"What do you say?" The analysis of classroom talk from a sociocultural perspective

Francesco Arcidiacono,

Ph.D. in Psychology, Professor at the Institute of Psychology and Education, University of Neuchatel, francesco.arcidiacono@unine.ch

Francesca G. M. Gastaldi,

the Psychology faculty of University of Turin, Italy

The aim of this paper is to study different situations of classroom talk through the use of a methodology called sociocultural discourse analysis, which focuses on the use of language as a social mode of thinking. Specifically, we intend to apply the categories elaborated within the model elaborated by Mercer (2004). In particular, we refer to cumulative, disputational and exploratory talk in order to analyze data collected through ethnographic observations of 8th and 9th classroom grade interactions. We analyze the recorded school situations through the use of conversation and discourse analyses in order to verify the fit of the above-mentioned sociocultural categories. Our hypothesis is that within the Italian school context is possible to find regularities as signs of regulation's processes within the school activity of social construction, as well discrepancies between the different forms of talk we are referring to. The findings of this study show regularities as concern the cumulative and disputational talk. Concerning the third category we found a level of "proto–exploratory" talk as hybrid category of classroom talk. We argue that the sociocultural discourse analysis is a valid methodology that can be used as a flexible model to analyze different levels of classroom talk.

Keywords: classroom talk, discourse analysis, sociocultural perspective, ethnographic observation

The need to analyze and understand how spoken language is used as a tool for thinking collectively is a major topic within the field of educational sciences. Different methodologies have been elaborated and used to serve particular research interests, such as to study how people pursue joint educational activities. In this paper we intend to analyze different situations of classroom talk, which focus on the use of language as a social mode of thinking. We position our work within the sociocultural approach of discourse analysis in order to highlight how language is a cultural and psychological tool for getting things done. In particular, we will use a specific model of analysis of classroom talk, in order to verify, in the Italian context, how useful it could be within a sociocultural perspective.

The collective classroom talk

Often, researchers have examined the structure of classroom discourse in order to study *"what do teachers and students need to know in order to participate effectively in classroom lessons"* (Mehan, 1985, p. 119). As the first feature of classroom life we can consider the event (Hymes, 1974) as a segment of activity that regularly occurs within the frame of school interactions. Classroom events have unique organizational features, such as whole-group activities in which participants are assembled together with a single focus of attention, or small-group activities, in which students can conduct different activities in separate clusters. Classroom lessons are events because of their interactional nature and their sequential organization, in which talking shifts from party to party as the event unfolds and as a hierarchic structure marked by recurrent behavioural configurations.

In this paper, we refer to classroom interactions as events, such as communicative modalities, that occur between students and teacher in the frame of the school. In this sense, the classroom and the related events can be considered as "micro-systems" (Bronfenbrenner, 1979) characterized by specific speech acts, which are inside "macro-systems" that include not only the school, but also the society and the more large culture in general.

Within the large tradition of the conversational studies in the school context, we refer to the qualitative approaches tending to analyze in an ethnographic way different school interactions (Woods, 1986; Hammersley, 1990). This perspective devotes a major attention to the context by the analysis of the cultural aspects that involved not only students and teachers, but also the researchers called to observe the processes and to interpret the data. Following this perspective (Maroni & Arcidiacono, 2003; Arcidiacono, in press; Pontecorvo & Arcidiacono, in press), we do not reject the fact that previous research underlined differences between formal and informal contexts during the everyday interactions, above all concerning the sense and the means of the discourse. In fact, in an ordinary informal conversation the sense of the discourse is established turn by turn, whereas in the classroom students usually could not negotiate the sense without the teacher. However, as suggested by Fele and Paoletti (2003), the teacher is always engaged to find equilibrium between the control of the classroom activity and the active and autonomous participation of children. In addition, other studies have underlined the link between discursive interactions in classroom and the development of children competences: for example, Orsolini and Pontecorvo (1992) have showed that a less teacher's control of the discursive interaction in the classroom produces additional interactions among children and increases their learning. For these reasons, teachers are called to support discussions and argumentations among students, in order to determine the emergence of a "community", as a place of learning and as a context to define the students' identity.

