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Chapter 1

Doing qualitative research: The analysis of talk-in-interaction¹

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As psychological phenomena are systemic, dynamic, and social, there is a need of different methods that may embody various conceptions of the nature of the object we study. Snyder (1995) has suggested that a successful combination of methods can depend on different factors and research being underpinned by a theoretical framework that is sensitive and flexible for understanding the complexity of the object. Thus, a research strategy integrating methods is likely to produce better results in terms of quality and scope since different methods enable insights into different aspects of complex and dynamic psychological phenomena. In addition, it encourages us to come up with creative alternatives to traditional or more monolithic ways to conceive and implement research. These options are an important effort to be reflexive and more critical about the research practice and, ideally, more useful and accountable to broader audiences (Arcidiacono & De Gregorio, 2008).

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In this chapter we focus on research in which the role of talk-in-interaction is prominent since other chapters employ this approach in order to study the process of co-construction of meanings and shared activities in a variety of contexts. For this reason, we present and discuss some general aspects of the qualitative approaches implied in discursive and conversational studies. In particular, we focus on social situations in which the analysis of the verbal interaction requires techniques and epistemological approaches to account in detail what people do during conversations. Within this framework, the Conversation Analysis and the Discourse Analysis (hereafter CA and DA) are assumed as two possible ways to account for the interaction among people in everyday social activities. Basic concepts in studying conversations, main steps in collecting, transcribing, and analyzing data are presented in this chapter as well. Our idea is to present different possibilities to proceed in qualitative research approaches involving the detailed analysis of verbal interactions between children and between adults and children. This qualitative view takes into account a double perspective: the conversation as the focus of the investigation in psychological and educational research, as well as the analysis of dialogues as a way to study more specific psychosocial processes of everyday interactions (Mercer, 2010).

Co-construction and verbal interactions as resources for research approaches

The analysis of children's/adults' everyday activities in different contexts has been a useful practice in order to explore, especially through the observation of verbal interactions, the "mind in culture" (Bruner, 1987) or the "culture in mind" (Valsiner, 2007). Studies on socialization and co-construction of meanings and activities in different settings have highlighted several relevant aspects that are powerful resources for the

qualitative analysis of the interaction among children and adults. Some aspects seem to us particularly relevant in taking this perspective. Firstly, co-construction can imply coordination, cooperation, and collaboration across participants: in this sense socialization is an interactional process; secondly, participation in social interaction is a resource for novices to appropriate socially constructed patterns of communication and activities, thus participation is both a means and an end of socialization; finally, the interactional structuring of socialization is socially and culturally organized. As Jacoby and Ochs (1995) have clearly said, “*we refer to co-construction as the joint creation of a form, interpretation, stance, action, activity, identity, institution, skill, ideology, emotion, or other culturally meaningful reality*” (p. 171).

Within a co-constructive approach, language is not only an instrument of communication, but also one of the objects and aims of the socialization process. The attention to the qualitative analysis of conversational sequences based on an idiographic and interpretative approach, as well as the nomothetic method, strongly contributes to discover some social properties of discourses as social activities. For this reason, we consider the study of conversations as a privileged modality to investigate how people co-construct the meaning of their interactions and involve themselves into the processes of socialization. The study of conversation “*represents a general approach to the analysis of the social action which can be applied to an extremely varied array of topics and problems*” (Heritage, 1984, p. 291). Based on the concepts developed in ethnomethodology (Garfinkel, 1967), social interactions and conversations are not considered as a given set of data, but as a continuous process of becoming. People continuously participate in interactive negotiations within which the social life is (re)defined (Duranti, 1992) and conversation analysts have applied the traditional methodology of ethnography to everyday life activities, studying “*social life in situ, in the most ordinary of settings, examining the most routine, everyday,*

naturally occurring activities in their concrete details” (Psathas, 1995, pp. 1-2). Actions are accomplished and understood by participants because they are filling in common-sense understandings entailed in the situation at hand. This activity of “sense-making” is thus an interactional affair.

