

05. Linguistic analysis of impairment data.

05.04. Interactive analysis of impaired speech samples.

05.04.01. The cooperative management of turn taking. The index of conversational participation. Turn taking agility. Dynamic and constitutive speech acts.

The analysis of the interactive dimension of linguistic data is centred around the categories and phenomena of turn taking.

At the beginnings of discourse pragmatics (the 1960s) was the [ethnomethodological school](#), which focussed its attention on the system of turn taking, proposing rules governing conversational alternation. Ethnomethodology is a sociological school that arose (Levinson 1983: 295)¹ as a reaction to excessive dependence on quantitative techniques and the imposition of supposedly objective categories on the data. The main objective of these authors is "*the set of techniques that the members of a society themselves utilize to interpret and act within their own social worlds*".

The starting point is the realisation that there is an organised taking of turns. Their basic conclusions indicate that such a system of turn taking "*will be characterized as locally managed, party-administered, interactionally controlled, and sensitive to recipient design*" (Sacks, Schegloffy Jefferson 1974: 696)². Research on the turn taking system distinguishes three linearly organised types:

"The linear array is one in which one polar type (exemplified by conversation) involves "one-turn-at-a-time" allocation, i.e. the use of local allocational means; the other pole (exemplified by debate) involves pre-allocation of all turns; and medial types (exemplified by meetings) involve various mixes of pre-allocational and allocational means". (1974: 729).

According to Sacks, Schegloff and Jefferson, the functioning of turn taking determines

- The type of communicative event (for example, a conversation compared to an interview or a rehabilitation session)
- Structural pragmatic units (interventions, speech acts, exchanges, sequences).

There are many classification proposals in the bibliography for both aspects; our classification of conversational units will be different depending on whether we accept the theoretical foundations of the Birmingham school (Malcolm Coulthard, Michael Stubbs and Willis Edmondson, for example), the Geneva school (Eddy Roulet), the Lyon school (Catherine Kerbrat-Orecchioni), or ethnomethodological conversational analysis (Harvey Sacks, Emmanuel Schegloff, Gail Jefferson), etc.

In the clinical sphere, the incorporation of the ethnomethodological theories is the logical consequence of trends that support the use of data and protocols with ecological validity, especially in the 1980s after the pioneering work of Carol Prutting (1982) "Pragmatics as social competence"³ which, although it sometimes confuses pragmatic and sociolinguistic features, has the merit of opening the door to concerns focussed on communicative use and efficiency.

The Conversational Analysis tradition often uses 14 features to characterise turn taking in a given communicative event:

¹ LEVINSON, Stephen C. (1983): *Pragmática (Pragmatics)*, Barcelona: Translation by África Rubiés.

² SACKS, Harvey, SCHEGLOFF, Emanuel and JEFFERSON, Gail (1974): "A symplest systematics for the organization of turn taking for conversation", *Language*, 50.4 (696-735).

³ Prutting, Carol A. (1982): "Pragmatics as social competence", *Journal of Speech and Hearing Disorders*, 47, pp.123-134.

- 1.- change(s) of recurring speaker(s)
2. in general, only one participant speaks each time
3. overlaps (simultaneous speaking) are frequent but brief
4. frequently transitions between turns are not spaced out
5. the order of turns is not fixed, but variable
6. the duration of turns is not fixed, but variable
7. the length of the conversation is not previously specified
8. what the parties say is not previously specified
9. the relative distribution of turns is not previously specified
10. the number of participants can vary
11. speech can be continuous or discontinuous
12. there are techniques for distributing turns
13. different constructional units of the turn are used
14. there are mechanisms for correcting errors and violations of turn taking.

These 14 features can be reduced to 7 as detailed analysis allows us to identify redundancies and repetitions (Gallardo 1998a and 1998b)⁴:

1. **Alternation of turn.** Normal functioning of communicative exchange enables the alternation of turns, which must be taken into account for the rehabilitation of the speaker with an impairment. Here we can point to *PACE: Promoting Aphasic Communicative Effectiveness*, by G. Albyn Davis and M. Jeanne Wilcox (1985), which consists of various conversational practise sessions initiated from visual and written stimuli, shared between the client and speech therapist; the manipulated cards are, first, objects from daily life, second, cards with words and, last, cards representing narrative sequences. According to the authors, PACE therapy is based on the fundamental principle of reciprocity between the patient and speech therapist: both are equal in their participation in the dialogue. This principle of reciprocity implies four basic consequences: 1) the need for the participants to exchange new information based on the cards provided; 2) participatory equality of the speech therapist and client; 3) multi-channel communication in which participants freely elect whether their communication is via the spoken word, writing, drawing or non-verbal communication; and 4) the feedback provided by the speech therapist must be real, not limited to traditional evaluative comments.