Within these lines of investigation, the analysis of teacher-student dialogues has generated an account of the different discursive techniques teachers typically used as tools (Mercer, 1995). As teachers and students need to create a shared framework to understand their common knowledge and interests, language is a main tool for creating this framework (for example, by questioning, recapping, reformulating, and elaborating). Teachers often elaborate and reformulate the students' contributions as a way to clarify what has been said for the benefit of the whole classroom. In this sense, language is not only an instrument, but also an object of the socialization process (Edwards, 1990). Our specific interest in classroom talk is devoted to highlight both sides of language.

Analyzing classroom talk: a sociocultural perspective

The theoretical perspective usually called socio-cultural (but also sometimes described as socio-historical or cultural-historical) is not a unified field, but those within it treat communication, thinking and learning as related processes which are shaped by culture (Wertsch, 1985; Wells & Claxton, 2002). The sociocultural perspective intends education as a dialogic process, in which students and teachers are working within settings that reflect the values and social practices of schools as cultural institutions. Different studies have investigated how people use language to combine their intellectual resources in the pursuit of a common task (Middleton & Edwards, 1990; O'Connor & Michaels, 1996). As an interaction is always located within a particular institutional and cultural context, the basis of common knowledge upon which shared understanding depends is constantly being developed by interactants.

A problem in investigating this aspect concerns the possibility to understand how talk is used for the joint construction of knowledge and how speakers construct the contextual foundations of their talk. A useful model in this sense is provided by a typology elaborated by Mercer (2004) that offers a useful frame of reference for making sense of the variety of talk in the classroom context. Three archetypical forms have been identified:

1) *Disputational talk*, characterized by disagreement and individualized decision making ("Yes, it is" versus "No, it's not");

2) *Cumulative talk*, in which speakers construct positively but uncritically a common knowledge of what others have said (through repetitions, confirmations and elaborations);

3) *Exploratory talk*, in which partners offer statements and suggestions for a joint consideration. They actively participate in talk, in order to made more accountable and reasoning their interventions.

By the present work, we intend to show how the discursive analysis of classroom interactions can benefit through the application of those categories. Firstly, at a theoretical point of view, the dimensions of talk in school contexts can be linked to specific aspects of the sociocultural perspective, such as the dialogical knowledge's construction, the collaboration in argumentative

activities, the social value of the verbal exchange within a group. Secondly, through those categories it is possible to study the processes of confrontation and debates that are realized within the school context. In fact, they offer the possibility to understand the functional characters of talk-in-interaction among teachers and students during their discussions on different topics.

Methodological aspects

The present study moves from the idea that in the school context it is possible to analyze relevant aspects and modalities of verbal interactions among students and teachers by the ethnographic observation (Arcidiacono, 2002, 2005) of their everyday classroom practices. We used the Conversation and Discourse Analysis approaches (hereafter CA and DA) as an alternative to the traditional methods of study in social sciences (for a literature see respectively, Sacks, Schegloff & Jefferson, 1974; Atkinson & Heritage, 1984; Psathas, 1995; and McKinlay, Potter & Wetherell, 1993). CA and DA contribute to explore social phenomena in their actual contexts of the everyday life, as they occur spontaneously during natural interactions. These approaches are based on the collection, description and analysis of data mainly collected by ethnographic methods that replace other research methodologies in psychology and education, such as interviews, questionnaires, or experimental procedures. The aim of these approaches is to identify and to describe the sequential patterns of discourse produced by participants during their interactions. The recorded data need to be transcribed and analyzed by a participants' perspective: for this reason, when some relevant phenomena are identified in the corpus of data, researchers are called to build a collection of similar instances and to consider the role of different participants' interventions within a sequence of discourse, and not as isolated turns of talk. In fact, as suggested by Schegloff (1990), *"sequence [...] is another candidate type of unit, the practices of which can underline the production of clumps of talk. 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).

