Conversation analysis at the service of research in the field of second language acquisition (CA-for-SLA)

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Key concepts: conversation analysis, talk-in-interaction, CA-for-SLA, situated learning.

1. Introduction

Learning a language in a formal context is not the same as learning a language in a natural setting, in that the goal of one of the participants in the communicative events that occur in the classroom, the teacher, is to teach a language. For this reason, the majority of the actions undertaken by the participants are directed at achieving that goal. That is why observing and analyzing interaction in the classroom becomes a key element in understanding how we learn. In this chapter we set out how this issue is approached through conversation analysis.

Conversation analysis studies talk-in-interaction, which means taking into consideration the social aspects linked to the use and acquisition of language. In the field of second language acquisition, there is a widely documented tension surrounding the relationship between these two phenomena. Research undertaken from a cognitive perspective, one of the dominant approaches, argues that studying the use of language does not contribute relevant data for understanding the process of its acquisition and therefore proposes longitudinal experimental studies. Conversely, the sociocultural perspective supports the idea that learning occurs based on interaction and therefore, to understand the language acquisition process, it is necessary to investigate how, through language,

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individuals complete social actions in specific contexts to attain concrete goals. To achieve this objective, one can either undertake longitudinal studies or else carry out case studies that identify and analyze sequences (of speech) in which the speakers orient to learning.

If we start from the premise that learning takes place through interaction and that learners acquire knowledge and communicative expertise through socially situated activities that take place in specific contexts of use, it is also important to study the organizational systems of participation in a contextualized way. Some forms of participation and the methods used to manage the linguistic resources available to participants are appropriate to educational institutions (for example, raising one's hand to ask for permission to speak is a method of organizing participation in a school environment; using Catalan as a vehicular language for learning is a characteristic typical of Catalan and Andorran schools, etc.), others are specific to each classroom (for example, participation is organized differently in classrooms where students are engaged in project work and classrooms in which interaction is controlled by the teacher).

Lastly, it should be remembered that learning languages is a complex and multimodal process and thus research into language acquisition must be carried out from an interdisciplinary perspective, using an emic approach (see Nussbaum, this volume) based on data relating to the real use of language and observing processes in which interaction, as a means of carrying out social action, generates learning. Conversation analysis is the discipline which, inspired by fields such as pragmatics, speech act theory, the analysis of variation, interactional sociolinguistics, ethnomethodology, the ethnography of communication, communication theory and social psychology, fulfills the premises we have set out.

There are other chapters in this handbook that justify the validity of using ethnographic procedures for gathering data and of using conversation analysis techniques to undertake classroom research from a collaborative perspective (see, for example, the chapters by Nussbaum, this volume; Unamuno & Patiño, this volume). In this chapter we want to undertake a detailed examination of

what conversation analysis means. To this end, we will first review the origins of the discipline, secondly we will describe the challenges researchers interested in carrying out research from this perspective have to take on and, to conclude, we will set out the premises on which this theoretical and methodological proposal is based and we will show, giving examples, the phenomena it is most concerned with.

2. Conversation analysis as a research discipline

Conversation analysis emerged at the start of the 1960's as a result of the studies by Sacks (1992, among others) on the organization of social interaction. The author was inspired by the work of Garfinkel (1967, among others) based on ethnomethodology and proposed studying talk-in-interaction through analyzing recordings of everyday conversations. At that time, this was a revolutionary option, not only because sound recording equipment was a lot less common but mainly because linguistics in those days had no interest in studying ordinary conversation.

Sacks, however, was not interested in analyzing conversation exclusively, but rather oral interaction, which implies the study of both verbal and non-verbal communication. The work he carried out with Schegloff and Jefferson (Sacks, Schegloff, & Jefferson, 1974; Schegloff, Jefferson, & Sacks, 1977) is especially important for the evolution of conversation analysis as a discipline for studying oral data (see a review of its origins and development in Goodwin & Heritage, 1990). As we mentioned, at the beginning, the discipline was interested in ordinary conversation, but later on other varieties of discourse were analyzed (interviews, political speeches, legal interrogations, etc.) and nowadays the aim of the subject is to cover any type of interaction that implies performing both verbal and non-verbal activities.