2. **Variable order of the participants.** To reflect this feature, rehabilitation should include, with the classical interview-format sessions (speech therapist/client), other types of sessions with more speakers, for example group sessions with family members, or other speakers from the same clinic; it is also possible to use volunteers, as in the Assisted Conversation Therapy developed in Canada by Aura Kagan⁵.

3. **Duration of turns not predetermined.** In conversational exchange there is room for monosyllabic turns and very long turns, from the hearer's continuators to the narrative or argumentative interventions of long duration.

⁴ Gallardo Paúls, Beatriz (1998a): Comentario de textos conversacionales I (Commentary on conversational texts I), Madrid, Arco Libros.

Gallardo Paúls, Beatriz (1998b): Comentario de textos conversacionales II (Commentary on conversational texts II), Madrid, Arco Libros.

⁵ Kagan, Aura (1995): "Revealing the competence of aphasic adults through conversation: a challenge to health professionals", *Topics in Stroke Rehabilitation*, 2, pp.15-28.

Kagan, Aura (1998 b): "Philosophical, Practical and Evaluative Issues Associated with 'Supported Conversation for Adults with Aphasia'", *Aphasiology*, 12, 9, Sept., pp. 851-864.

Kagan, Aura (1998 a): "Supported Conversation for Adults with Aphasia: Methods and Resources for Training Conversation Partners", *Aphasiology*, 12, 9, Sept., pp. 816-830.

Kagan, Aura (2004a): "Evaluation of Supported Conversation for Adults with Aphasia. Applications for Rehabilitation Professionals", in www.speechpathology.com.

Kagan, Aura (2004b): "Interview", in http://www.speechpathology.com/interview/interview_detail.asp?interview_id=1035.

4. **Content of turns not predetermined.** The taking of conversational turn enables speaking about all possible themes; there can be thematic restrictions arising from the institutional situation for example, or due to the relationship between the speakers; but these are sociolinguistic restrictions, not pragmatic. The rehabilitation of impaired speakers can show in some cases that the verbal conduct of those affected changes according to the theme; apart from strictly psychological questions ("delicate themes"), it may be thought that some interventions (for example a reasoned argument on political or ethical questions) pose problems in the sense that they may also involve other executive functions, such as memory and attention; it is not, strictly speaking a complexity of themes (semantic and lexical) but rather of underlying textual superstructure (textual pragmatics).

5. **Variable number of participants.** The conversational taking of turns allows participants to leave or enter the exchange at specific times. In rehabilitation, this would suggest that working with mechanisms of conversational entry and exit would be advisable.

6. **Duration of the meeting not predetermined.** While the speech therapy session has a defined duration, things are different in everyday conversational life.

7. **Detailed construction, turn by turn.** Each turn imposes new restrictions on the next turn; there may be some communicative events in which the interventions are organised beforehand, but in conversation, all the turns depend on the immediately preceding turn. A reading of a doctoral thesis, for example, allows each member of the tribunal to expound their criticism of the work one after the other and then the candidate responds in a single final intervention; some debate programmes allow each participant to pronounce on a certain theme in a round of successive interventions without any true interaction taking place. In conversation, however, turn 1 imposes syntactic, semantic and pragmatic limitations on turn 2, and this on turn 3 and so on. The more participants are included in the turn taking system, the more significant will be these restrictions and this can increase the participatory difficulty of the impaired speaker. This is described by one 54 year old speaker with transcortical motor aphasia (Corpus PerLA, recording 20JMB):

