

A short remark on the analysis of institutional interaction: the organization of repair in lessons

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abstract

I examine two aspects of the organization of repair in classroom interaction. I focus on the ways teachers elicitate correction of errors in pupil turns. Teachers use various techniques to initiate a pupil correction of an error. I will discuss techniques that only signal the occurrence of an error in prior turn, techniques that locate the error more precisely within prior turn, techniques that analyze the sources of the error and, finally, techniques that instruct the pupil how to make the correction. The design of teacher next-turn repair initiator turns (NTRI) turns is governed by a relative ordering of such techniques of error handling. In turns with more than one repair-initiation technique, 'weaker' techniques are followed by 'stronger' ones. If more than one sequence is needed, the next repair initiation is stronger than the previous one.

I will also look at a particular type of teacher other-correction in classroom interaction. Teachers discern systematically between types of errors. I describe one such difference in terms of Jefferson's distinction between 'interactional' and 'production' errors. Production errors are less 'focussable.' They are corrected 'on-the-fly,' in a way that minimizes the disruption of the ongoing talk. Interactional errors done in an exposed, discontinuous manner that allows error correction to become the actual business at hand.

¹ The paper is a concise version of a couple of papers I wrote within the research project 'Analysemethoden von Unterrichtskommunikation' sponsored by the German Research Society DFG ('Deutsche Forschungsgemeinschaft,' DFG Az. Re 524; see Mazeland 1984 and (*mimeo*). It was first presented at a conference on "Discourse in Institutions," Dortmund University, October 1986. A Dutch version has appeared as Mazeland 1986. See www.let.rug.nl/~mazeland.

The observations regarding the organization of repair in lessons illustrate the point that institutional interaction is not simply a reduced form of conversational interaction. Members use specialized methods that enable them to deal with recurrent tasks and problems in a specific type of situation.

1. The analysis of the interaction in institutional settings

Because of limited space and also because I want to make a point that can be taken up in the discussion, I will confine myself to a view on the analysis of institutional interaction that has been put forward in the conversation analytic literature. I shall illustrate my point with results from my research on the organization of repair in lessons.

Since Sacks, Schegloff and Jefferson's paper on the organization of turn taking, institutional interaction is often seen as a subset of the methods used in conversational interaction. Sacks and his co-authors describe turn taking in conversations as located at one pole on a linear scale. The other pole is occupied by ritual forms of interaction with categorical pre-allocation of turns. Everything in a ritual is fixed and pre-allocated, whereas conversational interactions are locally organized and in no way determined in advance. Non-ritual types of institutional interaction are seen as reduced and restricted forms of conversational interaction that - depending on the degree of pre-allocation - are located somewhere between these poles.

Most of the c.a.-work on institutional interaction I know presupposes this scalar model. It provides a global framework for the analysis of interaction in institutional settings. Organizational features are described as restrictions on the turn taking system for conversation and interactional activities are studied by examining how actions are selectively distributed over types of participants. Sequence organization itself is seen as a set of universally available devices. In the words of Thomas P. Wilson (*unpubl.*), sequence organization is thought of as "blind to" situational identities such as teacher and pupil, physician and patient, or judge and defendant.

I do not deny that *restriction* is not important or central. But I think one can also find evidence that some forms of institutional interaction are a kind of *specialization* of elementary organizational and sequential devices. Next to restriction, specialization accounts for the

particulars of institutional interaction. I am not saying this is a new perspective in the analysis of institutional interaction. I just want to stress the relevance of 'specialization' for the way we think about institutional interaction. Interactional devices are adapted and elaborated in a way that enables participants to deal with recurrent tasks and problems.

2. the design of next-turn repair-initiation turns in classroom interaction

I want to illustrate the mechanism of specialization with two observations about the organization of repair in lessons (*see* Mazeland 1986).² The first one is about the ways teachers initiate repair after turns in which a pupil has made an error. Lessons are a very repair-friendly type of event. Pupil utterances are frequently treated as problematic by teachers. They do so in a way that is partly in line with the organization of repair in conversations as described by Schegloff, Jefferson and Sacks (1977). The preference for self-correction also guides the ways teachers deal with a trouble source in a prior pupil turn, whereas the preference for self-initiation of repair is oriented to in the ways teacher initially deal with a repairable in the preceding pupil turn.

