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# The organization of repair in classroom talk

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## ABSTRACT

This article is a conversation-analytic investigation of the forms of organization that allow specific items of classroom discourse - words, phrases, up to whole turns at talk - to be altered by subsequent items. Central to the article is an analytic distinction between self-correction and other-correction, that is, between repair sequences in which the speaker of the initial item (the "trouble source") makes the correction and instances in which this is performed by one of her or his interlocutors (cf. Jefferson 1974; Schegloff et al. 1977). The classroom case is analytically interesting both for its own sake and also on account of research speculations that other-correction should be more frequent in adult-child talk than in other genres of conversation. However, in order to provide an analysis of the problem sensitive to the particularities of the classroom, it is necessary to look not merely at corrections, but at the larger repair trajectories in which they occur. These trajectories consist of corrections plus their prior initiations, the latter being means by which speakers mark out some item as requiring correction. Once the social identities of teacher and student are mapped against selfand other-forms of initiation and correction, it is possible to discern some of the structural preferences of classroom discourse along the general axis of repair. The materials are taken from geography lessons in Australian high school classrooms. (Repair and correction, question and answer, clue-giving, expansion sequences, modulation, classroom discourse, everyday language use, Australian English, conversation analysis, sociology of education)

In everyday life, and no doubt elsewhere, a variety of things can be corrected. For example, we note mistakes in the letters we send each other and offer alternatives. The wordprocessor I composed this article on is capable of both pointing out my spelling mistakes and correcting them. Writers also correct other problems by manually deleting them or crossing them out and then writing in replacements. Sometimes editors do this on their behalf. Filmmakers, too, notice imperfections in the rushes of their movies and may go

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back on location for further takes. Recently, I returned an imperfect drinking glass from a set of six and the storekeeper, after some persuasion, replaced it. And so it goes on. Note, though, the ternary structure of these procedures. Something goes wrong; it is noticed or pointed out; then, perhaps, it is corrected, either by the same party or another.

The same goes for conversation. Conversational troubles occur, they are pointed out, and then the problem is corrected. If pointing out the problem is looked upon, in turn, as a means of *initiating* the correction then, after Schegloff, Jefferson, and Sacks (1977), we can refer to these overall ternary sequences (comprising "trouble" + "initiation" + "correction") as "repairs" or, more technically, "repair trajectories."<sup>1</sup> In this technical sense, repair is not qualitatively distinct from correction. Rather, repair is a general sequential phenomenon of which corrections as such form just one part.

I present here a summary of an investigation of how such correcting is done in classrooms, and also of the broader repair sequences or trajectories in which it occurs (cf. McHoul 1985). What interests me most is a particular kind of repair sequence where teachers use the strategy of indicating unacceptable student answers without providing direct corrections as such. Instead, the work of self-correction is left to the students. But this is not the only type that exists in classrooms, for the matter of self- versus othercorrection is a vexed one. Two research questions arise out of this.

First, Schegloff et al. (1977:380-81) suspected there to be a skewing toward other-correction in adult-child interaction and, the classroom being one site where adults and children talk, it should be examined for the predicted skewing. So, I consider in this article whether there are empirical grounds for assuming (at least one form of) adult-child interaction to be an "apparent exception to the highly constrained occurrence of other-correction" (Schegloff et al. 1977:380). The educational interest of this speculation becomes evident when it is remembered that Schegloff et al. (1977:381) considered other-correction to act as a "vehicle for socialization . . . a device for dealing with those who are still learning or being taught to operate with a system which requires, for its routine operation, that they be adequate self-monitors and self-correctors as a condition of competence." Such speculative literature on adult-child repair sequences could therefore lead us to suspect a nice fit between the socialization processes adults and children are supposed to engage in - according to the story - and a relaxation of the usual (adultadult) preference for *self*-correction. But is this borne out by actual materials?