To illustrate a range of interaction modalities developed by participants during conversations, these approaches also refer to the concept of "participants' categories" (Garfinkel, 1967; Sacks, 1992) because CA and DA avoid making predictive assumptions regarding interactants' motivational, psychological, and sociological characteristics. 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 order to examine the interactive sequential procedures by means of which participants jointly accomplish conversations and thereby construct and negotiate social relationships, this analytic framework takes into account both local aspects of talk in interaction and global aspects of the social structure. In the qualitative analysis of conversational sequences, the phenomena could be studied both by an idiographic and

interpretative approach (with a specific attention to the details) and by a nomothetic method (in order to learn something about social regularities of discourses).

Participants and criteria of data collection

The present study is part of a project on the observation of school interactions (Arcidiacono & Pigotti, 2005) that involved classrooms of 8th grade of middle schools and classrooms of 9th grade of high schools located in Rome (Italy). The research project followed different steps in order to access classroom lessons. Before the participant observation and video recording of classroom lessons of Italian literature [1], we obtained the formal teachers' and students' consent to collect the data. We devoted a first meeting to explain to participants the general goal of the research project (such as the observation of interactions within the school context), but without furnishing other elements potentially informative for the participants about our specific research's interests. During the data collection a researcher was physically present in order to video-record the interactions and to move the camera in order to film speakers or specific group activities. As we were authorized to collect data only for few times, a previous practice of familiarization of participants with the instruments (cameras and microphones) has not been possible. However, the presence of the researcher and of the camera has not been perceived as a trouble within the classroom, as revealed by participants after the data collection during a final meeting with the participants. We recorded four lessons in a classroom of 8th grade (including a teacher and 21 pupils) and three in the 9th grade classroom (including a teacher and 17 students). For this study we present and analyze situations in which lessons were based on classroom discussions about current events of the everyday life.

Goals and hypothesis

The main goal of this study is the analysis of classroom talk through the above-mentioned categories elaborated by Mercer (2004) within a sociocultural perspective. We intend to verify if those categories, elaborated within a specific Anglo-Saxon school context, are useful for the analysis of discursive classroom interactions within the Italian context. In particular, we would like to explore if the use of the categories can help us to highlight regularities within the different sequences of talk we have recorded.

Our hypothesis is that within the Italian context there are regularities as signs of regulation's processes within school activities of social construction, as well discrepancies between the categories (as forms of talk) and the discursive sequences we have observed. Specifically, we think that the proposed categories could be not really exhaustive with respect to the characteristics

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[1] We recorded only lessons of Italian literature, because in the Italian school system they cover a lot of didactic time. This choice permitted to have more possibilities to observe classrooms during their curricular activities (when our presence in the classroom was authorized).

of talk in the Italian socio-cultural context. A possible integration of those dimensions will be thus needed.

Qualitative analysis of the classroom talk

All conversational sequences have been transcribed according to the conventions elaborated by Jefferson (1985)[2]. All transcriptions were revised by two researchers (reaching a high level of consent) and then coded. The unit of analysis has been the topic of discourse: we consider the topic as the subject of a sequence of no less than three consecutive turns of at least two different speakers.

We will present in the next section some excerpts concerning discussions in different classroom situations. The excerpts will be qualitatively analyzed in terms of their conversational construction in order to highlight the different types of classroom talk. In particular, we will analyze four excerpts related to different discussions about extra-curricular topics, using the categories of cumulative, disputational and exploratory talk.

Cumulative talk during collective discussions

The first excerpt concerns a typical sequence of cumulative talk in which turns are characterized by repetitions and confirmations. The object of discussion is constructed by participants through latching and specifications that permit to elaborate the meaning of talk through an accumulation of knowledge. The sequence concerns the interaction between the teacher and a student of 9th grade around the topic of youth drugs use.