For researchers who embrace sociocultural theoretical framework acknowledging the interactional root of higher psychic functions (Vygotskij, 1934/1962; Lurija, 1976; Leont’ev, 1977) and conceiving human development as a progressive mastering of participation in sociocultural activities and appropriation of cultural tools (Rogoff & Lave, 1984; Rogoff, 1990; Cole, 1996), the exploration of development and learning in their spontaneous contextual occurring constitutes one of the most intriguing and challenging enterprises. In this approach, development and learning are not seen as taking place within individual minds but rather as processes of improving participation in interactional activities (Resnick et al., 1991). Within sociocultural perspective, a special attention is devoted to the semiotic and other symbolic tools people use in accomplishing cognitive activities as these cultural resources not only facilitate, but always shape the unfolding of the same activities (Wertsch, 1985; Zittoun, 2006). A crucial role is thus attributed to language because the role of language cannot be separated from the overall sociocultural knowledge. As suggested by different analyses of educational contexts (Lucariello & Nelson, 1987; Ochs et al., 1992; Orsolini & Pontecorvo, 1992; Pontecorvo & Fasulo, 1997; Pontecorvo & Arcidiacono, 2010; Arcidiacono & Gastaldi, 2011), linguistic knowledge is embedded in sociocultural knowledge, and at the same time, values, rules, and concepts are appropriated and reproduced through language and communication. Language and its effects cannot be considered deterministically preordained by the exclusive properties of linguistic structures or by assumed constructs of individual competence and knowledge, but the opportunity to share the responsibility among interlocutors for

the creation of sequential coherence, identities, and meaning is an important element of co-construction within interaction.

We are strongly convinced that the qualitative study of discourse is not a minor subfield of the human sciences. In fact, it could be “*a key locus for the analysis of the discursive practices, cognitive operations and social phenomena through which human beings constitute together the endogenous worlds that they inhabit*” (Goodwin, 1996, p. 398). As language and meaning emerge as collaborative and interactional creations (Boden, 1994), we consider conversational and discursive analyses as powerful tools for a cultural and communicative approach that offers means adequate to the presentation and explanation of human behaviour and its development.

Conversational and discursive approaches

The approaches of Conversation Analysis (Sacks et al., 1974) and Discourse Analysis (Edwards et al., 1992; Antaki, 1994) aim at analyzing conversations in their actual contexts, in order to identify the sequential patterns of discourse produced by participants. These approaches try to assume the participants’ own perspective, in order to explore the structure of expressions used in conversation (such as words, sounds, movements), as well as the structure of meanings (overall topic, organization in talk, local patterns of coherence in the sequence, implication, assumptions).

In particular, conversational analysts have developed the idea of analyzing the language in interaction as a social organization that is based on some formal properties. Their aim has been to examine the conversational turns and sequences of talk in real-life situations, taking into account the context as a relevant issue for participants. As suggested by Schegloff (1987), “*a notion like ‘context’ will have to remain substantively contentless, and uncommitted to any prespecified referent and be instead*

‘programmatically relevant’ (that is) relevant in principle, but with a sense always to-be-discovered rather than given-to-be-applied” (p. 112). As we do things with our words, they are not inert representations of social action, but they are rather actions designed for the “here-and-now” of their production (Wooffitt, 2005). In fact, CA “*describes methods people use in doing social life [and shows] the detailed ways in which actual, naturally occurring social activities occur and are subjectable to formal description*” (Sacks, 1984, p. 21). In particular, analysts recognize the existence of two levels of organization in conversation: the first one acts on a local basis, turn by turn, in the alternation of speaking turns, because “*the system deals with single transitions at a time in comprehensive, exclusive, and serial fashion*” (Goodwin, 1981, p. 21); the second level considers the conversation as a whole, and as a unit with a beginning and an end. CA claims that the analysis of conversational exchanges should begin without any a priori assumptions about the data at hand, in order to discover the order that is realized through participants’ communicative competencies, and which in turn should be demonstrably relevant to the participants. Although this account has been criticized (Billig, 1999), it is important to point out that CA does not intend to analyze interaction in the participant’s own term, but it does seek to offer accounts of action which are warranted by reference to the ways in which participants display what they take to be relevant to their on-going interaction (Schegloff, 1999).