These days, conversation analysis is a consolidated discipline in the language sciences, but this has not always been the case. For example, at the start of this century, Seedhouse (2005) noted that the role played by conversation analysis in the field of applied linguistics was not the same one as it had, at that

time, in research undertaken into the acquisition of second languages. Applied linguistics does not question the validity of using conversation analysis as a research methodology and considers that studies based on this discipline make relevant contributions to teaching languages for specific purposes (see Wong & Waring, 2010, to discover more about the most recent proposals) as they provide guidance for (1) designing materials and text books based on the types of discourse that need to be presented, (2) managing interaction in the classroom or in other settings, and (3) understanding how conversations between natives and non-natives or codeswitching in bilingual or multilingual environments are structured. Notwithstanding all this, however, as we mentioned, the author himself states that at the beginning of the 21st century, conversation analysis in research into the acquisition of second languages, the branch of the discipline known as Conversation Analysis for Second Language Acquisition (CA-for-SLA), is the result of debate. Two things should be borne in mind in order to understand this statement: on the one hand, conversation analysis was one of the theoretical and methodological instruments adopted by researchers working from a sociocultural perspective, but held no interest for researchers from the dominant cognitive school of thought. The discussion is not, therefore, related to the validity of conversation analysis as a research tool, but instead depends on which concept of the learning process the researcher decides to adopt. On the other hand, when Seedhouse states that research into second language acquisition only took an interest in conversation analysis from the period 2000-2004, it is possible that he is only taking into account those researchers who explicitly adopted a sociocultural learning perspective and attacked the principles defended by supporters of the cognitive viewpoint. There are a great number of previous studies carried out mainly in Switzerland, but also in France, Germany and Catalonia that fall into the field of contact linguistics and language acquisition (de Pietro, Matthey, & Py, 1989; Lüdi, 1999; Lüdi & Py, 1986; Masats, 1999; Nussbaum, 1990; Pekarek Doehler, 1999; Py, 1997, among others) and in which, through conversation analysis, plurilingual practices are related to the process of acquiring second and foreign languages.

All studies based on conversation analysis contain three basic principles which, according to Mondada (2003), should feature in any research that proposes to

observe phenomena on the ground: the principle of observability (the phenomena studied must be able to be observed and described), the principle of availability (in order to observe and describe a phenomenon it has to be collectable) and the principle of symmetry (the way a researcher projects his or her viewpoint on the data is also a phenomenon that must be observed and described). These concepts have been described in the chapter that Nussbaum (this volume) dedicates to collaborative research. In the next section we will consider the challenges they imply and that researchers should be aware of.

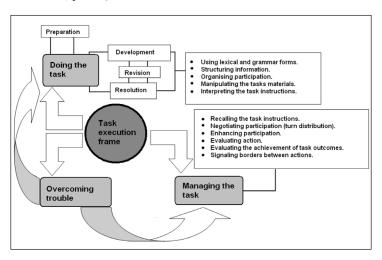
3. The challenge of documenting and describing observable phenomena

One of the key challenges for researchers is that of deciding what to investigate in order to document learning. There is a general consensus on the need to describe interactional competence and analyze how it is acquired (see Markee, 2000, 2008), but studies explaining how interaction in the classroom impacts on learning are still scarce (Pekarek Doehler & Fasel Lauzon, 2015). Along the same lines, Unamuno and Nussbaum (2006), for example, propose studying aspects such as how learners construct interactive scenarios, manage the activities they carry out, how they participate with a balanced level of conversation, how they identify and overcome communication barriers and how they adapt their verbal repertoire according to the activity they are involved in and the situation. Masats (2008), on the other hand, includes all of these aspects and expands them in the case of foreign language learning by exploring the interaction between pairs of learners carrying out communicative tasks. The following diagram (taken from Masats, 2008) illustrates the macro-discursive tasks that learners carry out when performing a task and shows the actions in their discourse which are observable and that serve to characterize their interactional competence.

To understand how interaction is organized when individuals perform a specific social activity (for example, when learners resolve a communicative task) and how that social activity is constructed, it must be remembered that "la realitat i el sentit es construeixen en les interaccions socials i que és en la pròpia interacció on cal

buscar les claus de la interpretació" (Nussbaum & Unamuno, 2006, p. 16)². Firstly, this presupposes an analysis of facts that are observable, such as the behavior that speakers exhibit when interacting, rather than theorizing over unobservable phenomena, such as their motivation for taking part in the interaction. Secondly, it is necessary to formulate the appropriate questions in order to grasp the social value of the facts being observed (see how Moore & Llompart, this volume, suggest approaching this topic in their chapter). In this respect, Maynard (1989) suggests formulating questions that involve observing how participants behave during an interaction (how to resolve barriers to communication, how to manage the linguistic resources at their disposal, how to co-construct statements, etc.). Nevertheless, it is not enough just to identify observable facts and pose pertinent questions; the need to categorize what we observe so that we can describe it obliges us to find the most appropriate vocabulary to do so. These three actions imply making decisions linked to the processes of data collection, treatment and analysis. We will take a brief look at these next (Figure 1).