There are also differences, however. For instance, regarding the ways teachers construct repair-initiation turns. In conversations, the recipient of a turn that causes trouble indicates the occurrence of a trouble source in prior turn through the use of forms such as the non-lexical token *huh?*, non-specific question words such as *what?*, or the repeat of a part from prior turn that locates the trouble source more precisely. Teacher *next-turn repair-initiation* turns display a broader range of construction formats. Teachers may also indicate the occurrence of an error in prior turn by overtly rejecting it ('*no*,' in line 21 of fragment 1 below), or by explicitly asserting the occurrence of an error in prior turn (as in line 29):

² My data were the transcriptions of (video) recordings of 5 lessons and 15 opening fragments of lessons. The recordings were made within the project 'Kommunikation in der Schule' (KidS) under the supervision of Konrad Ehlich and Jochen Rehbein.

(1) 160176 / English lesson. *error-indication, lines 21, 25 and 29*

14 Teacher: und damit ham wir dann auch gleich
15 schon die Überschrift,
[and because of this we already know what the title will be.]
16 0.7
17 wer kann se mal komplett sagen?
[who's able to say it [mal] completely]
18 1.1
19 Pupil1: the greengrocer.
20 (.)
21 Teacher: → nö:.
[no]
22 Pupil2: nei-
[no-]
23 Pupil3: at the greengrocer.
24 1.5
25 Teacher: → once again.
26 0.5
27 Pupil3: at: the greengrocer.
28 0.8
29 Teacher: → no, there was a mistake.
30 0.3
31 Pupil4: at the greengrocer's:.
32 0.4
33 Teacher: that's right.

Rejections and error assertions qualify the trouble in prior turn as an error type of problem. Moreover, they also show that the recipient presents herself as a participant who is able to assess its correctness.

Rejections and error assertions claim the occurrence of an error in prior turn. Teacher often do more than just *indicate* the occurrence of an error, however. They may *locate* the trouble source element very precisely through carefully formatted repeats of the trouble source element. One way to do so is through singling out the repairable from its framing environment by the use of contrastive stress and/or the pre- or postpositioning of short within-turn silences. See line 40 in (2):

(2) 160176 / English lesson. *error-indication, line 35; error-location, line 40*

33 Uwe: in the: Oxford:street.
34 (.)
35 Teacher: → there's a mistake.
36 ⌈ 2.0
37 Pp: ⌋ ((*several pupils raise hands*))
38 Uwe?: u:h
39 1.3
40 Teacher: → you said (0.5) in the (0.3) Oxfordstreet.
41 0.5
42 Uwe?: uh
43 Conny:in uh (.) in
44 0.7
45 Uwe: in Oxfordstreet.
46 Teacher: ⌋yes:. right.
47 0.4
48 she goes shopping in Oxfordstreet.

Teachers do not confine themselves to signalling or locating an error in prior turn. They can also analyze how the error was caused (*error method*, see line 458 in fragment 3):

(3) 210176 / mathematics. *indication, line 455; error-method, line 458*

450 Teacher: sechs Ganze (.)in achzehntl
six whole [numbers] (.) into eighteenth
451 2.7
452 Manfred: drei.,
three
453 0.8
454 P3: °nei:n!
no:!
455 Teacher: → Ne:e,
No,
456 (.)
457 Teacher: och Manfred,
[och] Manfred,

458 → du verwechselst das jetzt.
 you are mixing it up now.

459 1.7

A teacher thus may indicate, locate or analyze an error in a prior pupil turn. The teacher thereby provides an opportunity for error correction in the next pupil turn. All these construction types of NTRI-turns deal in a primarily retroactive way with the trouble. They tell something about what has been done before by prior speaker. They do not tell already something about how the correction can be brought about. A primarily prospective way of error treatment can be observed in construction types that provide cues as to how the repair can be accomplished. Look, for example, at the continuation of the interaction rendered in extract (3) above. When the pupil does not use the opportunity for self repair in line 458 - see the gap of 1.7 second in line 459 -, the teacher continues with a step-by-step explanation about how the error can be corrected. She explicates how the pupil should manipulate the values of the equation in order to be able to calculate its outcome (line 460-67 in 3a):

(3a) 210176 / maths [continuation of fragment 3] repair method, 460-67

457 Teacher: och Manfred,
 [och] Manfred,

458 du verwechselst das jetzt.
 you are mixing it up now.