In continuity with CA, Discourse Analysis has highlighted the relevance of accounts and flexibility in studying language as activity that can invoke psychological states as social practices (Edwards & Middleton, 1986; Potter & Wetherell, 1995). The main claims of DA concern the fact that language is used for a variety of functions and its use has a multiplicity of consequences, as well as the fact that language is both constructed and constructive. Within this approach, the research questions come from observations on features exhibited by data, and the sense of social

actions is analyzed through the participants' use of practical reasoning skills and competencies. This approach also implies an accusation of triviality in the sense that the analyses are considered as potential starting points for social sciences and they can address core issues in a way distinctive to their own epistemological and methodological orientations.

Most of the data analyzed in CA and DA are the results of a similar series of phases: getting on making recordings of natural interactions; transcribing the tapes; analyzing selected episodes; and accounting for detailed aspects. All these phases are linked in a "spiralling fashion" because they cannot be strictly separated. A main concern of these approaches is the possibility to treat data that have been audio- and/or video-recorded. This aspect is not without challenges: the general recommendation for making recordings of data is that these should catch interactions as fully and faithfully as is practically possible. However, the activity of recording is a selection of a "reality", the possibility to catch a portion of the situation that is at stake at a certain point of an activity, within a determined space and time. Thus, audio- and/or video-recorded data have to be considered as *capta* that permit to account for specific and situated episodes of the interactions played by social actors. Other specific aspects of CA and DA are the attention to the system of turn-taking and the speaker's selection. In fact, conversation is regulated by a turn-taking system that allows for minimal gap/minimal overlap and by procedures for the turn shifts (such as processes of self-selection/other-selection). The emphasis on the semantic organization of sequences is thus an alternative to other approaches, such as the speech act theory that is focused on the analysis of utterances and sentences in isolation (Levinson, 1983). However, the whole context and situation under investigation must not be lost in favor of a fragmented view of the interactional activity that participants show during their exchanges.

All these aspects require a strong effort in the implementation of an accurate methodology and in the evolution of every phase in

the research activity. In order to illustrate some of these steps, we present two methodological concerns that seem to us particularly relevant in the qualitative analysis of verbal interactions.

Methodological aspects: Transcribing data

In this section we present more specifically the transcription as the main baseline for the analysis of recorded interactions. Basically, a transcription aims to write down not only what has been said, but also how it has been said in the course of the interaction. As highlighted by Heritage and Atkinson (1984), “*the transcripts result from and represent an attempt to get as much as possible of the actual sound and sequential positioning of talk onto the page, while at the same time making this material accessible to readers unfamiliar with systems further removed from standard orthography*” (p. 12). The transcription can be considered as a “translation” of the actually produced speech into a version of the standardized language of a particular community (e.g. a group of researchers). However, no transcription system is perfect since it represents the results of a series of compromises between heterogeneous considerations. In fact, transcriptions are selective, “theory-laden” renderings of certain aspects of what the tape has preserved of the original interaction.

As the transcriptions are the researcher’s data, the connection between the analysis and the transcription activity concerns the fact that the format of a transcript influences the interpretative process carried out by the reader. Ideally, by a transcript the researcher intends to meet practical as well as theoretical consideration: the transcripts must express the relation between non-verbal and verbal behaviour as accurately as possible. Heritage and Atkinson (1984) have suggested that “*conversation analysts do not claim that the transcription system captures the details of a tape recording in all its particulars, or that a*

transcription should (or even could) be viewed as a literal representation of, or observationally adequate substitute for, the data under analysis. Like all transcription systems, the one used [in CA and DA] is necessary selective [...] and indeed this system is particularly concerned with capturing the sequential features of talk” (p. 12). The process of transcription is an important tool providing the researcher with an understanding of, and an insight into, the participants’ conduct. It is a way to notice and discover particular events and their socio-interactional organization (Heath & Luff, 1993). In this sense, it could be considered as the first step of the analytical process.

In this chapter we are referring to the transcription method elaborated by Jefferson (2004) which attempts to really capture the talk as it is heard by participants. It is a vertical system in the sense that the utterances of different speakers are printed one below the other following the order in which they were uttered. Although extremely time-consuming, it is a necessary tool for performing an adequate interactional analysis. Even if the analysis is concerned with features of lexical content, the full transcript would most fully allow claims to be checked by other researchers (Ochs, 1979), potentially aimed by other goals of research.