Figure 1. Observable actions in the context of carrying out a task (Masats, 2008, p. 142)



^{2. &}quot;reality and meaning are constructed out of social interactions and it is in the interaction itself that the keys to its interpretation can be found" (Translated from Nussbaum & Unamuno, 2006, p. 16)

4. The choice of tools to collect observable phenomena

As we have indicated, the principle of availability establishes that in order to describe observable facts it is first necessary to collect them and then represent them

At the beginning of the 1970s, for example, Sacks based his work on sound recordings, but a decade later the Goodwins were already documenting their data on video. In terms of analysis, whichever tool is used to record interaction in the classroom (a video camera, a mobile device, a voice recorder, etc.), it cannot be viewed solely as a means of collecting data; the way the device is handled by students also gives pointers to how learners interactively construct the meaning of the task to be performed (see the recommendations regarding this made by Moore & Llompart, this volume). For example, we can determine which part of their discourse a pair of learners wish to make 'public' or otherwise by observing their discursive actions and paying attention to aspects such as the moment they decide to momentarily pause a recording, what they register when they restart a recording that was paused, what they whisper to each other, and when they address the camera directly, etc.

Given that the non-verbal elements in any interaction are significant, it is important to be able to document them. In this respect, recording data on video is preferable to audio-recorded data (see Moore & Llompart's comments on this subject in this handbook). If it is impossible to access to video data (there may be families that withhold permission for their children to be filmed), then the value of non-verbal communication should not be overlooked, which means that our transcripts, just in the same way as when we transcribe visual data, must contain comments on the kinetic, gestural and visual aspects that have left an observable trace in the verbal production. The challenge, in this case, is about deciding what is and what is not observable when working with audio recordings only without the visual support to understand what is happening (Mondada, 2003). Fragment 1, which is part of a longer sequence, serves to illustrate this issue

Fragment 1

7.	Gemma:	{(P) ingredients of the— }	
8.	Jana:	cake \ cake\ [she is writing] es que no sé cómo se escribe\ cake\	
9.	Gemma	[calls out to the teacher] María\ com s'=escriu pastís=	
	Metropolitan Infant and Primary School Carrying out a role play task		

In turns 7 and 8, Gemma and Jana are jointly putting together a script ("ingredients of the cake") that will form part of a fictitious dialogue the two girls have to develop. Suddenly, Jana (at the end of turn 8) verbalizes that she does not know how to spell one of the words that has come up ("cake"). Therefore, Gemma (turn 9) refers to the teacher to ask how to spell it. In this case, the action of writing is registered in the discourse of this dyad because one of the participants topicalizes it when she initiates a change of code. In other words, after verbalizing the word "cake", the spelling of that word becomes the subject around which the interaction turns, which is expressed in a different language to the one used by the girls when constructing the invented dialogue. The transcript of this fragment contains a comment by the transcriber, a fact that indicates that in the process of translating the oral data to written data, he or she 'visualized' the existence of that kinetic action and captured it because it was felt to be relevant to how the action was configured.

Fulfilling the principle of observability involves recognizing that, without observable evidence in the interactive speech generated by the two girls in the exchange illustrated in Fragment 1, we would not be able to confirm that, in order for Gemma and Jana to carry out the task they had been assigned, they decided to write the dialogue they were inventing down on paper and that it was Jana who took the responsibility for doing so.

5. The choice of a system to represent the observable phenomena

As we noted in the previous section, in order to document observable phenomena it is necessary to represent them once they have been collected. Therefore, conversation analysis obliges us to work with transcripts which often act as mediators between theory and data. By their very nature, however, transcripts are partial and selective because they restrict the social reality they wish to study (Bucholtz, 2000; Ochs, 1979; Psathas & Anderson, 1990). For Haviland (1996). a transcript represents talk-in-interaction out of the context of its production. The willingness of the researcher to 'reconstruct' the situation in which the discourse unfolds implies a process of decision-making that has an impact on the analysis. Ochs (1979) states that all transcriptions are built on the basis of applying selection processes (decisions need to be taken on which aspects of the conversation should be made 'visible' or not, whether to produce a phonetic or an orthographic transcript, the selection of symbols to represent the paralinguistic and non-verbal information, whether the transcription is organized into turns, tonal units or an alternative system, etc.) and simplification (abstracting from the aspects selected). Therefore, transcription, as noted in the chapters by Nussbaum (this volume) and that of Moore and Llompart (this volume), must be viewed as a first phase of this analysis (Ochs, 1979), and as a starting point for reflection (Mondada, 2002).