459 1.7

460 Teacher: → du hast- (0.3) kuck ma, (1.0)
 you have- [(0.3) well look, (1.0)
 [((starts to make a drawing on the blackboard))

461 das wär' ein: Ganzes,
 this is a whole [number],

462 0.9

463 → davon hast du sechs:
 you've got six of them

464 0.7

465 → und (0.5) sie sollste (0.4) in (.) achzehntl
 and (0.5) you have to (0.4) into (.) eighteenth

466 0.8

467 zergliedern einfach.
 partition them simply.

468 → 3.9
 469 Teacher: Martina
 470 0.3
 471 Martina: hundertacht
 one hundred and eight
 472 1.2
 473 Teacher: richtig.
 correct. .

In an *error-method* construction type, a teacher tells the pupil(s) what (s)he did wrong, whereas a *repair-method* technique provides an instruction how the task can be performed correctly.

Teacher correction initiators thus can be characterized in terms of the way the error in prior turn is dealt with. A subset of these techniques is primarily operating on the error as such. Error-indication, error-location and the explication of the error-method are a group of retrospective practices that tell the pupil that is something wrong, where this occurs or what is wrong respectively. Another group of techniques helps the pupil by working stepwise towards finding the correct solution.

An interesting feature of the use of these techniques in teacher correction-initiation turns is that it reveals an orientation to a relative ordering of initiation techniques, both within single turns and at the level of sequence organization when more than one teacher-initiated correction sequence is needed.³ A next correction initiation is usually stronger than the previous one. Error-location comes after error-indication (see fragment 2, lines 35 and 40) , or fragment 3, lines 455 and 458). Error-method comes after error-indication (see fragment 3, lines 455 and 458) and repair method comes after error-method (see 3, lines 458 and 460-67).

Next turn-constructional units in multiple-unit teacher-initiations of pupil corrections are stronger than the construction type that is used in the preceding unit. If the repair apparatus is applied repeatedly for the correction of the same error, then this order also governs the design of successive teacher correction initiations. At both organizational levels, we see a participant

³ This pattern is in line with the observations made by Schegloff, Jefferson and Sacks 1977 for the design of other-initiation turns in conversation: "*The construction types for other-initiation of repair (...) have a natural ordering, based on their relative 'strength' or 'power' on such parameters as their capacity to 'locate' a repairable. The natural ordering is realized empirically in several facts. For instance, (...) if more than one other-initiated sequence is needed, the other-initiators are used in order of increasing strength (...).*" (SJS:77, p.369).

orientation to the following ranking order:

- (4) - error indication
- error location
- error method
- repair method

In general, what is done is a kind of 'didacticizing' of repair-initiation turns: the teacher puts a substantial amount of 'doing instruction' in the repair initiator.⁴ S/he uses a specialized set of construction types for this. Apart from indicating or locating the occurrence of an error in prior turn, teachers analyze the error type and/or provide cues as to how the correction should be done.

3. the correction of less-focussable errors

The other example of specialization of ordinary-talk devices in institutional interaction is a minor type of teacher other-correction. Although other-correction is not a preferred alternative in classroom interaction either, other-repairs do occur. For example, a teacher may eventually take refuge to other correction when both the pupil that made the error and one or more other pupils do not succeed in correcting it. This type of error correction usually occurs as a way of closing off a series of unsuccessful pupil attempts to self-correct. The teacher first has provided a series of opportunities for pupil self-correction by abdicating from making herself the correction (teacher other-correction). She only initiates repair and withholds the correction although s/he is observably and knowably able to do so. However, in some environments teachers other-correct pupils immediately without creating an opportunity for pupil self-correction. See, for example, fragment 5:

⁴ Attendant instructional commentaries also occur in conversational repairs, but - as far as I know - not in NTRI-turns, - only in or after other-corrections.

(5) 210176/mathematics

967 Ralph: uhm: siebn Sechstl sind größer wie,
968 (.)
969 Teacher: → als:
970 0,3
971 Ralph: vier Fünftl
972 0.8
973 Teacher: → größer als
974 0.6
975 Ralph: als vier Fünftl

967 R: *uhm: seven sixth are bigger as,*
968 (.)
969 T: → *than*
970 0,3
971 R: *four fifth*
972 0.8
973 T: → *bigger than*
974 0.6
975 R: *than four fifth*

The teacher interrupts the pupil and makes a grammatical correction.⁵ Unlike the type of repair sequence that was discussed in the previous section, the teacher does not first create an opportunity for pupil self-correction. The repair initiator is not separated from the repair outcome. Instead, initiation and the repair proper are combined in one and the same teacher move.