This system of transcription includes a series of symbols accounting for turns organization, non lexical sounds and other elements. Here, we include a list of the most common symbols used in CA and DA and the description of their significance. For symbols and transcripts the fonts “Courier” or “Courier New” are usually employed as they are a mono-spaced fonts allowing to easily align different turns of talk. Names and other identifying details of the participants and/or situation are usually changed in order to ensure anonymity.

Transcription symbols

[] Overlapping: the left bracket indicates the point of overlap onset

example: 1. A: how are [you?
2. B: [I'm ok.

The right bracket indicates the point at which two overlapping utterances end, if they end simultaneously, or the point at which one of them ends in the course of the other

example: 1. A: how [are] you John?
2. B: [how]

= Latching: it indicates no break or gap between the end of a prior and the start of a next piece of talk. Two equal signs, one at the end of one line and one at the beginning of the next, indicate no break between the two lines

example: 1. A: yes, I'll do it=
2. B: =yes!

(2.0) Pauses: number in parenthesis indicates elapsed time in seconds

example: 1. A: I think that (3.0) that it is not possible

(.) Micro-pauses: it indicates pauses less than 0.2 seconds

example: 1. A: ehi (.) what about Mike?

mhm Backchannelling

example: 1. A: I was thinking that- mhm, maybe we can try

.h Inhalation

example: 1. A: and .h I'm sure .h I'll do it!

h. Aspiration

example: 1. A: finally, you- you are here. h.

. Falling intonation

example: 1. A: look, there is no possibility to discuss.

? Rising intonation

- example: 1. A: are you sure?
! Exclaiming intonation
example: 1. A: she is here, excellent!
, Continuing intonation
example: 1. A: I have a nice car, a good
job, a great family,
- Abrupt cut-off: the dash indicates a cut-off of the
utterance
example: 1. A: because I get- I get sick
: Prolonging of sound: colons indicate prolongation of
the immediate prior sound. The longer the colon row,
the longer the prolongation
example: 1. A: it's all here?
2. B: yes:::::
- Stressed syllable: the underscore indicates a stress of
a word or a part of it
example: 1. A: I want that one
ABC High tone: upper case indicates loud sounds relative
to the surrounding talk
example: 1. A: YOU SILLY!
((abc)) Double parentheses: it indicates comments added by
the transcriber in order to clarify some elements of
the situation
example: 1. A: I want this ((*pointing at the*
book))
(abc) Single pairs of parentheses: it indicates that the
transcriber is not sure about the words contained
therein
() Empty parentheses: it indicates non-transcribing
segment of talk
example: 1. A: I think that this () is
not real
°abc° Quiet speech: degree signs indicate that the talk is
spoken noticeably quieter than the surrounding talk
example: 1. A: Dear John, °don't sleep
please°

>abc<	<u>Quicker speech</u>
	example: 1. A: please Jack! >no no no no< please
"abc"	<u>Reported speech</u>
	example: 1. A: and Sam said "where are you from?"
abc	<u>Bold</u> : to highlight segments of special analytical interest

Methodological aspects: Doing analysis

When the language is the focus of the investigation, the usual analytical objects in CA and DA are the following: the patterns of interaction; the sequential structures; the social organization of ordinary actions and activities; and the competence and procedures used by participants in interactions (Garfinkel & Sacks, 1970). However, conversation can also be viewed as a way used by the analysts in order to study other aspects of the social interaction, such as cognition, emotion, social identity, positioning (Coulter, 1981; Shotter, 1983; Hollway, 1984; Davies & Harré, 1990; Pontecorvo et al., 2001; Arcidiacono & Pontecorvo, 2010). As Psathas (1995) has pointed out, "*the variety of interactional phenomena available for study are not selected on the basis of some preformulated theorizing, which may specify matters of greater or lesser significance*" (p. 45). The job of the analyst is not to interpret the significance or nature of conversational activities, but to reveal how participants' own interpretations of the ongoing exchange inform their conduct. In other words, analysis can be grounded in the observable activities of the participants themselves.