Second, apart from simply asking "Who does corrections?" we need to ask additionally how the larger repair trajectories are actually organized in classroom talk. This brings us to consider, regardless of whether teachers or students *correct* themselves and/or each other, the matter of who remarks upon, or otherwise *points out*, the fact that some item of the talk requires correction. This is the related question of self- versus other-*initiation*.

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These questions are examined in light of repair trajectories selected from a corpus of video transcriptions of geography lessons in Australian high schools (McHoul 1978:184).<sup>2</sup> To that extent, the analysis is necessarily limited and in need of extension and supplementation. It is, I think, both possible and necessary to go on to examine *relations* between repair trajectories and other educational – as well as conversational – matters, such as turn-taking, socialization, and the crucial research question of power in educational practices. But the present report cannot accomplish that further analysis. It offers itself instead as an empirical baseline for such broader investigations, too many of which have no such concrete beginnings but remain content with "just-so stories" about what happens in classrooms – a point argued in more detail in another article (McHoul & Watson 1984).

#### TRANSCRIPT CONVENTIONS

The classroom talk referred to in this article is in the form of transcripts of videotapes. Attention is drawn to particular aspects of the talk by means of point markers (**•**). Where students cannot be identified by name, the transcriber has used separate letter designations for each student's *turn*. In extract 34, parentheses containing ditto marks show "same thing said but untranscribable." Each line, rather than each turn, is numbered at the left. Otherwise, the transcription conventions are Jefferson's, as reported by Schenkein (1978:xi-xvi).

## TYPES OF REPAIR TRAJECTORY

Schegloff et al. introduced *four* principal means by which self- and othercorrection can be performed, referring to these four possible movements from trouble source to initiation to correction as the trajectories of a repair (see Table 1). The first three are the possible means by which self-initiation and correction are done. For us, types 1 and 2 can be treated as a single case, "same-turn self-correction," since questions of turn transition are not central to this report. The fourth type is the single means by which other-initiation may be done and divides into two subtypes, (a) where other-initiation yields other-correction and (b) where other-initiation yields self-correction.

#### OTHER-CORRECTION IS NOT AS INFREQUENT?

#### Self- and other-correction frequencies

Even a brief inspection of our transcript materials shows that type 4a, othercorrection – consisting almost entirely of teachers correcting students' talk – occurs more readily in the classroom than it does, according to Schegloff et al., in everyday conversation where it is a quite rare occurrence. For example:

TABLE 1. Repair trajectories

	Turn	Content	Participant
1	Single turn	Trouble source + initiation + correction	Self
2	Single turn Turn transition	Trouble source Initiation/correction	Self
3	First turn	Trouble source	Self
	Next turn	(        )	Other
	Third turn	Initiation/correction	Self
4a	First turn	Trouble source	Self
	Next turn	Initiation/correction	Other
4b	First turn	Trouble source	Self
	Next turn	Initiation	Other
	Third turn	Correction	Self

```
Extract 1
  (1) T: D'you know what that region's called?
         (4.0)
m::?
  (2) T:
  (3) S:
         °(Hamersley Ranges)
                     ſ
                      Pilbara
  (4) U:
         Pil?bara
 (5) T:
  (6) V: °(People call it)
  (7) T: m::::
                 (0.5)
  Extract 2 (abridged)
   .
  (10) T: Yes
              ((looks at raised hand))
  (11) Z: 's just above the Tropic of Capricorn in North Western Australia
• (12) T: Just above the Tropic of Capricorn in the west of Western Australia. Yes
  Extract 3
  (1) T: d's anyone - have any idea at all why nineteen sixty was the magic date?
                (2.0)
  (2) T: Suddenly you got tremendous development worth - hundreds of millions of dollars
                (1.0)
  (3) T: 't all began around nineteen sixty. Why?
                (1.5)
  (4) T: m:?
  (5) T: I thought it might have been in that section you read last night. Yes
  (6) A: °(I think it was a man who-----flying over it in a plane and-----a
         small-
                   -----)
```