- 0034 I sí↓//(asiente) y es ((rao))/ eso es→/ terrible↓// porque tienes quee pensar↑ que no→/ como no puedo hablar↑/ nii→ escuchar↑/ pues entonces mee callo↑/ por ejemplo/ eel sábado→// ¿domingo?// (⇒M) ¿eh?// [éramos=]
- 0035 M [uh mm]
- I = een→ Merche↑
- 0036 M estábamos en casa de Merche↓/ sí↓
- 0037 I ¿eh?/ y éramos→/ siete personas↑/ o bueno↓ es igual↓// y yo noo→/ o sea↓ me callo↑// (se lleva la mano a la boca) ¿sabes?/ yyy→ ((alguno)) de repente me dicen↓/ oye ¿qué te pasa?/ ¿estás bien?// y yo↓ sí↓/ sí↓// si yo bien/ pero no pue do hablar/ ((o sea)) tengo uno/ dos/ tres/ cuatro/ cinco/ seis personas (enumera mientras señala con el brazo izquierdo y mira hacia diferentes lugares de la habitación)/ pues imagínate/ la-[la- la]
- 0038 R [pero] ¿sólo?/ Juan/ ¿sólo es cuestión de la vista/ o es que/ si te hablan dos o tres/ varias conversaciones a la vez no las puede seguir?
- 0039 I no/ primero↑/ la vista// o sea quee tengo reducido laa-// laa-/// laa-// ¿ves?
- 0040 M el campo de visión
- 0041 I el de visión ¿no?/ y luego/ dos personas/ o tres personas/ de acuerdo/ si fuéramos juntos/ ¿eh?/ uno/ dos// tres personas→ (enumera mientras señala con el brazo izquierdo y mira hacia diferentes lugares de la habitación)// yo/ correcto// pero sii tiene que ser así/ ya no puedo hablar/ ¿no?/ aquí/ aquí/ aquí (señala con el brazo izquierdo y mira hacia diferentes lugares de la habitación)// o sea que/ tengoo/ de visión/ cero// por lo menos aquí (se pasa la mano izquierda por delante de la cara) / esto/ ess terrible//

In the protocol used by the PerLA (Perception, Language and Aphasia) group and in the Rapid Protocol for Pragmatic Evaluation INIA (PREP-INIA), we analyse the impaired speaker's dialogue data taking into account the separation of three pragmatic levels: enunciative, textual and interactive or receptive. For the interaction level, we consider the following basic elements:

1. the Conversational Participation Index (Índice de Participación Conversacional - IPC): we quantitatively evaluate the subject's participation, measured according to the number of interventions, speech acts and/or words compared with the total values in the recording.
2. Turn taking agility: the number of turns per minute.
3. The use of dynamic speech acts, that is, establishing links of predictability with the previous or subsequent intervention.

The cooperative management of turn taking: the example of aphasia

[Part of this subject comes from two studies:

Beatriz Gallardo and Carlos Hernández, 2007: "Anotaciones a un texto conversacional: la Agilidad del Turno y el Índice de Participación Conversacional en la afasia" (Annotations to a conversational text: turn taking agility and the Conversational Participation Index), in E. Serra (Ed.): La incidencia del contexto en los discursos, Anejo 14 de Lynx. Valencia: Servei de Publicacions de la Universitat de València, pp. 55-79

Beatriz Gallardo and Verónica Moreno, 2006: "Evolución de la pragmática en un caso de afasia de Broca severa" (Evolution of pragmatics in a case of severe Broca's aphasia), Revista de Logopedia, Foniatría y Audiología 26/4, pp. 188-203].

One of the basic premises of [ethnomethodological conversational analysis](#) is that turn taking which determines the type of communicative event is always constructed collaboratively. In enunciative pragmatics centred on the speaker, this collaborative structure is reflected in the 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."

When one of the speakers in a given conversation has aphasia, we can say that the impairment affects all participants, in a similar way to when a speaker does not know the language well and the others make efforts to adapt to the foreign conversational partner. In the case of aphasia, the linguistic impairment obliges the development of compensatory strategies to assure a minimum communication. We can say in these cases, that adaptation to the context is, above all, an adaptation to the aphasic impairment. And this adaptation is inevitably made both by the aphasic speakers and their conversational partners; this is why we speak of an "aphasic conversation", as the impairment conditions all the participants' behaviour.