Teachers can do this type of pupil other-correction in an interruptive manner. The correction is delivered immediately after the production of the repairable in the pupil's turn, but still before the pupil has reached a possible completion point (see lines 767-69 in fragment 5). This allows the pupil to incorporate the correction into the continuation of the interrupted turn (see line 971 in fragment 5). The teacher, however, does not accept this. He enforces the pupil to demonstrably incorporate the correction into the interrupted turn by redoing the problematic part in the demonstrated manner (see the teacher's prompting after the pupil's first continuation attempt in lines 971-75 of fragment 5).

⁵ In standard German, the conjuncts of equal comparisons are linked through the connective 'wie' (more or less equivalent with English 'as', as in '... as tall as ...'), whereas comparisons of gradually differing conjuncts are linked with 'als' (± English 'than').

The expectation that the correction is redone by the pupil can also be observed in the fragment below. Here the pupil first repeats the teacher's correction before the teacher continues with the next step of the instruction:

(6) 110774 / geography

57 Teacher: Ralph?
 58 0.3
 59 Ralph: → uh: (0.6) uh Cala Rati:d(e-)
 60 (.)
 61 Teacher: → Ratjada
 62 0.5
 63 Ralph: Ratjada
 64 Teacher: → und wo ist das (nun)?

57 *Teacher:* Ralph?
 58 0.3
 59 *Ralph:* → uh: (0.6) uh Cala Rati:d(e-)
 60 (.)
 61 *Teacher* → Ratjada
 62 0.5
 63 *Ralph:* Ratjada
 64 *Teacher:* → and where is that (then)?

This type of teacher correction is tied as close as possible to the error element itself and the pupil is expected to redo the correction without delay. Another feature of this type of teacher correction is the absence of attendant instructional commentaries. The repair is limited to correction of the error carrying element. In fragment (5-6), this can be achieved within the bounds of a one-word utterance. No further accountings are given with respect to the nature of the error, the rule it is violating or how it can be avoided.

The discontinuity caused by the insertion of the correction is minimized and confined to the doing of the correction itself and its redoing by the pupil. As a consequence, it can be returned quickly and rather smoothly to sequentially relevant next actions (see Schegloff 1979), - for instance completing the interrupted turn - which is the case in the continuation of the pupil's turn in fragment 5 -, or making a next step in the course of action to which the corrected makes a

contribution, - as in the teacher turn in line 64 of fragment 6.

The errors that are repaired in this type of teacher corrections are of a special, specifiable type. In fragment 5, for example, the teacher is correcting a grammatical error in the course of a mathematics lesson. In fragment 6, a pronunciation error is corrected in a geography lesson. And in the fragment below, the outcome of a maths assignment is corrected and repeated in a way that shows that both teacher and pupil see the repairable as a slip-of-the-tongue kind of mistake:

(7) 160176 / mathematics

148 Teacher: Georg!
149 0.4
150 Georg: → Achtundneunzig geteilt durch drei:?
151 0.5
152 Teacher: Sechsundneunzig geteilt durch drei.
153 0.3
154 Georg: Ja,
155 sechsundneunzig geteilt durch ↑drei.
156 Teacher: ja:,
157 0.3
158 Teacher: → also der Bruch, der links steht,
159 wenn man mal die Acht beiseite läßt, (0.5)
160 das ist der Preis.

148 Teacher: Georg!
149 0.4
150 Georg: → eighty nine divided through three:?
151 0.5
152 Teacher: sixtynine divided throug three.
153 0.3
154 Georg: yes,
155 sixty nine divided through three.
156 Teacher: → ye:s,
157 (0.3)
158 so the fraction which is on the left side,
159 if you leave out the eight.(0.5)
160 that's the price.