Excerpt 1

Participants: teacher, student (Giorgia)

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577 Giorgia:    very often young people (.) are conditioned by: by
                the- their group or by eh:: >by their group< because
                sometimes they are mocked because: oh you don't smoke!
                oh you don't use marijuana! that so- so, do like that
                so they do: don't be excluded: they do: (.) the so
                called phenomena. (    )
578 Teacher:    Franco, you are engaged in a:: very active
                conversation, ((Franco is talking with other
                students)) but let's listen what she ((Giorgia)) is
                saying, then you will say which is your position too.
                because if not,
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[2] Each excerpt of conversational sequences is presented into a simple form (see the Appendix for the transcription symbols). For all participants, fictitious names replace real names in order to ensure anonymity.

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579 Giorgia:     so they do it and me too I have to do it because::
                 everybody is doing it, so why do I have not to do it
                 too? I'd to: because if not I'm not good like them,
                 I'm different!
580 Teacher:     so, you are saying that a factor that is conditioning
                 in the drugs' use, that it conditioning for young
                 people in the use, is not just the matter that the
                 circulation of the drugs is free. but you are saying
                 that it is the group of the other young people that
                 solicits this use. is it what you would like to
                 highlight?
581 Giorgia:     it is a psychological matter.
582 Teacher:     it is a psychological matter.
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The sequence is open by Giorgia (turn 577) that presents her own opinion about the drugs' use among young people. In turn 578, the teacher, after a first recontextualization of the situation (Ochs, 1990) addressed to other students, solicits Giorgia to continue and to reformulate the content of her claim. In particular, in turn 580 the teacher specifies what Giorgia affirmed before (*"so, you are saying"*): from one side it could be perceived as the intention to make clearer the previous content of the student; from another side it could be a way to solicit an elaboration of the claim by the girl. Within the same turn, the second round of the same claim is introduced through an adversative form (*"but you are saying"*) with a double role: as a call to Giorgia to make clear her option (*"do you want to say that?"*); and as a way to build a common sense (even with the whole group of students) through the Giorgia's claim. The intervention of Giorgia in turn 581 introduces an original element: in fact, she answers to the teacher's request by an alternative form (*"it is a psychological matter"*) that is not within the range previously offered by the teacher. However, the teacher repeats in turn the words of Giorgia, as a sign to ratify the student's answer.

In this excerpt the interventions of the student are proposals and reformulations of her point of view. The teacher intervenes to confirm and to solicit minimal elaborations (turn 580) or repetitions (turn 582). In this sense, the sequence can be categorized as a cumulative talk: participants offer positive assertions, without an explicit critical position with respect to the claim of the interlocutor. At the same time, within the exchange, there is not just an "overlapping" of claims: participants contribute to elaborate contents of knowledge that are in part shared and in part original. The teacher's repetitions aim at gradually specifying the student's ideas, at elaborating them, and at highlighting the relevant aspects for the general discussion.

The cumulative talk represents several discursive interactions within the school context, in particular concerning the teachers' interventions. This function of teachers' sustain is particularly realized through confirmation, repetitions and reformulations of students' claims. In this sense, the cumulative talk is not allowing elements of full originality. However, there are situations in which, within a conversational sequence, new elements can emerge with characteristics that are for some reasons proper to the cumulative talk, but for some others they are near to other types of talk. The following excerpt is an example of such a case.

Between cumulative and disputational talk

The next excerpt 2 presents a discussion between a teacher and three students about the opportunity to delete religious symbols from the classroom (during last years in Italy there has been a large debate about the obligation to expose religious symbols in all public institutional spaces). The interaction is mainly characterized by typical form of cumulative talk, even if there are critical interventions and counter-positions as forms of disputational talk. For this reason, it is not possible to position the excerpt into one exclusive category, but it is needed to analyze its specific conversational modalities across two levels.