This adaptation is not easy for any of those affected; with the cerebrovascular accident or cranioccephalic trauma, the speaker experiences a change of identity which occurs suddenly and unexpectedly (*traumatic brain injury*). In addition, aphasia does not appear isolated but with other situations of impairment for the subject. It is also not possible to focus attention on the linguistic impairment until general health has improved to some degree. Identity is obviously a multi-faceted concept that can be studied in multiple ways; when we refer to the identity of an aphasic subject, we are in the general area of disability with ramifications of a

psychological and sociological nature that we can frame within the concept of "integration". In the most common situation, aphasic subjects are adults and the occurrence of the impairment has devastating effects on their lives and everyday activity as well as on their self-esteem and self-concept.

There is another element contributing to this difficulty in acclimatisating to the linguistic impairment; aphasia as a pathology is practically unknown by Spanish public opinion. In a recent survey of secondary school and first-year university students in Valencia, more than 96% of those questioned did not know the meaning of the term "aphasia", although all had heard of diseases such as Alzheimer's Disease, Parkinson's Disease and multiple arteriosclerosis. Although there are no definitive epidemiological studies, some partial approximations allow us to calculate the incidence of the fundamental causes of aphasia: cerebrovascular accident and cranioccephalic trauma. Garret (2003)⁶ cites the data from the National Aphasia Organisation according to which, for the United States, the figure is 80,000 cases annually, representing one out of every 275 adults.

From Berthier (2004)⁷, we can extract the following data referring specifically to aphasia caused by stroke and its annual incidence in Europe in the 25-74 year age-group (not including cranioccephalic trauma, tumours and other causes):

- men: 318-372/100,000 population
- women: 195-240/100,000 population

This assumes an incidence of between 21% and 38% only of aphasias from stroke. Rubio⁸ indicates the following incidence for strokes, a third of which produce some type of aphasia:

"Studies on populations of northern and southern Europe reveal significant differences. The figures are much higher in countries such as Finland where in men, 270 new cases of cerebral vascular disease are recorded per 100,000 population, while in Italy this figure is 100 cases per 100,000 population per year. The WHO figures are around 200 new cases per 100,000 population. The majority of studies in Spain are on hospital cases. The incidence of new cases in Spain is around 156 per 100,000 population, although it may be as high as 200 cases per year".

Regarding cranioccephalic trauma,

"the estimated incidence of cranioccephalic trauma is round 200 new cases per 100,000 population, of which approximately 80% are considered severe, 10%

⁶ "Yet the general public knows very little about aphasia. Of the estimated 400.000 strokes which occur each year, 80.000 result in aphasia. Approximately one million people, or one out of every 275 adults in the United States, have some type of aphasia. Ninety percent of those with aphasia who participated in this survey feel the public's awareness of this disability is minimal". (<http://www.aphasia.org/NAAimpact.html>). Garrett, Kathryn L. (2003): "Strategy use in context: AAC, Supported conversation, and Group Therapy Interventions for People with Severe Aphasia", <http://aac.unl.edu/drb/garret/garoutv.pdf> (Checked in May 2004).

⁷ "Global aphasia (total loss of language) and other aphasias more difficult to classify clinically represent 50% of cases admitted into stroke units, especially in patients that have a previous history of vascular events, while classical aphasias (anomies, Broca's, conduction, Wernicke and transcortical) are more frequent in those patients suffering the first stroke. (...) Recovery from aphasia is always possible, even in severe cases, and this is reflected in that virtually all aphasias develop into less severe forms during the first year. Longitudinal studies of spontaneous recovery have shown that the greatest recovery occurs in the first 2 or 3 months after the stroke, with subsequent improvement less noticeable in the following months, reaching stability at around one year." Berthier, Marcelo L. (2004): "Nuevas estrategias en el tratamiento de la afasia crónica postictus: análisis preliminar de eficacia y seguridad del donepezilo" (New strategies in the treatment of chronic post-stroke aphasia: preliminary analysis of the effectiveness and safety of donepezile", Inv. Clín. Farm. Vol. 1 (3), pp. 09-17.

⁸ Rubio, Francisco (2004): "Epidemiología y clasificación sindrómica" (Epidemiology and syndrome classification) (<http://www.seacv.org/revista/1.html>).

moderate and the remaining 10% mild". (<http://tratado.uninet.edu/c110202.html>).