In order to analyze argumentative exchanges, analysts select a number of conversational sequences occurring in the given interactions. As suggested by Schegloff (1990) "*the organization of sequences is an organization of actions, actions accomplished through talk-in-interaction, which can provide to a spate of*

conduct coherence and order which is analytically distinct from the notion of topic” (p. 53). The participants’ interventions are considered not as isolated turns, but as parts of sequences within the frame of the ongoing observed activity: in fact, it is possible to understand each turn only in connection with the previous and the following one. In order to consider sequences as relevant for a study, it is necessary to refer also to the concept of “participants’ categories” (Sacks, 1992), in order to avoid predictive assumptions regarding interactants’ motivational, psychological, and sociological characteristics. In fact, these factors can only be invoked if the participants themselves are “*noticing, attending to, or orienting to*” them in the course of their interaction (Heritage, 1995, p. 396). In doing a conversational and discursive analysis and in considering the action that an utterance implements within an activity, the fundamental elements that researchers have to consider are three: the formulation of what actions are being accomplished; a grounding of this formulation in the participants’ reality; and the explication of how a particular practice (in terms of utterance or conduct) can yield a recognizable action.

When the qualitative analysis is carried out on transcripts, analysts have to identify the participants’ interventions within the selected sequences and to examine the relevant (informative) passages by going back to the audio and/or video data, in order to reach a high level of consent among researchers. Then they have to build a collection of instances, similar in terms of selective criteria, in order to start a detailed illustration of the conversational sequences. The presentation of excerpts aims at making the selection of cases clear and easy, avoiding the use of pre-established categories. In fact, from an ethnomethodological point of view, courses of action that run off “routinely” must be regarded as “*achievements arrived at out of a welter of possibilities for pre-emptive moves or claims, rather than a mechanical or automatic playing out of pre-scripted routines*” (Schegloff, 1986, p. 115). Summarizing, analysts have to select a sequence; to characterize the actions in the sequence on a turn-

by-turn basis; to consider how the speaker's packaging of actions provides for certain understandings of the actions performed; to consider how the speaker formed it up and delivered it; to consider how the timing and turn-taking provide to achieve the actions; and to consider the ways the actions are accomplished implicate certain identities, roles and relationships for the interactants.

Each excerpt has to be framed in its context of production, naming each part as a case that accounts for certain types of discursive activities. As a consequence, analysts have to remain sensitive to what interactants do, as well as to what they refrain from doing, to realize a given course of action (Maynard & Clayman, 2003). The way in which participants describe something is "reflexively" connected with the analysis because members produce, through talking, the social setting they inhabit in terms of objective features of interactions. Thus, every analyst's effort is made to avoid general or ideal-typical characterizations of interactional procedures in favour of attending to specific instances as they unfold within, are shaped by, and in turn organize concrete circumstances.

Within the first perspective of qualitative view (the study of conversation as the focus of investigation), by the analysis the researcher usually tries to understand how conversational system is locally managed (turn-by-turn), party-administered (by participants), and interactionally controlled (multilaterally shaped). Thus, two elements become relevant: the first concerns the notion of "recipient design" which means that a speaker builds an utterance in such a way that it fits its recipient (Schegloff, 1992). This notion fits with the multiplicity of ways in which participants take into account the particulars of who they are talking to and the events they are engaged in. In other words, recipient design refers to a multitude of respects in which the talk by a speaker in a conversation is constructed in ways which display an orientation and sensitivity to the others who are the co-participants. The second element is related to the fact that in the

analysis of particular instances “*the purpose of generalization (...) is to see whether and how some a priori rule or principle is oriented to by participants in various instances of natural interaction*” (Ten Have, 1999, p. 136). The general interest is not in the activity-as-such, but in specific kinds of context-bound activities. Researcher’s effort is directed not at uncovering hidden meanings, but at the connotations that are actually and observably produced by the participants in and through the interaction.

An example of a family dinnertime conversation introduces us to this kind of qualitative analysis. The selected excerpt is a part of a corpus of data collected in Italy within a research project on family interactions (Pontecorvo, 1996; Pontecorvo & Arcidiacono, 2007). Participants’ families have been asked to videotape their dinnertime 3 times over a 20-day period. All conversations have been fully transcribed and revised by researchers reaching a high level of consent. We present a short excerpt of a dinner conversation in order to illustrate some potential elements of analysis within the first perspective of qualitative research approach.