Excerpt 2

Participants: teacher, students (Franco, Fabrizio, Ferdinando and Viviana)

((Franco is talking with the teacher about his point of view on deleting of the crucifix from the classroom))

214 Franco: yes but, professor, it is not possible to delete so-
                something
215 Viviana: we have it in school?
216 Franco: a symbol, because it is a symbol in school only for
                one person.
217 Fabrizio: it is not one person
218 Franco: it is something that is present since [long time
ago
219 Ferdinando: [it is not only
                one person
220   *((different students are talking among themselves))*
221 Franco: (   )
222 Ferdinando: it is a question of respect to another [religion *((to
                Franco))*
223 Teacher: [eh? (.) what?
                ((to Franco))

224 Franco: well, but there is not anymore respect for us! *((to Ferdinando))* they *((foreign people having other religions))* come. we do as they say, but we exist too!

Excerpt 2 is an example of the alternation between repetitions, counter-positions, partial elaborations of contents, and requests to precise their own standpoints. The first intervention of the sequence aims to maintain a previous topic students and teacher were talking about. In fact, in turn 214 Franco said *"yes but"* as a sign of continuity with respect to the earlier claim and, at the same time, of break, through the use of the adversative form. Turns 214 structures the sequence under the form *"claim–question–claim".* The question in turn 215 is devoted to ask for a clarification of the proposed standpoint (*"we have it in school?"*), and the claim in turn 216 introduces new contents to think about the topic (*"a symbol...for one person"*). This new proposal is immediately considered by the next speaker (turn 217, *"it is not one person"*) and becomes a central focus of discussion (cf. turns 218 and 219). This joint construction of the topic permits to the participants a new final elaboration (turn 222, *"it is a question of respect"*). The teacher is then asking for a further elaboration and Franco immediately makes an intervention in order to precise the previous claim of another student (turn 224, *"well but there is not anymore respect for us!"*). It seems that the counter-position of Franco with respect to the claim of Ferdinando has been mediated by the previous soliciting intervention of the teacher. The sequence is thus a sort of collection of interventions under the form of thesis-antithesis, even if the participants do not build a final synthesis. Within this frame, the teacher plays a role of mediator, because she is trying to solicit the elaboration by the students, rather than to offer a solution.

The excerpt seems to be understandable as example of disputational talk: the sequence is characterized by short exchanges, presented as assertions/counter-assertions. The disagreement among students is made explicit through critical claims, repetitions, and gradual elaborations of the ideas. However, the knowledge is developed as accumulation along the sequence (cf. in particular turns 219 and 222). For this reason, the excerpt seems to be between cumulative and disputational talk, sharing at the same time some characteristics of both categories.

Cumulative talk tending to exploratory talk

A fundamental characteristic of cumulative talk is the possibility to specify some contents through confirmations, rounds, and repetitions. At the same time, classroom talk includes not only the accumulation of knowledge, but also the proposal of new contents within a sequence, it can be possible to recognize characteristics of both cumulative talk and "embryonic" elements of exploratory talk. The following excerpt 3 is an example of apparent cumulative talk that can highlight, after a more rigorous examination, elements of exploratory talk.

Excerpt 3

Participants: teacher, students (Enrica and Viviana)

((Enrica is talking with the teacher about her personal experience concerning the drugs' use))

513 Teacher: Enrica, what do you say?

514 Enrica: I'm saying that if somebody goes somewhere it is not obligatory to drink, it is possible also to enjoy, to be with friends, to dance, (   ) a lot of things to do.