Therefore we have a relatively frequent pathology in our society which is almost unknown. This lack of knowledge leads to identification of the communicative impairment with a cognitive or mental impairment. This creates a negative situation for aphasic speakers trying to develop their communication in the face of an often inhibitory or withdrawing reaction:

"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)⁹

Another important aspect of contextual adaptation that we are describing has to do with the 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)¹⁰. Here our focus pays special attention to the key conversational partner¹¹, as the meaningful pertinence of aphasic utterances totally depends on the management by the co-participants. Goodwin and collaborators have stressed the importance of this collaborative construction of meaning in their analysis of a speaker with severe expressive 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)

"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).

To obtain the maximum advantage from these collaborative adaptations, both types of speaker fall back on a series of linguistic impairment compensatory strategies (Gallardo and Moreno 2006) that depend in part on the type of aphasia to which they are adapting. In the case of motor aphasias, we can highlight strategies such as the following (Goodwin 1995, 2000; Ferguson 2000¹²; Gallardo 2005¹³:

1. Resorting to suprasegmental elements (intonation, intensity, syllabic length), often taking advantage of a certain iconic nature;
2. Emphasis of gestuality, even in common cases of hemiplegia; often the aphasic speaker presents emblematic use of gestures that in other situations may act as illustrating or adapting; the emphatic use of some *regulatory* gestures are especially important from

⁹ 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.

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

¹¹ The importance of this person is always fundamental, not only as facilitator of the communicative activity of the aphasic subject but also as an informant of his or her real impairments. There are many tests and evaluation protocols where the information comes completely or partially through these speakers, such as, for example, the Communicative Effectiveness Index (Lomas et al. 1989), *Conversational Analysis Profile of People with Aphasia* (Withworth, Perkins and Lesser 1998), *Pragmatics Profile of Early Communication Skills* (Dewart and Summers, 1988), *Functional Assessment of Communication Skills of the ASHA*, (Frattali et al.1995).

¹² Ferguson, Alison (2000): "Maximising Communication Effectiveness", en Müller, Nicole (Ed), *Pragmatics in speech and language pathology. Studies on clinical applications*, Amsterdam/Philadelphia, John Benjamins, pp. 53-88.

¹³ Gallardo Paúls, Beatriz (2005c): *Afasia y conversación (Aphasia and conversation)*. Las habilidades comunicativas del interlocutor-clave (Communicative skills of the key-speaker), Valencia: Tirant lo Blanch.

the point of view of compensation for the impairment. An example would be the beat regulator that accompanies speech and provides an alternative or complementary supporting signifier to the phonological signifier (which poses problems by being impaired). Also, *deictic illustrators* have special importance as pointers, that is, as lexical identifiers¹⁴.

3. The exploitation of the conversational partners' inferential ability, either by the use of non-explicit expressions or by recourse to sequential organisation of the conversation; there are various concrete strategies that are supported in the transfer of communicative responsibility to the hearer¹⁵, among which the following are the most important:
 - The dissociation between the purely locutionary dimension of the speech act (Searle's enunciative act) and the propositional dimension, based on lexis and grammar; we will see that speech acts typical of aphasia arise, which we have called inference activator acts; here the dialogic, cotextual environment serves as a propositional frame giving meaning to utterances (Grice's pertinence implicature). Two categories of these statements are distinguished, with null conceptual value: interjections and locutive acts, where we find a high percentage of discursive markers.
 - Another common strategy that is supported by sequence of conversational acts is the uttering of overlapping turns, that is, simultaneously with what the speech partner says (which achieves a reframing or reinterpretation of this informative element) and recourse to repetitions¹⁶. Goodwin (2000: 74) refers to this ability to use the distributional environment to infer meanings as "anchoring"; this strategy can also be analysed in terms of cognitive schemas.
 - A specially important case of over-exploitation of Grice's maxims in Broca's aphasia is the frequent construction of statements in the direct style, something that obviously implies a grammatical simplification and can be understood as a sign of paraphrastic impairment in these speakers.
4. Lastly, in the specific sphere of conversational turn taking, we find strategies such as a generalised slowing down of turn taking (a feature that is coded according to the turn taking agility, that is, the number of turns per minute in each recording) and the emphatic recourse to appendices and tag questions, often as fillers inside the turn (which verify comprehension) and at other times as passing the turn (by asking for repetition).

