

Conversation Analysis and Education

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Introduction

Conversation analysis (CA) has been concerned with education from an interest in how educational practices are accomplished by participants as situated activities. First and foremost this has meant an interest in interaction in classrooms as the primordial site of formal education. Conversation analysts aim to analyze how teachers and pupils establish “order” in the classroom; not order as the pedagogical teacher problem of how to keep pupils from disruptive behavior, but order in the sense of bringing about classroom interaction in such an “orderly” manner as to become recognizable and interpretable as classroom interaction, both for teachers and pupils as participants, and for us as observers and analysts. And when the issue of pedagogical order and teacher authority does get analyzed, as in Mehan (1979) or Macbeth (1990), it is dealt with as an instance of the latter type of “order,” not as a unilateral teacher problem, but as an interactional accomplishment of both teacher and pupils.

Although CA has also produced studies of student group work (Ford, 1999; Melander & Sahlström, 2009), teacher–student dyads (Koole, 2010), and student–student dyads (Hellermann, 2008), the interest in the orderly production of classroom interaction has primarily focused on frontal teaching to the whole class. Two basic organizational features of informal talk-in-interaction have also been important foci of CA studies of education: *turn management*, or how teacher and pupils organize their mutual speaking and listening, and *sequential organization*, with an interest in the interactional organization of classroom activities. Recent studies show an increasing interest in learning as an interactional activity and an interest specifically in teaching second language classes.

In studying these organizing features, a research interest has been the relation between classroom interaction and informal face-to-face conversation. CA takes informal conversation to provide a basic set of interactional norms and resources, some of which can be adapted for institutional practices, while others remain intact. The CA treatment of classroom interaction shows a long line of studies of the relation between informal and educational interaction, some arguing that basic principles have become adapted to institutional practice (e.g. McHoul, 1978, on turn taking; Mehan, 1979, on sequence organization), some showing that basic principles are incorporated into classroom practices (e.g. Hellermann, 2003, on syntax and prosody as interaction organizing resources; and Lerner, 1995, Koshik, 2002a, 2002b, Margutti, 2006, and Koole, 2010 on question–answer relations), and some disputing whether similar phenomena from informal and classroom interaction should be seen as adapted or different (e.g. McHoul, 1990, and Macbeth, 2004, on repair and correction).

Turn Management

Sacks, Schegloff, and Jefferson in their 1974 paper on turn taking had already suggested that in different institutional contexts we would see different means for allocating turns that

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can be described as deviations from the turn-taking systematics of informal conversation. This challenge was taken up by McHoul (1978) when he analyzed teachers and pupils as having asymmetric turn-allocation rights. This amounted to a systematics that is a modification of the Sacks et al. (1974) model for informal conversation in two major respects. In contrast to informal conversation

1. pupils may not self-select after each turn-completion point of the present speaker, but must wait to be selected by the teacher; and
2. pupils do not have the right to select a next after they complete their turn, the teacher is always the next speaker.

Since 1978, however, conversation analysts have found student self-selection to be much more ubiquitous than could be predicted from McHoul's analysis (e.g. Sahlström, 1999). A major classroom technique for turn allocation is a conditioned form of pupil self-selection whereby a teacher invites all pupils to take a turn or bid for a turn (Mehan, 1979; Mazeland, 1983). In excerpt (1) we see both turn-allocation techniques.

(1) [Mazeland (1983)]

- 01 TEA: wie heeft er nog wel jaartallen verder dan driehonderd
who has heard of any years beyond three hundred
02 voor Christus gehoord.
before Christ
03 PUP: ja, zeshonderd jaar voo[r Christus
yes, six hundred before Christ
04 TEA: [zeshonderd jaar voor Christus.
six hundred before Christ.
05 TEA: weet jij iets van zeshonderd jaar voor Christus?
do you know anything of six hundred before Christ?

In lines 1–2 the teacher invites pupils to self-select by asking a question addressed to all pupils with “who.” In line 5, subsequently, the teacher selects a single student, addressed with “you” (sg.), for a next turn.

An important focus of CA studies of turn management in classrooms has been on teacher techniques for allocating turns. In his influential study “Learning Lessons,” Mehan (1979) was concerned with the difference between “individual nominations” (as in excerpt 1, line 5) and whole-class-directed invitations in particular “invitations to bid,” for example by raising a hand, and “invitations to reply” by self-selecting (excerpt 1, lines 1–2). Others have focused their analytical attention on the design of teachers’ turn-allocating turns (Lerner, 1995; Koschmann, Glenn, & Conlee, 2000; Koshik, 2002a; 2002b). A teacher-turn format that is often used in classrooms is what Koshik (2002a) calls the “designedly incomplete utterance”: The teacher produces an utterance that is designed to be completed by a pupil.

In comparison to the research on teacher-allocation techniques, much less attention has been given to the work pupils do to get turns. Yet the studies that exist convincingly demonstrate pupils’ active hand-raising behavior (Sahlström, 1999) or verbal bids, often in combination with hand raising, as techniques for getting turns, or the opposite: They may do work to avoid getting turns. Sahlström (1999) discusses the example of Sven, who only raises his hand at places where the teacher’s turn is audibly not yet complete, and as a result does not get a turn.