515 Viviana: [but is very unusual (   )

516 Teacher: [so (   ) the spots where you usually go there is nobody exceeding. are you saying it?

517 Enrica: it depends. if somebody:: is- would like to do:: for example, would like to do: a stupid thing, he goes to drink a lot. but otherwise I, when I go out, I ask to my friends: so I ask some advice to be more careful

518 Teacher: yeah yeah

519 Enrica: if: not: (.) if I don't know, it- it is not my problem so it is not my problem.

520 Teacher: but sometimes can you see it in spots where you go? So is somebody drunk? a little bit::?

521 Viviana: [me, yes

522 Enrica: [not, not drunk! (   ) not but: e::h two little beers three=four

The sequence is structured through the alternation of counter-positions, confirmations and elaborations of the proposed claims. The first solicitation is made by the teacher, through a request of clarification to Enrica (turn 513, *"what do you say?"*). The answer of the student and the expression of her point of view solicit the request of specification by another student (turn 515). Then the teacher tries to round the position (turn 516, *"so"*), to confirm the contents proposed by the students and, at the same time, to solicit a further elaboration (*"are you saying it?"*). The teacher mediates the exchange between students, trying to ask a partial elaboration and a synthesis. In turn 517, Enrica tries to organize her own opinion through more precise elements, examples, arguments issued by her personal experience. The exchange between the teacher and Enrica goes towards this direction. The teacher invites the student to elaborate and to explicitly verify the relevance of her contents, with respect to the personal experience (turn 520, *"but sometimes you can see it"*). As

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result, two students reply at the same time to the teacher's turn, even if their answers are contrasting (turns 521 and 522). In the whole sequence the conversation is not characterized by a reciprocal confrontation with the aim to co-construct a new knowledge. Instead, there is a progressive articulation of the first claim, through continuous confirmations and repetitions offered by the teacher. In some way, there is an accumulation of contents rather than the construction of new knowledge. However, those characteristics of cumulative talk are associated to form of intervention related to exploratory talk (cf. turns 516 and 517). In fact, some critics, different solicitations to reformulate and to elaborate the claims, as well as suggestions that contribute to offer alternative hypotheses about the topic of discussion are offered. These interventions, as in the previous excerpt, are not used to build a new knowledge (as in a potential typical case of exploratory talk), but they aim at specifying the contents at stake. The alternation between cumulative and exploratory talk shows how the sequence is at an intermediate level between these two categories.

Disputational talk

Disputational talk concerns short contrastive turns. When the interactions are built within this alternation of affirmations and counter-affirmations, there is not a co-elaboration of original contents. The following excerpt 4 is an example of this type of conversational sequence within an interaction between the teacher and four students.

Excerpt 4
Participants: teacher, students (Ferdinando, Jasmine, Franca and Michele)

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((participants are discussing about the use of drugs, based on a
newspaper article selected by students))
556 Teacher:    always within: the remark made by Franca, she is for
                the marijuana's legalization
557 Ferdinando: not. I don't know what to say. I don't like this
                matter of drugs. any drug I::=I don't like even to
                smoke.
558 Teacher:    mh mh.
559 Ferdinando: but, I don't know.
560 Jasmine:    it is something, like somebody kills somebody else and
                nothing will happen. if you begin to use drugs, then
                you will continue. so you can imagine a little 10
                years old boy, as it is legal, he can use drugs.
561 Franca:         [but not! it is like cigarettes. So,
562 Teacher:    [you are saying that the legalization will increase
                everything. are you saying it?
563 Jasmine:    yes
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564 Franca: so what! as for cigarettes, I don't think that
                 somebody will sell cigarettes to a child.

565 Teacher: beh

566 Ferdinando: yes on the contrary! yes on the contrary.

567 Michele: there are 13 years old children that are smoking.

In excerpt 4, the teacher introduces the topic of discussion through a link to a previous student's claim (turn 556, *"always within the remark made by Franca"*). Various students offer their claims as different opinions and contrastive contents (for example in turn 559, *"but, I don't know"*, in turn 561, *"but not"*, and in turn 564, *"so what"*). In turn 558, the teacher tries, through minimal intervention (*"mh mh"*), to offer to students the opportunity to express their positions. She also summarizes the content of the conversation through a reformulation and a request of confirmation (turn 562). However, the character of talk remains individualized and linked to a disputational level. In fact, assertions and counter-assertions given by participants does not allow for a co-construction of knowledge.