The use of some or all these strategies causes a fragmentation of discourse which requires shared construction by the speakers, as a simple act of lexical designation or identification can require the development of various turns.

¹⁴ Goodwin (2000) analyses the importance of pointing and the difficulties of interpretation that this can pose for speakers due to the "the multiplicity of entities that might count as legitimate targets of a point" (2000: 74).

¹⁵ Such a transfer is only the logical consequence of cooperation among those involved: it is plausible to think that the more ability, the more responsibility. Although Goodwin et al. came to refer to this compensation effect as "parasitic organisation" (2002: 7), they were right when they said that the aphasic speaker (in the specific case that they analysed, incapable of articulating more words than "yes", "and" and "no") succeeded in performing speech acts through being supported by conversational partners. But this support also requires these conversational partners to have a minimum level of complicity and minimum level of skill (which may be enhanced by specific training, such as that developed by A. Kagan in his Assisted Conversation Therapy).

¹⁶ These repetitions, which try to bring attention to some semantically important element (for example, converted into a holophrastic nucleus) must not be confused with another common category common in aphasia (and in other neurolinguistic disorders) such as iterated utterances, repetitions which the aphasic speaker cannot avoid due to a problem of control of the inhibitory capacity (Hernández Sacristán, in press).

The index of conversational participation

The conversational participation index indicates the quantity of conversational units that a participant utters in a given exchange. It is often measured in percentages; our evaluation of each recording starts with this element measured in turns; a second pass of analysis establishes the same participation in speech acts and in words. The concept appears in the protocol of Quantification of Conversational Behaviours by Crockford and Lesser (1994)¹⁷. It is the first element we consider in each transcription, also used as initial data by Adams y Bishop (1989)¹⁸ in their description of semantic-pragmatic disorder. We count each participant's turns, indistinctively including those that are true interventions and those belonging to the secondary system, that is turns of the listener or continuators, sometimes called feedback, despite the fact that they maintain the distribution of turns static: *yes, yeah, sure, aha, ...* and the conventional *uh hum*. This equal consideration is because in serious cases it is very difficult to distinguish between evaluative reactive interventions and these typical utterances from the position of listener.

The conversational participation index reveals the communicative willingness of the speaker, as it has psychological interest and is also related to individual character and attitude to impairment.

Obviously, there are no criteria of "normality" that can be used as a reference for this measure; as every speaker knows, participants can present minimum and maximum involvement in turn taking in natural conversation without this isolated datum *per se* being indicative of communicative competence. The same speaker can have different conversational participation indices in various exchanges over their conversational history, depending on their personal disposition, the theme being talked about, the number of conversational partners and their relationships, the social situation, psychological state, etc. However, speakers have expectations over what should be the participation of conversational partners, and we express surprise or concern when someone speaks very little or we criticise when someone monopolises turn taking and does not let others speak.

[Suggested additional reading: "[Afasia y tempo dialógico: el índice de participación conversacional](#)", Verónica Moreno 2006]

Turn taking agility

The agility of turn taking of a conversation is the number of turns per minute; this index enables us to establish degrees of conversational dynamism and relatively quantify symptoms such as Logorrhoea (speakers who monopolise the speaking turn and hardly allow any gap for external participation) or at the other extreme, speakers who hardly participate and only utter monosyllabic and/or echoing turns.

Predictability

Predictability is a feature of speech acts and interventions; each turn may or may not impose structural restrictions to the subsequent turn, which leads to differentiation between predictive and predicted turns; the concept appears in all the schools that analyse dialogue data, although it goes by various names: predictability (Birmingham school), conditional pertinence

¹⁷ Crockford, Catherine and Lesser, Ruth (1994): "Assessing functional communication in aphasia: Clinical utility and time demands of three methods", *European Journal of Disorders of Communication*, 29, pp. 165-182.

¹⁸ Adams, Catherine; Bishop, Dorothy V. (1989): "[Conversational characteristics of children with semantic-pragmatic disorder. 1: Exchange structure, turntaking, repairs and cohesion](#)". *British Journal of Disorders of Communication* 24: 211-239.