Excerpt 1

Participants: mother; father; children (Leonardo, 3 years, 9 months; Marco, 10 years, 3 months)

114. Mother: where are you going? ((to Leonardo who is making a move to leave the table))
115. Leonardo: to use the computer
116. Mother: the compUter? ((taking Leonardo by the arm to stop him from getting down from the chair)) you haven’t finished yet. now listen here ALL OF YOU- this story about the computer has to stop
117. Father: no, no. it is enough, it is enough! right? ((to Leonardo))

118. Mother: because it is just not possible. at
 meal times we stay at the table. and
 we eat! no playing with the computer.
*((Leonardo turns his back to the table and climbs down
from the stool on which he was sitting))*
119. Mother: Leonardo don't switch on the computer!
 you haven't finished yet. you must eat
 your fruit.

Excerpt 1 is a short example of a natural interaction among family members at dinnertime. Parents and children are often confronted to different actions and possible ways to cope with that depend on their contingent management of the situation at stake. The starting point of the episode is offered by the action of Leonardo who is moving to leave the table. This nonverbal conduct determines the intervention of the mother (turn 114 “*where are you going?*”), presuming the right to know the reason for the child’s behaviour. The answer of Leonardo (turn 115 “*to use the computer*”) and the reaction of the mother (turn 116 “*the comPUter?*”) produce the opening of a sequence in which participants are engaged in a one-to-one exchange: the mother’s first question (turn 114) obliges the selected recipient (Leonardo) to answer in the following turn (115). This micro-sequence constitutes an “adjacency pair” in which the organization of the turn-taking (the mother asks Leonardo something, selecting him for the next turn) and the nature of the interventions (question-answer) constitute a predictable structure of talk. In fact, an adjacency pair is a minimal sequence of two turns related by a principle of conditional relevance (Schegloff, 1972): given the first pairs part, the second is structurally expected. Usually, participants understand each other and keep the conversation going because they adhere to this structure.

In our case, the conditional relevance depends on the fact that a violation of this kind of organization could be interpreted as a dispreferred turn modality (Pomerantz, 1984), claiming participants to account their conduct. In particular, after the second question at the beginning of turn 116, the mother clarifies

that it is not possible to leave the table if there is still some food to eat. It is very interesting that in her intervention she also includes the other child, Marco, using the plural form (“*listen here all of you*”). By this claim and the stress of a part of the sentence (ALL OF YOU) she is underlying her intention to express a general rule that all family members (the children, in this particular case) have to comply with. Immediately after, the alternation between the child and the mother is broken by the father’s turn of talk that is in alignment with the mother’s claim. In fact, his turn 117 is addressed to Leonardo, aiming at positioning himself from the parental side, and reinforcing what the mother was saying just before. His claim “*it is enough, it is enough*” seems to be a way to complete the previous mother’s interventions and to clarify the connotation of the Leonardo’s behaviour. In legitimizing his claim, the father uses the tag-question “*right?*”, a rhetorical device identified as “extreme case formulation” (Pomerantz, 1986) that is usually employed in order to defend against or counter challenges to the legitimacy of complaints, accusations, justifications, and defenses. Ideally, it entails a request to the defendant to remedy the perceived violation, for instance, by producing an account for the behaviour or by offering an apology. Goffman (1971) explains that this kind of intervention can be considered as “remedial interchanges” because the participant who has violated a rule or norm is expected to produce a remedial activity. The function of this remedial work is to change the meaning that otherwise might be attributed to the conduct at stake with the aim of changing what could be considered offensive into what can be considered acceptable. However, in our excerpt Leonardo is not able to produce a verbal account for his behaviour. As he is missing this opportunity for a remedial interchange, the parents make explicit their arguments against the child’s behaviour in the final part of the excerpt (turns 118 “*at meal times we stay at the table and we eat! no playing with the computer*”). Although Leonardo tries to leave the table again, the mother immediately underlines that it is not possible to switch on the computer if he has not finished

eating. Her final directive (turn 119 “*you must eat your fruit*”) concludes the episode, definitively underlying the parents’ authority within the family participation framework.