The act of choosing a transcription system (see the suggestions put forward by Moore & Llompart, this volume) is guided by the objectives of the research to be carried out and the subject of the study. This explains why some researchers (such as Auer, 1998, when analyzing codeswitching) develop their own conventions when it comes to transcribing and analyzing their own data. Some of the oral data transcription systems that have enjoyed widespread acceptance in the field of interactional analysis are those developed by Jefferson (1985, 2004), Atkinson and Heritage (1984), du Bois (1991) and Gumperz and Berenz (1993) (see Moore & Llompart, this volume, on more recent conventions for multimodal transcription that have been developed). Often, however, there is no consensus on whether the conventions adopted complicate the reading of the data and oblige the researcher to do unnecessary work or whether it would be possible to represent oral data through a simpler system such as the orthographic one (see the debate between Potter & Hepburn, 2005a, 2005b; Smith, Hollway, & Mischler, 2005). We believe that detail in the transcript is necessary for reproducing data as faithfully as possible, as that allows us to carry out a detailed analysis of it and thereby comply with one of the four basic principles of conversation analysis (see below). The transcription symbols used in this chapter are based on conventions developed by the GREIP group (see Moore & Llompart, this volume) and are included in the annex.

6. The choice of terminology to categorize observable phenomena

The principle of symmetry recommends viewing both informants and observers in the same way. This means that researchers should also be considered as forming part of the data collected (Mondada, 1998) and, therefore, their actions also need to be observed and made available. In this respect, the challenge of describing observable facts involves choices that will have an impact on the description and analysis of the data, on how we position ourselves as researchers in response to these data and on how we present ourselves to the scientific community. Writing an article or research study also constitutes a social activity and a communicative situation (encounter): someone relates 'a convincing story' (Silverman, 1989) in the hope that someone else might wish to read it.

However, choosing the words to describe observed phenomena is not always an easy task. Firstly, if a piece of qualitative research is undertaken, categorization cannot be created until the data have been analyzed (Bryman, 1988); categories emerge as the result of the analysis. Secondly, once a phenomenon has been observed, a categorization has to be constructed based on a careful lexical choice that must be fully justifiable since the same word can often be used to describe phenomena of a different nature or else the same event can be described using different terminology. By addressing our audience as researchers-writers, we make vocabulary choices that make it easier for readers to relate to a particular research tradition or to a specific way of describing the reality observed. For example, if we choose to make use of the term 'participant' rather than 'speaker' and 'listener' when referring to the individuals taking part in a communicative situation, it implies that we recognize their interaction as a social action, as defended from a sociocultural learning perspective.

7. The four basic principles of conversation analysis and the four key elements it studies

In order to analyze every interaction, conversation analysis is grounded on four basic principles rooted in the ethnomethodological suppositions defended by Garfinkel, who, as we said, was one of the sources of inspiration for Sacks. These four principles guide the process for treating and analyzing data and can be summarized as follows:

- Interaction is a form of discourse that has a clear order, and the job of the analyst is to work out how it is organized and sequenced.
- Interaction is linked to the context in which it occurs and therefore it is
 essential to analyze it sequentially in order to be able to understand it.
 At the same time, interaction also creates a context that is observable
 through the manner in which actions take place and how participants
 approach them.
- The details (silences, changes in intonation or rhythm, whispers, pauses, etc.) are never insignificant, no matter how small they might be. That is why it is essential that interaction be transcribed accurately and in detail
- The analysis must be drawn from the data. Reviewing the data should be done from an emic perspective, i.e. analyzing what participants orient to in their discourse. To achieve this it is important to bear in mind how participants interpret and make sense of what they do. For example, an ungrammatical utterance is not a problem as long as the interlocutors do not make it one. Neither the background of the participants nor their identifying characteristics are relevant unless they are brought into play during the discourse.

In the field of conversation analysis, the description and explanation of the use of language as a social action is focused on the study of the four elements on which Sacks based his analysis of the organization of interaction: constructing adjacency pairs, the notion of preference, turn-taking and repair (see a detailed description of these elements in Schegloff, Koshik, Jacoby, & Olsher, 2002; Seedhouse, 2004, 2005, among others).

8. Adjacency pairs and the notion of preference

The construct of the adjacency pair is based on the ethnomethodological principle of reflexivity which states that procedures activated through the production of an action or utterance are the same as those activated when it comes to interpreting them. For example, a question is generated to elicit a response and that is also how the interlocutor to whom the question is directed interprets it. However, the interactive meaning of a turn can only be interpreted by analyzing the turn that follows. Adjacency pairs therefore, serve to describe the sequential order in which the interaction is organized.

