation M: wife of aphasic speaker

Adaptation in KCP: prompter function

- Second function: toward aphasic speaker
- KCP act as a **prompter**, helping the aphasic speaker

> I: entoncess// el martes↑/ (SEÑALA LA SALA EN LA QUE ESTÁN) quee- / noo→
> M: no vinimos
> I: no *mimi mos*

Adaptation in KCP: prompter function

- Lexical level (phonemic cues)

> I: (MIRANDO AL SUELO) lunes ↑ martes ↑ miércoles ↑ jueves ↑ sab→
> M: viern→
> I: ssann
> M: viernes
> I: sábaado ↑ domingo
> M: ya está [ya estáa =]
> I: [domingo]

- Repair Sequences

35

Repair sequence

0404 **I** yoo→/ *animal*/ porquee→/// ¡oye!/ es que→/ y→ quince días/ porquee→/// (2.0) un mes/ y– y *( )* pues→ ahora→// *te– sí↓ sí↓ sí↓*/ porque así (EBM DE MUCHAS PERSONAS)/ ¿sabes?/ de– de clientes/ porquee mmm/// chst/ vamos– vas/ º(ooy)º/ vendré– vendremos

0405 **H** *iremos*

0406 **I** *iremos*// a→/ no– no– no/ no me sale// vee– venís/ venés/// (4.0) porque→/// chst/ vaya– ar-umm porquee es// la/ la plana/ la pa(e)lla/ y *( )* y– y/ y loo– yy los vee→(r)aa→neantes// tienen quee→ quee→ bañarse/ y– y y claro/ pues (xxx xxx) aquí/// (SONRISA, 2.0) vendrán/// con sus pandi– sus familias/ yy– yy/// (4.0) y see– yy/ fisios/ porquee ¡oh!/ porquee/// noo/ vayan a/ porque es muy incómodo el– eel→ que vayan a vaa→caciones/// y/// (4.0) yy/// y/ y– lo (SE PARA PORQUE NO PUEDE CONTINUAR)

5

CONCLUSION

Conclusion

- Finally, aphasia is an element that causes conversational breakdowns in normal interaction, which the aphasic speakers and their partners must cope with.
- Clinical linguistic investigates this situation in order to
  - provide strategies and resources to both kinds of speakers.
  - provide tools to speech therapists, in assessment and rehabilitation

Images references

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Research Project:

"Ampliación y adaptación del corpus PERLA de datos clínicos en el
marco del proyecto internacional Childes/Talkbank: perfiles pragmáticos
y propuestas de intervención" (Ref. FFI2012-39325-C03-01)

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Tack så mycket för er uppmärksamhet

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