As we have pointed out in the introduction of this chapter, there is another possible perspective in doing qualitative investigation of verbal interactions: we are referring to research studies in which the analysis of conversation is a way to explore more specific psychosocial processes that are realized by participants in different settings of interaction. It is the case of several studies conducted within the field of social psychology, in which various cognitive processes have been investigated through the analysis of situations in which participants (usually children) are invited to discuss, to confront themselves with different points of view, to solve problems or to debate (Marro Clément et al., 1999; Whitebread, 2004; Markova et al., 2007; Psaltis et al., 2009; Arcidiacono & Perret-Clermont, 2010; Tartas et al., 2010). These studies refer to a variety of interactive situations in which the analyses of participants’ conducts and of their “minds at work” are the results of the evidences that researchers can identify through what participants say and do during the interactions.

In order to illustrate how the study of conversation can be assumed as relevant in this kind of analysis of social interaction processes, we present a brief episode of discussion among children (aged from 5 to 7 years) and adults in a quasi-experimental setting implemented within a research project on argumentation (Arcidiacono & Perret-Clermont, 2009; Sinclair-Harding et al., in press). In particular, the situation we present in the next excerpt is a revisitation of a Piagetian task in which an adult tests the children’s understanding of the notion of conservation of quantities of liquid via conversation about the effects of pouring juice into glasses of different shape. We have videotaped the interactions in a Swiss school and we have fully transcribed the conversations among participants. Excerpt 2 is a short case of a multiparty discussion among an adult and three children.

Excerpt 2

Participants: experimenter (Exp); children (Mathilde, Matteo, Vincent)

((the experimenter has poured the content of a glass into another smaller and wider glass, and children were asked to discuss the relative quantities of juice in two different glasses: the initial glass and the new smaller and wider glass))

12. Exp: so do they *((referring to hypothetical puppets interested in drinking some juice from the glasses used by the experimenter))* both drink the same amount? *((of juice))*
13. Vincent: mhm *((shakes the head))*
14. Matteo: no *((shakes the head))*
15. Mathilde: ehm, yes! I say that they *((the glasses))* both have the same amount *((of juice))*
16. Exp: ah, so you do not agree.
17. Vincent: no
18. Exp: and why?
19. Mathilde: because they *((the glasses))* both have the same amount. *((of juice))* this one *((the glass smaller and wider))* is similar to the other one. *((the initial glass))*
20. Vincent: bu:t except that it is a- little (.) is bigger. *((referring to the initial glass))*
21. Mathilde: yeah, BUT otherwise it's the same amount.

Piagetian theories sustain that the need for conservation is a kind of functional a priori of logical thinking: in this sense the answers of a child have to be considered as the symptoms of his/her operational stage. Contrarily to Piaget's ideas that considered children's statements as dependent on their cognitive and logical levels, we intend to take into account the children's answers also as the result of the conversation with the adult and

the peers. In fact, through the analysis of the dialogue among participants it is possible to explore to what extent the children's interventions are not "simple" signs of their cognitive competencies, but also a capacity to cope with other points of view within a complex conversational framework.

In excerpt 2, children differently participate to define the solution about the amount of juice in different glasses. After the first experimenter's question (turn 12 "*so do they both drink the same amount?*"), children assume three distinct cognitive positions: Vincent shakes his head in a doubtful way (turn 13 "*mhm*"), as he does not know how to answer; Matteo takes a non-conserver standpoint (turn 14 "*no*"), but without any argument to support his position; and Mathilde recognizes the equality of amount of juice in the two glasses (turn 15 "*ehm, yes!*"). As the children's disagreement could be intended by the adult as depending on children's different cognitive levels, participants are invited to explain why they do not agree (turns 16-18 "*ah, so you do not agree. and why?*"). In this way, the experimenter is trying to understand the grounds of children's positions, but also to implicitly solicit the participants to reach an agreement about the expected answer. As a consequence, Mathilde tries to provide a reason in order to sustain her standpoint (as conserver): the glasses have the same amount because they are similar. The argument she is using concerns the perceptual similar shape of the containers. Although her initial answer was correct (there is the same amount of juice in the two cups), the glasses analogy as a relevant element to affirm the conservation of liquid is not consistent. Mathilde's argument can be reconstructed as a symptomatic scheme, as follows: the amount of juice is the same, because the first glass is of the same size as the second one, and two containers being the same size is symptomatic for the amount of juice in these containers being the same. The inconsistent argument provided by Mathilde produces the reaction of another child. In fact, Vincent who was unsure about the answer at the beginning of the sequence links his intervention (turn 20 "*but*