■ (7) T: e::r

small-----) [ ] =

 <sup>(8)</sup> T: =yes, well actually there were some men - who'd known it was there quite a long time, known that there was iron ore there - but in nineteen thirty eight the Australian Government . . . put a ban on export of iron ore . . . that ban was not lifted till nineteen sixty

Extract 4 (1) T: ... c'd anyone (1.2) (2) T: see - a concentric - zone pattern developing for their particular (0.2) (3) T: Portsville model? (3.0) (4) T: Ye::::s (0.4) (5) X: We've got our - manufacturing industry • (6) T: No residential we're int'rested 'n [] = (7) X: Oh (8) X: =yeh well we got our (basic) residential - just outside the CBD ...

However, it should be noted that instances of teachers initiating and carrying out corrections on students' talk are greatly outnumbered by instances of a slightly different sequence – namely, type 4b, where teachers perform *initiations* but withhold any *corrections* they may have in mind. This type of sequence provides for a subsequent slot, following the teacher's initiation, for students to self-correct. In light of this observation, we can offer an initial summary of the preferential organization of repair in classrooms. Othercorrection can occur without difficulty, but self-correction is a much more routine and observable phenomenon, and (as we shall see) it is frequently undertaken by students following *initiation* by teachers.

Moreover, it should also be mentioned, in keeping with Schegloff et al.'s work, that the type 4a, involving direct corrections by teachers, does not occur just anywhere and anytime in classrooms, but in *particular sequential environments*.

## Self-correction, error, and social identity

Whereas there are instances of self-*initiated self*-correction on the part of both teachers and students (types 1 and 2 especially), these are often restricted to cases where the repairable or "trouble source" is other than an *error* in the strictest sense. Instead, it may be a grammatical shift, a return to a phrase that should have been inserted earlier, a vocabulary replacement, a word search, and so forth. This form of initiation and correction is mostly done by teachers rather than students, perhaps for the simple reason that they hold the floor more often and longer than students.

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Extract 5

(1) T: Awright where
(0.5)

(2) T: if somebody said that's Mount Tom Price where is that? Extract 6

(1) T: the fire first of all spread in a
(0.5)