Adams, Catherine; Bishop, Dorothy V. (1989): "[Conversational characteristics of children with semantic-pragmatic disorder. 2: What features lead to a judgement of inappropriacy?](#)", *British Journal of Disorders of Communication* 24: 241-263.

(ethnomethodology), restrictions of chaining (Geneva school). It is a structural characteristic, internal to the language, that speakers manipulate to chain their interventions and that implies tension between two forces or communicative directions:

- On one hand, *illocutivity* that speakers imprint on their utterances.
- On the other hand, *interactive orientation* which tries to involve the listener.

In the sphere of speech acts, predictability enables us to differentiate between linking acts, that direct to the previous or subsequent intervention and constitutive acts that imply a new contribution by the speaker (Edmondson, 1981)¹⁹.

- Dynamic speech acts or linking acts
 - Acts of retroactive linking: *prefaces*²⁰, which mark the relation with the previous intervention and *re-starts* or self-interruptions of the speaker at the start of the turn, which is used to capture attention.
 - Acts of projective linking: signal the end of the intervention and ceding the turn: they are basically *added questions* ("no?", "eh?", "you know?") and *prolongators* ("and so", "well then").
- Constitutive speech acts: those that transmit the content of the interventions; they move the conversation forward.

	<i>illocutionary act</i>	<i>Interactive orientation</i>
	<i>Intention of the speaker</i>	<i>Involvement of the listener</i>
	<i>Paradigmatic axis</i>	<i>Syntagmatic axis</i>
Speech acts	- Representational - Directive - Promissory - Declarative - Expressive	- Constitutive - Dynamic - retroactive - projective
Interventions	- Initiative - Reactive	- Predictive - Predicted

Charles Goodwin²¹, of University of California in Los Angeles (UCLA), performed a recording in 1992 of a lawyer who had a cerebral infarct in 1979, owing to which he could only maintain three words: AND, YES and NO. The researcher reflects on the nature of this minimal residual language, alluding to its relational character which challenges predictability as follows:

"Why, among all the words in a language, these three? Note that the three presuppose links with the speech of another. And link some speech units, sentences for example, with others. Yes and No are prototypical examples of second parts of adjacent pairs, used to construct a response to something that someone has said. (...) this vocabulary set presumes that the user is included in a community with other speakers. His speech does not remain only as a self-contained entity but emerges from and is situated in the speech of others, to which

¹⁹ Edmondson (1981) says that the intervention (move) can be integrated by three types of act: uptake, which alludes to the previous speaker's intervention; head, which constitutes the current speaker's contribution; and appealer, which asks for another intervention from the conversational partner.

²⁰ The bibliography talks about frames, prefaces, mistaken position markers, disjunction markers, contrast markers, apposite starts; the connectors are units than can perform this pragmatic function independently of their morphosyntactic category.

²¹ Goodwin, Charles (1995): "Co-Constructing Meaning in Conversations with an Aphasic Man", Research on Language and Social Interaction, 28 (3), pp. 233-260.

it is inextricably linked. This enables the possibility that in spite of the extraordinary frugality of the system, the speaker can nevertheless be capable of participating in complicated language games, say a wide range of different things performing various types of actions, making use of the resources provided for him by the speech of others.

[Suggested additional reading: "2002 "[Producing Sense with Nonsense Syllables: Turn and Sequence in the Conversations of a Man with Severe Aphasia](#)" Charles Goodwin 2002]²²

We can link the appearance of dynamic speech acts with cooperative behaviour (in Grice's terms), as long as the context of the dialogue implies providing turn alternations. We find a striking absence of these types of speech acts in the conversational behaviour of some speakers, those suffering from Williams Syndrome for example (see corresponding chapter in *Pragmática para Logopedas* - Pragmatics for speech therapists).

²² Goodwin, Charles; Goodwin, Marjorie Harness; Olsher, David (2002): "[Producing Sense with Nonsense Syllables: Turn and Sequence in the Conversations of a Man with Severe Aphasia](#)". In Barbara Fox, Cecelia Ford, and Sandra Thompson (Eds.): *The Language of Turn and Sequence*, Oxford: Oxford University Press, pp. 56-80.