Sequence Organization

The sequential structure that has, without question, received most attention in studies of classroom interaction is the IRF sequence. In this sequence, first analyzed extensively from a CA perspective by Mehan (1979), a teacher performs an initiative action (I: initiation), the pupil responds to that initiative (R: reply), and the teacher then provides feedback to that response, often an evaluation (F: feedback). This sequence may be used as in excerpt (2) where a primary school teacher instructs pupils to move their seats, and subsequently evaluates the move as “good.”

(2) [Mehan (1979)]

- 01 TEA: these four people over to Martin
 02 PUP: ((*move to seats*))
 03 TEA: good Rafael

And it is used very ubiquitously to discuss educational content, as in excerpt (3), where a mathematics teacher and a pupil look at the axes of a coordinate system.

(3) [Koole (2010)]

- 01 TEA: hier nemen ze stapjes van?
 here they take steps of?
 02 PUP: tien
 ten
 03 TEA: ja.
 yes

Here, the teacher asks a question, the pupil answers that question, and the teacher evaluates that answer as correct. The third turn shows that the teacher knew the answer to his own question, and for that reason these teacher questions are also known as “known information questions” (Mehan, 1979).

The IRF sequence consists of three related sequential “positions” (I, R, F), but not necessarily of three turns. A sequence can be expanded to include more turns, as in excerpt (4), where the teacher’s negative evaluation in line 3 induces the pupil to correct her first answer. Only after the pupil’s answer in line 4 receives a positive evaluation (line 5) does the sequence come to a close.

(4) [Koole (2010)]

- 01 TEA: juist, wat is hier het kleinste getalletje?
 Right, what is the smallest number here?
 02 PUP: zes (.) tien
 six (.) ten
 03 TEA: nee,
 no,
 04 PUP: tien, tien
 ten, ten
 05 TEA: tien
 ten

The I–R Relation

CA research of this IRF sequence has produced several educationally relevant insights into the relation between the three sequential positions. As far as the relation between Is and Rs is concerned, the question at stake is how particular types of teacher Is make pupils respond with particular types of Rs. One of the earliest findings in CA is that we overwhelmingly organize our talk as action pairs called “adjacency pairs” (Schegloff, 2007), such as a pair of greetings, or question–answer pairs. The two parts of such pairs are produced by two different speakers, which makes the production of a first-pair-part an appropriate tool for turn allocation. Following a first-pair-part, speaker change needs to occur. Second, the pairs are type-governed. A greeting needs a return greeting, and a question needs an answer. Moreover, this relation between questions and answers has been discovered to be so specific that particular question formats project particular types of answers. Not only does, for example, a *why*-question project a reason-answer and a *where*-question a location-answer, but, more interestingly for educational practice, questions with built-in answer options commonly project one of the options as the “preferred” answer (Schegloff, 2007).

The most common question of this type is the yes/no question, with its two answer options “yes” and “no,” and these yes/no questions very frequently embody a “preference” for either a “yes” or a “no” answer. This feature of yes/no questions is used as an educational resource in producing the first position of the IRF sequence. Koshik (2002b), for example, found that teachers use yes/no questions that prefer no-answers to point essay-writing students to problematic aspects in their writing.

(5) [Koshik (2002b)]

- 01 TEA: are you gonna talk about it? in relation to: de Gaulle?
 02 STU: (this) nuh uh. heh:=
 03 TEA: =not right here right?
 04 STU: yeah

In excerpt (5) the teacher question in line 1 indicates for the student that at this point in his essay (“in relation to de Gaulle”) he was not supposed to talk about “it.” We see the student in his response treat the question indeed as introducing a problem, and the teacher confirms this in line 3. Margutti (2006) and Koole (2010) show that this use of question preference for educational purposes is present in several other types of questioning, such as questions with two answer options (“up or down”; “mountains or plains”) of which one is the preferred option.

The R–F Relation

Another line of research has focused on the relation between the last two sequential positions, R and F. Hellermann (2003) noticed that teachers often evaluate student answers by repeating that answer. Prosody is used in these evaluations to distinguish repetitions that make a positive evaluation from other repetitions. McHoul (1990) compared teacher evaluations of pupil answers to the Schegloff, Jefferson, and Sacks (1977) analysis of repair in informal conversation, and found on the one hand that in educational contexts also there is a preference for self-initiation and self-correction of errors, while on the other hand other-initiations and other-corrections—by the teacher—are more frequent than in informal contexts.