(2) T: an easterly direction and then in a south westerly direction.
```

Extract 7

- (I) T: I'm gonna ask different people from different groups to come to the *screen* (0.3) rather than to the projector so just come to the screen and with
- their hand (0.3) show us what kind of (0.4) to or
- sorry or much to identify one region and then give a sensible name to it.

Extract 8

(I) T: Now Tom what makes that a region what makes that dist- mor- distinctive from the resta the country

 (I.2)

Extract 9

(1) T: Alright wh- what sort things – mu- give that area – distinctive personality Peter? Extract 10

- (I) T: And wuja put o- wuja just check on y'r own map
  - (0.5) ((switches on projector))
- (2) T: Wuja make certain y'regions are very similar to the ones that on the screen Extract 11

(I) T: three quarters of the country has much lower pers: - ma- much lower figure th'n that an about a quarter 'v the country has a much higher figure th'n that

However, this does not mean that there are no cases where the trouble in question is an error, as the following extract shows:

#### Extract 12

(1) T: I's the si:: xteenth (0.4) sorry the seventeenth eighteenth century an i's before the industrial revolution

Again, with far less frequency, we can locate cases where *students* do selfcorrections also initiated by self or which appear to be uninitiated as such. The following case is one example; it contains an instance of one of the Schegloff et al. main nonerror types, the "word search" (1977:363).

Extract 13 (1) L: ... you'd prob'ly just have small – local industries like bakeries an (0.3) (2) L: Um (3.0) ((L shakes head slowly)) (3) L: Y'know as ah essentials t' the people []] (4) T: G o o d ...

This phenomenon is also encountered in teachers' talk.<sup>3</sup>

Extract 14 (1) T: Alright so we'll jus call (0.8) we'll just call em a : : : m (0.5) whada Barb call em sand dunes (3.0) ((writes on slide))

So the distinction between *error* and *nonerror* types seems to be only weakly connected with the occurrence of type 1 and type 2 trajectories. And the same is true of the distinction between the social identities *student* and *teacher*. But, on the whole, these kinds of self-correction do appear to be done more often than not on nonerroneous trouble sources and, then, mostly by teachers. Here, though, we should remember that, overall, instances of *same-turn* self-correction (types 1 and 2) are far less numerous in the corpus

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than other-initiated self-corrections (type 4b). An interesting point to note here is that the former do seem to have about the same (in)frequency as other-initiated other-corrections (type 4a). (Given that type 3 is absent from the present corpus – though see the section on cluing and repair – an approximate count shows types 1 and 2 together accounting for 26 percent of the corrections, type 4a accounting for 19 percent, and type 4b for a preponderant 55 percent.) In this sense, classroom talk is unlike ordinary conversation; yet it by no means moves to an extreme preference for other-correction.

Returning then to the Schegloff et al. initial conjecture about adult-child discourse, we can reach a preliminary conclusion. Whereas other-correction does not figure so large as may have been anticipated, at least in classrooms, (a) other-*initiation* is frequently encountered, and (b) partly supporting Schegloff et al.'s suspicions, same-turn self-corrections are in fact less frequent than other-initiated self-corrections. At the risk of overstressing the caution, it is crucial to maintain the reservation that this goes only for classroom talk and not necessarily for parent-child talk or other genres of talk between those who are supposedly competent (initiates) and those who are supposedly not (novices).

## THE PREDOMINANCE OF OTHER-INITIATED SELF-CORRECTIONS

Now we must turn to what appears to be the main repair trajectory for classrooms – the type 4b, according to the Schegloff et al. schema. As we see, this trajectory works in conjunction with a number of other aspects of classroom talk that are highly related to it. First, it pertains to the procedure we can call "cluing," in which teachers attempt to lead students to correct answers by small steps. Second, the trajectory can be seen to "recycle," thus tying it into classroom expansion sequences in general. Third, the recycling of the trajectory produces a distinctive "withholding" phenomenon that is somewhat different from that encountered in conversation. As we shall see, these connections are facilitated by (and in return facilitate) the triple structure of classroom talk, namely, the fact that teachers have a right, following a pair of utterances (especially a question–answer pair), to take a third turn that comments on and occasionally evaluates the student's second pair part. How these relations and connections operate is the main topic of this section. It ends with a discussion of "direct" teacher correction – types 4a.