Even though the reality is that only a set number of actions can be undertaken through constructing adjacency pairs, the analytical reasoning on which the construct is based is applicable to other ways of organizing action (Goodwin & Heritage, 1990). However, the behavior of interlocutors when it comes to the sequencing and organization of discourse is not analyzed from a regulatory perspective, i.e. conversation analysts are not interested in explaining what the speakers actually say, but rather their orientations or, in other words, what their preferences are when it comes to interacting. Responding to a greeting with another greeting is a preferred action and the most common one, but interlocutors may choose not to follow the preferred action. Fragment 2 serves to illustrate the adjacency pair concept and the notion of preference.

Fragment 2

51	Héctor:	in my yes\\in my picture the shop assistant_ the hair is green\ ay\ is—<0> no\ [laughs] brown\
52	Josep:	eh in_ in my_ what colour_ what colour is the shoes of a woman?

Metropolitan Infant and Primary School Carrying out a task for identifying differences		
61	Hector:	in my picture there are two\ two cheese\
60	Josep:	yes\ um— <1>
59	Héctor:	${(DC) \text{ in a: basket}} \ eh$ _ there are bananas\ oranges\ lettuce [+le'tuz+]\ and milk \
58	Josep:	eh um—
57	Héctor:	the customer/ is green\
56	Josep:	eh— what colour is the eyes [+eis+] the consumer?
55	Héctor:	eh— pink\
54	Josep:	eh— what colour is the hair_ [+jair+] ey ma_ of the woman?
53	Héctor:	black\

Fragment 2 shows us part of an exchange in the interaction between two primary school learners comprising six sequences in which the boys try to find out what differences there are between the drawings each of them is holding. Three of these sequences (turns 51, 59-60 and 61) are initiated by Héctor and the other three (turns 52-53; 54-55 and 56-57) by his classmate, Josep. As we can see, Josep goes about this task by adopting an interactive pattern in which he takes on the discursive identity of the questioner and allocates the role of informant to Héctor. Thus, the two boys construct sequences based on adjacency pairs of the question-answer variety. The consecutive use of this type of pattern serves to tacitly indicate that there is no difference between the two drawings. That is to say, as the reply Josep receives from his classmate does not contradict the information that he has in his drawing, he formulates a new question to continue investigating the two drawings. In turn 58, Josep hesitates before formulating a new statement, which gives Héctor the chance to take his turn to speak, thus changing the interactional framework (turn 59).

If we look at the three sequences initiated by Héctor, we see how he shows that his preferred action is to take on the discursive identity of describer, for the following reason: both in turn 51 and when he picks up the conversation in turns 59 and 61, he formulates a statement containing a description of what is shown in his drawing. The sequence comprising turns 59 and 60 is also an example of an adjacency pair (description-confirmation of the description) in that Josep uses his turn to verbalize that his drawing contains the same elements listed by

his classmate. The other sequences started by Héctor comprise just a single turn since the opening of a new sequence by his classmate (turn 52) serves to confirm that what Héctor has described also appears in Josep's drawing.

Thus, as we can see, four of the sequences that we have shown of this interchange are based on adjacency pairs and two are not; and that is because each participant shows a preference for a particular discursive pattern.

9. Turn-taking

Turns represent the minimum units of participation around which interaction can be structured. As we saw in the previous fragment, turns can be grouped together into bigger units called sequences. Sequences can be formed by just a single turn (as in the case of turns 51 and 61 in Fragment 2), by adjacency pairs (as in the case of turns 52-53, 54-55, 56-57 and 59-60 of Fragment 2), by Initiation-Response-Follow up (IRF) sequences (as we see in Fragment 3 which follows) or by other more complex groupings that arise, above all when learners are trying to resolve communication barriers (see Fragment 4).

Fragment 3

3	María:	more or less/ do you understand this?	
4	Álex:	que farem_ que farem una fitxa de diferències\	
5	María:	yes\ that's it\ that's it\ alright\ then— in order to spot the differences— what you have to do is to describe your picture\ right/ say— for example\ in my picture there's a:: dog\ and the dog is brown\	
The	Metropolitan Infant and Primary School The teacher (María) gives instructions about how to perform a task about finding differences		

Fragment 3 shows a sequence of three turns described by the abbreviation IRF. This discursive structure is typical of classroom interaction during the times when the teacher is managing class participation (see Nussbaum, 2016, for a more detailed analysis of this type of sequence). The first turn in this sequence (turn 3),

begins (initiation turn) with a question from the teacher to establish whether the instructions she has just given have been understood. In the second turn, one of the students answers her (response turn) in the affirmative by summarizing in Catalan the content of the instructions given. Finally, in the third turn (follow up turn), the teacher gives a positive assessment of the student's answer ("yes, that's it, alright") before starting a new initiation move by continuing to give further instructions within the same turn

Conversation analysts are just as interested in the mechanisms of turn construction, which could be verbal or non-verbal, as they are in the mechanisms speakers adopt for turn taking. The study of turns and the processes related to them (talking over, pauses, interruptions, silences, gestures, etc.) is essential for understanding how interaction is constructed and organized and how interaction generates learning. The basic question guiding studies undertaken from the conversation analysis perspective is the following: 'Why does that happen in that way at precisely that moment?' For Seedhouse (2004), this question summarizes the essence of the principles of conversation analysis, since it shows that interaction is conceptualized as an action (why does that happen?), expressed through specific linguistic forms (why is that being expressed in that way?), embedded into the development of a sequence (why does that happen, expressed in that way, at that precise moment?).