Discussion and conclusion

In this work we have analyzed classroom talk through the use of categories elaborated within a sociocultural approach. Our goal has been to verify to what extent these categories are useful and pertinent within school discursive interactions in the Italian context.

The findings of this study reveal how different conversational situations are structured with respect to the characteristics of disputational talk (excerpts 2 and 4). In fact, we have found interactions in which opinions are presented as individual proposals, through short exchanges, and assertive, negative or imperative claims. As contents are not really elaborated and co-constructed, the result is the presence of different positions, and often counter-positions, without the emergence of new knowledge. Other situations (excerpts 1 and 3) are characterized by a cumulative talk, in which repetitions, confirmations, and minimal elaborations are present. However, the tendency to cooperate among participants is not opening possibilities to build a new knowledge.

On the contrary, in our data there are not explicit and clear situations of exploratory talk, even if some exchanges (in excerpts 2 and 3) are including characteristics of continuous and critical confrontations that can potentially solicit new contents of knowledge. We recognize that the absence of forms of exploratory talk can be related to specific characteristics of the participation framework and to the influence of the applied methodology. For example, the partial exhaustive nature of the proposed categories could lead to look for situations of exploratory talk even if the real context we observed does not allow for this possibility. In this sense, if the categories' model is perceived as ideal, there are not opportunities to identify intermediate levels of talk between cumulative, disputational and exploratory talk. However, as we have found situations in which there are embryonic, germinal characteristics of exploratory talk with respect to its expected

canonical form, we suggest to pay attention to the presence of micro-sequences of potential exploratory talk.

We think that it is useful to assume (and to use) the proposed categories as interpretative possibilities to understand the classroom talk. In particular, it is possible to refer to cumulative and disputational forms of talk from a semantic point of view rather than in a strictly taxonomic way, in order to reconsider data on the ground of other evidences. Concerning the exploratory talk, our study suggests to consider forms of "proto–exploratory talk" in order to mark in a more flexible and graduated way the shift from a category to another. The dynamic character of classroom interactions can increase new hybrid forms of talk that have to be taken into account in order to better understand the conversational exchanges among students and teachers. In this sense, we consider overlappings and intermediate levels between the proposed categories as powerful features of the sociocultural approach we examined, rather than a limitation.

In conclusion, we underline the value of the sociocultural discourse analysis to examine and assess the linguistic process whereby people use language to introduce new information, orientate to each other's perspectives and understandings and pursue joint activities. We think that further research in this direction can contribute to address more specific research questions about how language is used within the classroom context in order to carry out the process of teaching and ¬learning in school. In this way it will be useful to plan educational interventions in order to track the development of common knowledge amongst the teacher and students of a class, to examine the ways that teachers seek to guide students through a series of related educational activities and to induct them into new ways of using language as a tool for thinking together.

References:

1. Arcidiacono, F. Note sul metodo osservativo e su alcune applicazioni in psicologia dello sviluppo. Rassegna di Psicologia, 19(1), 2002.

2. Arcidiacono, F. Ricerca osservativa e analisi qualitativa dell'interazione verbale. Rome, 2005.

3. Arcidiacono, F. (in press). Conversation in educational contexts: School at home and home at school. In G. Marsico G., K. Komatsu, & A. Iannaccone (Eds.), Crossing Boundaries. Intercontestual Dynamics between Family and School. Charlotte: Information Age Publication.

4. Arcidiacono, F., & Pigotti, M. C. L'emergere dell'identità di adolescenti di terza media e primo superiore nelle discussioni in classe su temi di attualità. Psicologia scolastica, 4(3), 2005.

5. Atkinson, J. M., & Heritage, J. (Eds.) Structures of Social Action: Studies in Conversation Analysis. Cambridge, 1984.

6. Bronfenbrenner, U. The Ecology of Human Development: Experiments by Nature and Design. Cambridge, 1979.

7. Edwards, D. Language in education. In H. Giles, & W. P. Robinson (Eds.), Handbook of language and social psychology (pp. 476-494). Chichester, 1990.