# Cluing and repair

Something, however, has been overlooked; namely that no type 3 appears to occur in the materials. The *giving of clues* to correct answers (or other correct forms) by teachers might seem to be a candidate for that type, mapping on to the type 3 model so as to produce a trajectory like this:

Trouble source  $\rightarrow$  Cluing  $\rightarrow$  Initiation/Correction

When we look at the materials, however, it's very hard to find initiations in the turns following these clues. And so they might better be described as types 4b:

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Trouble source \rightarrow Cluing ( = initiation?) \rightarrow Self-correction
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I want to argue for the latter, if only because the former alternative would mean that we would have to understand classrooms as discursive institutions in which certain repairables (such as unacceptable answers) get self-corrected without initiation. The strangeness of this is a strong case for treating cluings as – or at least like – next-turn initiations in type 4b trajectories and not correction-unrelated next-turns in type 3. Let us turn to some materials on this.

Extract 2 (("C1" = several class members)) (1) T: Would you know where in Australia it is? (2) Y: ) ( (3) T: Have a look at the atlas (2.0)(4) T: Now (3.0) (5) T: Page fourteen (1.5) (6) T: There is - a map of minerals in Australia? (5.0) ((T looks at a raised hand - but continues)) (7) T: Can you find (1.5) (8) T: Mount Tom Price in there? (9) Cl: m: (10) T: Yes ((looks at hand mentioned after line 6)) (11) Z: 's just above the Tropic of Capricorn in North Western Australia (12) T: Just above the Tropic of Capricorn in the west of Western Australia. Yes

Note here that Y's inaudible answer in line 2 is *not* accepted as correct by T at line 3; but what T does in this next turn position is not an initiation of correction such as we find in ordinary conversation so much as a *clue* to where the answer may be found: "have a look at the atlas." The atlas clue then continues through lines 4-6 and, at line 7, T rephrases the initial question. Upon the requestioning and even before it, at line 6, a student is ready with a (?self-) correction of Y's answer from line 2. The problem facing the analyst here is whether lines 3-8 (cluing + requestioning) constitute a form of, or even a form analogous to, correction-initiation. Depending on the answer, either classrooms do or they do not rely quite heavily on type 3 trajectories. This classification also carries the proviso that the student (or students) in question does in fact find an acceptable correction, thereby obviating further cluing, requestioning, redirecting of the question, or other-correction by the teacher. If these types are, however, to be classified along with Schegloff et al. type 3s, they will have this peculiar feature when compared with *con*-

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versational versions of that trajectory. They will contain no initiations as such.

### Cluing, repair, and comments

For these reasons, though not without reservation, my preference is to treat these cluing examples as being in fact correction-initiations. There is further supporting evidence for this. I have noted elsewhere (McHoul 1978:190-91) that conversational Q-A adjacency pairs often get formulated in classrooms as Q-A-C adjacency *triads*, where C is a comment on, acceptance of, or rejection of the contents of the previous turn's answer. Cluing begins to look very much like correction-initiation when we consider that (a) cluing occurs immediately following answers, in comment slots, and (b) if comments are *absent*, this has marked consequences for the talk going on in any given sequence of questioning and answering in classrooms. First, we can refer to cases where a *direct* acceptance/rejection is absent, following a student's answer, but where that answer is nevertheless shown to be acceptable by virtue of the teacher doing a thematic *continuation* of it. For example:

Extract	15
(1) D:	the factors that would influence : : the manufacturing would be
	(1.0)
(2) D:	um
	(1.0)
(3) D:	what type of industry's going on – like whether it was an export industry or import – and if it was export it would then it would have t'be – located somewhere – on the harbor – so as to
() <b>D</b> .	
	provide means of transporting the goods out of the place or into it=
(5) T:	=So the major
	(0.3)
(6) T:	manufacturing concentration is along the

- (0.3)
- (7) T: coastline . . .