10. Repair and processes for avoiding communication breakdowns

According to proponents of interactive language learning, performing tasks to overcome barriers fosters participants' acquisition of communicative expertise (Hall, Cheng, & Carlson, 2006; Kasper, 2004) inasmuch as they provide practice in procedures and methods of social behavior and are not just a source of access to language forms. Traditionally, conversation analysis has been interested in repair, one of the mechanisms employed by interlocutors to solve any communication barriers they encounter, but not the only one. In this section we will first deal with the concept of repair and then move onto other processes

used by learners, such as codeswitching, code-mixing or employing paraphrase to maintain the flow of the conversation.

11. The concept of repair

In contrast to other mechanisms employed by participants in a communicative event to overcome barriers, repair provokes interruptions in the flow of the conversation. Evidence of a repair may be seen discursively when interlocutors momentarily abandon the action they are engaged in and resolve the trouble within a new sequence. This is called a side sequence because its intention is to focus on language forms or negotiate the sense of the statement that has interrupted the flow of conversation. Once the barrier is resolved (or once the attempt at resolution is abandoned), the action that had been interrupted is resumed.

According to Masats (1999), it is impossible to understand the complex phenomenon of repair without analyzing it from a perspective that takes into account three core concepts: (1) repair in relation to the actions performed by the learners; (2) the connection between the object of the repair and the discursive identities assumed by the interlocutors during the repair sequence; and (3) the connection between repair and metalinguistic activity as tools to foster learning. Regarding the first factor, conversation analysis demonstrates that four procedures can be identified in order to repair conversation, depending on who flags up the communication barrier and who puts forward a proposal to solve it:

- Self-initiated Self-repair (SS): the repair is initiated and resolved by the speaker who encountered the trouble.
- Hetero-initiated Hetero-repair (HH): the trouble is identified and resolved by a speaker who did not utter the statement that caused it.
- Self-initiated Hetero-repair (SH): the repair is initiated by the speaker who encountered the trouble but resolved by another participant.

• Hetero-initiated Self-repair (HS): the barrier is identified by a speaker who did not utter the statement that caused it, but is resolved by the person who initiated the trouble.

A repair can serve a variety of purposes. Masats (1999) suggests that in order to observe what interlocutors are repairing, it is necessary to analyze the three areas in which the learners are operating: resolving problems related to code, negotiating meaning and managing the task, while recognizing the value of the objects that accompany the action (the support materials for the task) as a factor that shapes and restructures the approach of the speakers to that action. The following Table 1 summarizes her proposal.

Table 1. The object of repairs (Masats, 1999, p. 65)

	Directed at THE CODE	LEXICAL REPAIRS
		SEMANTIC REPAIRS MORPHOSYNTACTIC REPAIRS
		PHONETIC REPAIRS
REPAIRS	Directed at THE MESSAGE	COHESION REPAIRS PRECISION REPAIRS AMBIGUITY REPAIRS
	Directed at THE TASK	
	Directed at THE MATERIALS	FOCALIZATION ON THE CODE FOCALIZATION ON THE DISCOURSE FOCALIZATION ON THE TASK

Independently of the objective being repaired, when a repair is carried out there is always a participant that adopts the discursive identity of the non-expert speaker who thus bestows the identity of expert speaker on the other party. These identities are not fixed but change according to the discursive actions being performed. The indiscriminate adoption of expert and non-expert identities between learners is a mechanism that assures the development of their interactive abilities and encourages learning since it forces them to engage in metalinguistic activities. For this reason, the study of the side sequences that open up when a repair is made is especially interesting as they

often become potential acquisition sequences (de Pietro et al., 1989). This can be observed in Fragment 4.