except that it is a little is bigger”) to the previous turn of Mathilde, saying “*but*” as a sign of opposition. In his view, it could be possible that there is the same amount (as he is not contrasting the first part of Mathilde’s claim in turn 19 “*they both have the same amount*”), but the argument of the similarity of glasses shapes is doubtful. Finally, Mathilde in turn replies to the partner, using a specific communicative form: from one side she is accepting the Vincent’s remark (turn 21 “*yeah*”); from another side she highlights anew her belief about the conservation of liquid in the two containers (turn 21 “*but otherwise it’s the same amount*”). It is interesting to notice that Mathilde employs the same rhetorical structure used by Vincent (“*yes...but*”). This device can be potentially interpreted as a way to build conversational moves as closely linked to the other’s explicit or implicit suggestions rather than the sign of child’s own self-governed logical thinking.

Excerpt 2 shows a possibility to consider the language (through the analysis of dialogues between adult and children) as a way to better understand the interactional dynamics through which different cognitive processes are mobilized and co-constructed during social activities of problem solving. The attention to conversational phenomena that take place during activities of debate, confrontation and discussion can be relevant in a large range of studies in social and educational psychology. Through the detailed account of how adults and children participate in dialogical experiences, we can contribute to the understanding of the growth of thinking. In fact, this process does not take place in a social vacuum, nor is the product of an a-historical individual. Thinking is rather situated and it has its roots in social interactions and conversations.

Concluding remarks

We have presented some aspects of the qualitative approach implied in discursive and conversational studies. Our interest in the investigation of talk-in-interaction has been a starting point to highlight two analytical possibilities (identified in CA and DA) that allow for the account of interactions among people in their everyday social activities. Our idea has been to consider the advantages in combining conversational and discursive methods in order to enrich the analysis of interactional activities within a psychosocial perspective.

Although we are aware of the amount of different bias and epistemological considerations that the choice of an approach implies, we are convinced that a combination of different methods in studying the talk-in-interaction can strongly contribute to improve a qualitative view of the complexity of human processes. From one side, we recognize that it is important to analyze conversations and communicative structures as the focus of the investigation in different research studies in the field of social, developmental and educational psychology. It could permit to better understand cultural and situated strategies and activities that participants use in everyday social interactions as situated and distributed patterns of communication. On the other side, it is also useful to look at the “embeddeness” of thinking in conversations, trying to understand, through the analysis of dialogues, more specific phenomena that take place in social situations of interaction.

We think that a detailed qualitative study of discursive exchanges among people could improve our knowledge in various fields of psychology and education. For example, the analysis of conversation can help us to properly look at the working memory as the ability to hold multiple viewpoints in memory whilst verbally expressing ones’ own opinion; to reconsider the theory of mind; to observe how the executive functioning takes place in terms of volition (the ability to formulate a goal or intention, to provide reasoned argument), planning (the identification and the organization of the process and elements of reasoning needed to

carry out an intention/goal), the capacity to consider alternatives ideas and purposive action (for example, the ability to translate the intention into a productive, self-serving activity, to initiate, maintain, switch and stop sequences of complex conducts in an orderly and integrated manner). Other possible gains could be obtained in the understanding of effective performances in social interactions, such as the ability to monitor, self-correct and regulate the intensity of different deliveries. A further field of interest could be the study of cognitive conflicts in terms of necessity for confrontation and disagreement when a discursive activity violates aspects of existing knowledge, creates uncertainties, poses novelties, seems complex, and the information that is received differs from existing information. At the same time, the attention to interest and social engagement in various activities (such as the commitment and the curiosity to/in a task and its discussion), as well as the motivation and the social awareness of others and compliance of social norms could be considered in more useful ways in the light of qualitative discursive approaches.

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