Conclusion

The study of the situated accomplishment of educational order has been exemplified here with studies of turn management and sequential organization, two basic organizing principles of both informal and classroom interaction. These studies show that classroom interaction is related to informal conversation in ways that are educationally relevant, and in return can provide insights into the nature of informal talk. This relevance for application is not always immediately embodied in the research outcomes, sometimes because of the actual distance between analysis and application, sometimes also because analysis needs to be translated into application. Let us conclude with an example of the latter. Given the preference embodied in a yes/no question for either “yes” or “no,” teachers are better advised to apply such questions in activities that seek to convey information to pupils than in activities that seek to check pupils’ understanding; or, to phrase it tangentially, teachers are better advised to treat such questions and their answers as a means for conveying knowledge than as a means for checking it. The preference norms that inform these question–answer relations are examples of a normative interactional organization that, in contrast to for example the norms for turn allocation, are directly incorporated from informal conversation into classroom interaction to accomplish educational order.

SEE ALSO: Conversation Analysis and Classroom Interaction; Conversation Analysis and Ethnomethodology; Conversation Analysis and Institutional Interaction; Conversation Analysis and Language Acquisition; Conversation Analysis and Learning in Interaction; Conversation Analysis Methodology in Second Language Studies; Conversation Analysis: Overview; Conversation Analysis and Repair Organization: Overview; Conversation Analysis and Second Language Acquisition: CA-SLA; Conversation Analysis and Turn Taking

References

- Ford, C. (1999). Collaborative construction of task activity: Coordinating multiple resources in a high school physics lab. *Research on Language and Social Interaction*, 32(4), 369–408.
- Hellermann, J. (2003). The interactive work of prosody in the IRF exchange: Teacher repetition in feedback moves. *Language in Society*, 32, 79–104.
- Hellermann, J. (2008). *Social actions for classroom learning*. Clevedon, England: Multilingual Matters.
- Koole, T. (2010). Displays of epistemic access: Student responses to teacher explanations. *Research on Language and Social Interaction*, 43(2), 183–209.
- Koschmann, T., Glenn, P., & Conlee, M. (2000). When is a problem-based tutorial not a tutorial? Analyzing the tutor’s role in the emergence of a learning issue. In C. Hmelo & D. Evensen (Eds.), *Problem-based learning: Gaining insights on learning interactions through multiple methods of inquiry* (pp. 53–74). Mahwah, NJ: Erlbaum.
- Koshik, I. (2002a). Designedly incomplete utterances: A pedagogical practice for eliciting knowledge displays in error correction sequences. *Research on Language and Social Interaction*, 35(3), 277–309.
- Koshik, I. (2002b). A conversation analytic study of yes/no questions which convey reversed polarity assertions. *Journal of Pragmatics*, 34, 1851–77.
- Lerner, G. (1995). Turn design and the organization of participation in instructional activities. *Discourse Processes*, 19, 111–31.
- Macbeth, D. (1990). Classroom order as practical action. *British Journal of Sociology of Education*, 11, 189–214.
- Macbeth, D. (2004). The relevance of repair for classroom interaction. *Language in Society*, 33, 703–36.

- Margutti, P. (2006). "Are you human beings?" Order and knowledge construction through questioning in primary classroom interaction. *Linguistics and Education*, 17, 313–46.
- Mazeland, H. (1983). Sprecherwechsel in der Schule. In K. Ehlich & J. Rehbein (Eds.), *Kommunikation in Schule und Hochschule: Linguistische und ethnomethodologische Analysen* (pp. 77–101). Tübingen, Germany: Narr.
- McHoul, A. (1978). The organization of turns at formal talk in the classroom. *Language in Society*, 7, 183–213.
- McHoul, A. (1990). The organization of repair in classroom talk. *Language in Society*, 19, 349–77.
- Mehan, H. (1979). *Learning lessons: Social organization in the classroom*. Cambridge, MA: Harvard University Press.
- Melander, H., & Sahlström, F. (2009). In tow of the blue whale: Learning as interactional changes in topical orientation. *Journal of Pragmatics*, 41(8), 1519–37.
- Sacks, H., Schegloff, E. A., & Jefferson, G. (1974). A simplest systematics for the organization of turn-taking for conversation. *Language*, 50(4), 696–735.
- Sahlström, F. (1999). *Up the hill backwards: On interactional constraints and affordances for equity-constitution in the classrooms of the Swedish comprehensive school*. Uppsala studies in education, 85. Uppsala, Sweden: Uppsala University.
- Schegloff, E. A. (2007). *Sequence organization in interaction: A primer in conversation analysis*. Cambridge, England: Cambridge University Press.
- Schegloff, E. A., Jefferson, G., & Sacks, H. (1977). The preference for self-correction in the organization of repair in conversation, *Language*, 53(4), 361–82.

Suggested Readings

- Baker, C. D. (1997). Ethnomethodological studies of talk in educational settings. In B. Davies & D. Corson (Eds.), *Encyclopedia of language and education*. Vol. 3: *Oral discourse and education* (pp. 43–52). Dordrecht, Netherlands: Kluwer.
- Heap, J. (1997). Conversation analysis methods in researching language and education. In N. H. Hornberger & D. Corson (Eds.), *Research methods in language and education*. Vol. 8 (pp. 217–26). Dordrecht, Netherlands: Kluwer.
- Hester, S., & Francis, D. (Eds.). (2000). *Local educational order: Ethnomethodological studies of knowledge in action*. Amsterdam, Netherlands: John Benjamins.