Fragment 4

85	Eli:	in my picture there are mm— cómo se llama? {(PP) XX}<14> {(PP) la camisa \} <2>
86	Álex:	the shirt\ [+short+] shirt\[+short+]
87	María:	shirt\
88	Álex:	=shirt=
89	Eli:	=shirt= in my picture there are shirt_ em— shop assistant [+a'ssisten+] eh— is red and blue\
90	Álex:	red and blue\
91	Eli:	yes\ <1>
Metropolitan Infant and Primary School Eli and Álex perform a task about finding differences		

In turn 85, Eli initiates a sequence to describe something in her drawing but she encounters a lexical barrier that does not allow her to complete her description (turn 89) until it is resolved. To achieve this, she adopts the discursive identity of non-expert speaker, bestowing on her classmate the identity of expert speaker and initiates a side sequence, which she inserts into the same turn 85. The construction of this new sequence is preceded by a sound that indicates doubt ("mm"), is signaled by a change in language and takes the form of a request for help ("cómo se llama la camisa?") uttered in a lower tone. Given that the participant who has encountered the barrier is the same as the one pointing it out, we categorize the repair as self-initiated. In the next turn, Alex replies to his classmate, which is to say he hetero-repairs her discourse. In principle, this repair's side sequence could have consisted entirely and exclusively in this adjacency pair (question-answer). However, the teacher, María, is near the children and notices that Álex has problems with correctly pronouncing the word he wishes to provide to Eli and so she decides to intervene. In doing so, she selfcategorizes herself as an expert speaker and assigns Álex the discursive identity of non-expert speaker. Thus, turn 87 is a hetero-repair (the teacher corrects Álex) hetero-initiated (the teacher points out to Alex that he has a problem). The boy has not asked for help and repeats the word twice, but we cannot tell if he does that because he does not know how to pronounce it correctly or if he just says it twice without realizing that he is not pronouncing it correctly. Turns 88 and 89 show how, simultaneously, Álex and Eli assimilate the teacher's repair and, in the case of the girl, she inserts it into her discourse to complete the statement that had been interrupted in turn 85. To sum up, Fragment 4 shows an example of self-initiated hetero-repair between Eli and Álex (turns 85 and 86) and another hetero-repair by the teacher directed at Álex's utterance (turns 86, 87 and 88). Nevertheless, the findings of studies into repair, including the study which is the source of the data we are reproducing (see Masats, 2008), show that learners have a preference for self-repairs regardless of whether they are self-initiated or hetero-initiated.

Lastly, it is important to point out that analyzing data from an emic perspective, one of the four principles that we indicated as guiding conversation analysis, implies observing data from the viewpoint of the participants. In turn 89 of Fragment 4, when Eli returns to formulating her statement, we observe that she mispronounces the word "assistant". The transcription contains this information (observing and noting it) but as it is a fact that neither of the two participants in this exchange pick up on, we as researchers cannot categorize this deviation from the norm as a barrier in need of repair.

12. Procedures employed to maintain the conversational flow

Masats, Nussbaum, and Unamuno (2007) analyzed the problems that students come up against in a more general way, transcending the concept of repair, and categorized them according to the topics they fall under: the global format of the activity (what has to be done), the materials (as intermediary objects in the interaction), the global management of the task (how it should be managed), the resources available to the students in performing the task (if they have them available and/or consider them relevant to the local construction of the activity). In Fragment 5 we can observe some of these procedures that, unlike repairs, do not interrupt but rather maintain the conversational flow.

Fragment 5

75	Bawna:	it's a_ a_ a deu mil money\
76	Pau:	deu mil no\ <2> deu mil moneys\
77	Bawna:	a ten_<0>
78	Pau:	er_
79	Bawna>	ten thousand\
80	Pau:	ten thousand moneys\
81	Bawna:	XXXXX
82	Pau:	yes yes es que_ sube \ it's up\ it's up navideit \
83	Bawna:	=thank you\=
84	Pau:	=thank you\= bye bye\
85	Bawna:	=bye bye\ =
BCN	BCN1 Infant and Primary School	

Pau and Bawna take part in a role play

In Fragment 5, Pau and Bawna find themselves immersed in co-constructing a dialogue between a shopkeeper and a customer. The scenario the teacher has given them on which to base this fictitious conversation involves giving the price for the products the customer has bought. The fragment shows the moment at which the learners abandon their roles as buyer and seller in order to find a joint solution to this communication challenge. Thus, in turn 75, Bawna proposes an amount. As we can see, her statement is in a hybrid form that mixes up two codes: English (the language the task is performed in) and Catalan (the language Bawna uses to communicate with her classmates). Observing what happens in the following turns allows us to appreciate that this procedure is not a product of the girl's lack of command of the target language but rather a resource that allows her to take her turn in the conversation without having to think about how to frame her proposal. In turn 76, her classmate questions her proposal and repairs (incorrectly) the part of the statement that the girl had formulated in English. This interruption allows Bawna to self-correct her discourse (turns 77 and 79) and formulate a statement entirely in English (turn 79) avoiding taking on board Pau's proposal. Pau assimilates his classmate's self-correction and supplements it. At this moment the boy, whose role in the role play is that of the shopkeeper, abandons the metalinguistic reflection activity he was engaged in and adopts this discursive identity and thus the conversation proceeds within the role play.