8. Fele, G., & Paoletti, I. (2003). L'interazione in classe. Bologna: Il Mulino.

9. Garfinkel, H. Studies in Ethnomethodology. New York, 1967.

10. Hammersley, M. (Classroom ethnography. Empirical and methodological essays. Buckingham, 1990.

11. Heritage, J. (1995). Conversation analysis: Methodological aspects. In U. M. Quasthoff (Ed.), Aspects of oral communication (pp. 391-418). Berlin, 1995.

12. Hymes, D. Foundations in sociolinguistics. Philadelphia, 1974.

13. Jefferson, G. An exercise in the transcription and analysis of laughter. In T. van Dijk (Ed.), Handbook of Discourse Analysis (pp. 25-34). London, 1985.

14. Maroni, B. & Arcidiacono, F. The conversation like socialization in educational contexts. In G. T. Papanikos (Ed.), Education. Vol. III: Primary and Secondary Education (pp. 333-339). Athens, 2003.

15. McKinlay, A., Potter, J., & Wetherell, M. S. Discourse analysis and social representations. In G. M. Breakwell, & D. Canter (Eds.), Empirical Approaches to Social Representations (pp. 39-62). Oxford, 1993.

16. Mehan, H. The structure of classroom discourse. In T. A. van Dijk (Ed.), Handbook of Discourse Analysis. Vol. 3: Discourse and Dialogue (pp. 119-131). London, 1985.

17. Mercer, N. The Guided Construction of Knowledge. Clevedon, 1995.

18. Mercer, N. Sociocultural discourse analysis: Analysing classroom talk as a social mode of thinking. Journal of Applied Linguistics, 1(2), 2004.

19. Middleton, D., & Edwards, D. (Eds.) Collective Remembering. London, 1990.

20. Ochs, E. Indexicality and socialization. In J. Stigler, G. Herdt, & R. Shweder (Eds.), Cultural Psychology: Essays on Comparative Human Psychology (pp. 287-308). Cambridge, 1990.

21. O'Connor, C., & Michaels, S. (1996). Shifting participant frameworks: Orchestrating thinking practices in group discussion. In D. Hicks (Ed.), Discourse, Learning and Schooling. Cambridge: Cambridge University Press.

22. Orsolini, M., & Pontecorvo, C. Children's talk in classroom discussion. Cognition and Instruction, 9(2), 1992.

23. Pontecorvo, C., & Arcidiacono, F. (in press). Development of reasoning through arguing in young children. Cultural-Historical Psychology.

24. Psathas, G. Conversation Analysis: The Study of Talk-In-Interaction. London, 1995.

25. Sacks, H. Lectures on Conversation. Cambridge, 1992.

26. Sacks, H., Schegloff, E. A., & Jefferson, G. A simplest systematics for the organization of turn-taking for conversation. Language, 50, 1974.

27. Schegloff, E. A. On the organization of sequences as a source of "coherence" in talk-in-interaction. In R. Freedle (Ed.), Advances in discourse processes: Conversational organization and its development (pp. 51-77). Norwood, 1990.

28. Wells, G., & Claxton, G. (Eds.) (2002). Learning for Life in the 21st Century. Oxford, 2002.

29. Wertsch, J. V. (Ed.) Culture, Communication and Cognition: Vygotskian Perspectives. Cambridge, 1985.

30. Woods, P. Inside schools. Ethnography in educational research. London, 1986.

Appendix: Transcription symbols

.   falling intonation

?   rising intonation

!   exclaiming intonation

,   continuing intonation

-        abrupt cut-off

:   prolonging of sounds

_   stressed syllable

> <   quicker speech

[simultaneous or overlapping speech

=   contiguous utterances

(.)   pause (2/10 second or less)

( )   non-transcribing segment of talk

(( ))   comments added by the researcher