The teachers correct errors that are being dealt with as not very essential for the business at hand. On the one hand, the correction is still done disjunctively and in an overt manner. It initiates a sequence in which the pupil is obliged to redo the correction. The correction is not made in the

non-disjunctive, by-the-way manner that is typical for embedded corrections (see Jefferson 1983). The error is still something that can not be passed without correcting it. On the other hand, however, both the placement of the other-correction - tying it as close as possible to repairable, sometimes even interruptively - and its no-nonsense, minimal format indicate that both teacher and pupil orient to minimization of the correction sequence. The correction is made in a by the way manner. It should be done, but they are made in such a way that a return to the business at hand can be made unproblematically and as soon as possible.⁶

The teacher discern systematically between different types of errors, which reminded me of Jefferson's distinction between 'interactional' and 'production' errors. Some errors are made during the production of "coherent and grammatically correct speech." They differ from "interactional errors," that are made on a level at which participants strive "to speak appropriately to some co-participant(s) and/or within some situation." (Jefferson 1974: 181)

For current purposes, I prefer to speak of 'more-or-less-focusable' errors. The focusability of a repairable depends on the degree in which participants treat it as relevant for the current business at hand. As far as lessons are concerned, more focusable errors are a kind of 'interactional errors', - that is, for example, the kind of errors that is responded to in the teacher NTRI-turns that are discussed in section 2. Correction of the error often becomes the main business at hand. It is a prominent and frequently used vehicle for doing of instruction in lessons. Among the set of less-focusable errors are the ones that are corrected in the teacher-corrections we have discussed in this section, - *e.g.*, the correction of a grammatical error in a mathematics lesson, or a pronunciation error in a geography lesson. Less-focusable errors are errors that are treated as currently not the business at hand, although still worth to be corrected in an on the fly manner.

As is the case in conversation, some errors of pupils in lessons appear to be less focussable on and are being dealt with in a specialized type of repair sequence. The institutional use of this device exhibits setting-specific features, most notably regarding the techniques through which this kind of repairables is shown and treated as less focussable (the placement and the format of the correction) and its sequential characteristics (immediate redoing by the error-making pupil).

⁶ The minimization of this type of teacher other-correction sequences possibly is a kind of second order validation of the orientation to the dispreferred status teacher other-corrections. (See Sacks 1987)

In sum: both in the construction of teacher NTRI-turns and in the sequencing of teacher other-corrections of less-focusable errors, a conversational device is specialized in ways that enable the accomplishment of specific types of actions in lessons. It is this kind of modification⁷ of conversational devices I am thinking of when I speak of 'specialization' of devices that are used in conversations. Institutional interaction can not be simply characterized as just a subset of the options that are available to members in conversation.

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⁷ By characterizing specialized devices in institution settings as 'modifications' of devices that are used in conversational interaction, I do not want to make any claims about the historical primordially of conversational interaction. At first instance, it is a purely methodologically motivated way of saying that institutional interaction can be described as a modification of the principles that are found in conversations.

references

- Jefferson, G. 1974. 'Error correction as an interactional resource.' In: *Language in Society*, Vol.2, p. 181-99.
- Jefferson, G. 1983. 'On exposed and embedded correction in conversation.' In: *Studium Linguistik*, Nr.14, p. 58-68.
- Mazeland, H. 1984. "Was kostet denn iks?" - *semantisch-pragmatische Analyse einer Frage*. Arbeitspapier 11, DFG-Projekt "Analysemethoden von Unterrichtskommunikation" (Az. Re 524).. Seminar für allgemeine Sprachwissenschaft, Düsseldorf.
- Mazeland, H. 1986. 'Repair-organisatie in onderwijs-interakties.' In: A. Scholtens & D. Springorum (eds.) *Gespreksanalyse*. Universiteit Nijmegen: Instituut Nederlands, p.233-46.
- Mazeland, H. (mimeo) *Some aspects of the organization of repair in lessons.*'
- Sacks, H., E. Schegloff, G. Jefferson, 1974. 'A simplest systematics for the organization of turn taking for conversation.' In: *Language*, Nr.50, p. 696-735.
- Sacks, H. 1973/87. 'On the preferences for agreement and contiguity in sequences in conversation.' In: G. Button & J.R.E. Lee (eds.) *Talk and social organization*. Clevedon, Phil.: Multilingual Matters. p. 54-69.
- Schegloff, E. 1979. 'The relevance of repair to syntax-for-conversation.' In: T. Givón (ed.), *Discourse and syntax*. New York: Academic Press, p. 261-99.
- Schegloff, E., G. Jefferson, H. Sacks. 1977. 'The preference for self-correction in the organization of repair in conversation.' In: *Language*, Vol. 53, Nr.1, p. 361-83.
- Wilson, Thomas P. 1985 (*unpubl.*). *Social structure and social interaction*. (Revised version of a paper read at the International Conference on Ethnomethodology and Conversation Analysis. Boston University 1985 Dept. of Sociology, University of California, Santa Barbara)