In other words, the shopkeeper (Pau) gives a price for the products the customer has bought (turn 81), the customer (Bawna) makes an unintelligible comment about the price (turn 82), the shopkeeper justifies the price (turn 83) and the customer accepts it (turn 84); the shopkeeper thanks her and says goodbye (turn 85) and the customer responds to this parting salutation (turn 86).

The task the learners are performing is complex in that it implies that the participants need to adopt, sometimes simultaneously, a variety of discursive identities in an attempt to turn the scenario they have been given into a coherent dialogue within the role play (Masats & Unamuno, 2001). Employing all the linguistic resources at their disposal makes this task easier for them. This also explains why, at a specific moment of the fictitious dialogue between the shopkeeper and his customer (turn 82), Pau constructs his statement in the way that he does. First we see how the boy and his classmate are interested in maintaining the flow of the conversation within the roles assumed for the role play. Faced with the intervention of his classmate (who is possibly complaining about the high price of the products she has purchased: fruit) he responds in Spanish, arguing that prices go up. The change of code, the use of Spanish, permits him to buy time to think of a way of expressing the idea of rising prices in English ("it's up") and to conclude his argument (prices go up because it's Christmas – the data were collected the week before the Christmas holidays) in the same turn 82 ("it's up navideit"). Once again, the use of a hybrid form (adding a morpheme that sounds like English to a half-formed word in Spanish) is a valid procedure for this dyad to succeed in completing the task assigned to them.

13. Concluding words

In this chapter, we have argued that conversation analysis is the discipline that provides a suitable theoretical and methodological framework for studying speech in interaction for those researchers interested in language acquisition processes from a sociocultural perspective of learning, in that it allows social aspects linked with acquiring languages to be taken into account.

Firstly, we re-examined the origins of this discipline. Secondly, we reviewed the principles it upholds and then, through analyzing fragments of conversation taken from primary school classrooms, we demonstrated some of the phenomena that are of interest to conversation analysis and how to analyze data from this perspective. Thus, on the one hand, we indicated that studies aimed at studying how languages are acquired in formal contexts show that some systems for organizing participation are dictated by educational institutions, while others are specific to each classroom. Conversation analysis is interested in studying how these participation systems are displayed in each context and how they contribute towards learners managing the linguistic resources they have at their disposal in a specific way.

On the other hand, we noted that conversation analysis argues that in order to understand how a language is learned, it is necessary to describe language use in its context, which can only be achieved through an emic and detailed analysis of the interaction generated in each particular conversational event. Thus, the analytical model set out by the discipline is based on data (data-driven model) and proposes to study, from the participants' perspective, a range of phenomena (turn-taking, how participation is organized, formulation of utterances, codeswitching, repair, etc.).

Lastly, we stressed that researchers interested in describing language acquisition processes from the viewpoint put forward by conversation analysis start from the premise that learners acquire communicative knowledge and expertise through participating in socially situated activities carried out in specific contexts of use. This participation encourages learners to engage in activities of metalinguistic reflection and call into play all of the linguistic resources at their disposal, thus guaranteeing that they can complete, in the target language, the communicative tasks given to them. From this perspective, it is the use of a variety of mechanisms such as codeswitching, using synonyms, paraphrasing or code-mixing that makes their discourse fluent and, at the same time, rich and exploratory.

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Appendix

Adapted from GREIP transcription symbols (see Moore & Llompart, this volume):

```
Questions:
        Yes/no questions /
        Interrogative questions (who, what...)?
Other tonal sequences:
        Descending \
        Sustained —
Pauses:
        Short |
        Medium |
        Long < number of seconds>
Overlaps:
        =Speaker A text A=
        =Speaker B text B=
Interruptions: text
Syllable lengthening: text:
Intensity:
        Piano {(P) text}
        Forte {(F) text}
Codeswitching:
        Text in Catalan
        Text in Spanish
Continuation of previous turn: Speaker>
Incomprehensible fragment (adjusted to length): XXX | XXX XXX
Uncertain fragment: {(?) text}
Utterances accompanied by laughter: {(@) text}
Approximate phonetic transcription: [+text+]
Comments: [comment]
```



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Enfocaments qualitatius per a la recerca en educació plurilingüe (Catalan)
Enfoques cualitativos para la investigación en educación plurilingüe (Spanish)

Edited by Emilee Moore and Melinda Dooly

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