Note that the teacher at line 5 continues the syntax of D's prior turn at line 4 with no audible gap. Further, the comment he makes is also a *topical* continuation of D's utterance. So, by accepting the student's turn as part of the lesson's officially sanctioned knowledge – knowledge that could just as well have been furnished by the teacher – this continuation technique turns out as the (possibly upgraded) equivalent of an accepting comment ("Yes, good answer"; "Right"; "That's right"; "Good", etc.). This answer, as it were, gets enfolded, carried along into, or even becomes a resource for T's talk about the facts of the case (here, factors influencing manufacturing industry in "Portsville"). In becoming so absorbed into the lesson without explicit acceptance/rejection, it is marked as acceptable, that is, as *un*corrected. The absence of a verbalized comment displays here that no correction is deemed necessary by T.

Comments and correction, then, are intricated with one another in a variety of ways, as we can see from the contrastive case in extract 16.

Extract 16				
(I) T:	How did the location of the railroad influence			
	(0.3)			
(2) T:	land use change on your model			
	(1.8)			
(3) T:	John Chapman			
( ) <b>T</b>				
(4) 1:	Did the location of the railroad=			
(-) I.	l J Well			
(5) J: (6) T;				
(0) 1.	=influence a land use change at all? (3.1)			
(7) J:	Well the railway runs through suh :: CBD			
()) 5.	(1.0)			
(8) J:	e::n near the:: industrial areas			
(9) T:	m : hm : : ?			
	(0.3)			
(10) J:	And ah			
	(2.8)			
(11) J:	Well			
	(2.1)			
• (12) T:	Which groups have indicated – a change in the land use along the <i>rail</i> road?			
( ) T				
(13) T:	Any groups. D'you think this is likely to occur?			
() T.	(3.2) ((towards end of gap Denise raises her hand))			
(14) 1:	Yes Denise			

Here, the absence of a comment, and the immediately consequent redirection of the question to a different student, displays that the initial answer is off the mark. In this example, it is worth noting that the gap between lines 3 and 4 is great enough for T to begin to rephrase his initial Q (lines 1-2) and for us (as analysts) and T alike to be able to expect that John does not *have* an answer ready at this point. At line 5, part way through the rephrasing, John begins to produce an answer that he is unable to complete. T indicates that John's part-answer is potentially acceptable at line 9. But through lines 10 and 11 John is found to be unable to carry it to completion. At line 12, T does not produce the expectable comment but in fact redirects an effectively identical question to the whole class and selects Denise as she raises her hand.

In extract 16, the replacement of a comment by a redirection of the question shows that, in contrast with extract 15, John's answer cannot be continued upon by T either topically or syntactically. Using this technique signifies that John's answer has not become part of a continuing piece of sanctioned discourse; it is not acceptable. The substitution of comment by a question-redirection functions here very much like correction-initiation, at least insofar as it marks out a prior trouble source. A number of other instances of this technique can be found in the materials, for example: Extract 17 (simplified)

	Extract 17	(simplified)
	(I) T:	But that's not realistic is it why not
		(1.2)
	(2) T:	Matthew ((hands go up))
		(2.4)
	(3) T:	If we if you if somebody read in a textbook say an eh an ey lived in Bri'n they
		said the av'rage population density of Australia is five per square kilometre
		why isn't that realistic
		(3.2)
	(4) T:	Y'know what's wrong with (reading) that
	-	(1.1)
	(5) (Ma):	('d think there wus) too - little number of people in a place I s'pose
		(0.6)
ı	(6) T:	Yeh Jeff
	(7) Je:	There's
		(0.8)
	(8) Je:	°(For most the ca- there're people ofof Australia)
	(9) T:	Right so what's wrong withat figure
	-	(2.7) ((hands go up))
	(10) Je:	°(Counts the whole) 'v Australia=
	(11) T:	=Yes=
	(12) J:	=('s thoughhardly anyone w's here)
	(13) T:	Right
		-

But there are also cases where, after a student's answer, the comment takes the form of a *modulated* other-initiation (see Schegloff et al. 1977:378-79, and the section on modulations herein). By this I mean that the answer is cast into some doubt as to its acceptability rather than being marked as definitely incorrect. For instance:

Extract 18

- (1) T: How might the CBD increase in size
- (2) T: Er::m Peter (0.7)
- (3) P: Er:::m it c'n erm take away
- (1.0) (4) P: Erm :: residential areas surrounding it an' build more buildings more CBD ( ) (0.2)
- (5) P: round the residential ones (0.7)
- (6) T: The thing to remember of course is the CBD is hemmed in by residential and industrial areas
- (0.2) (7) T: an' that – possibly the CBD

- (8) T: Will er have vertical development possibly (0.4)
- (9) T: there will be horizontal expansion of the CBD how might that occur (3.2)
   (10) T: Chris
  - (0.7)

Here, we can notice how the teacher's turn at line 6 is a part continuation of Peter's prior answer while, at the same time, casting its appropriateness into doubt: "The thing to remember of course is. . . . " The teacher then con-

tinues by having Peter's answer expanded by another student, Chris. Our analytic attention is drawn here to the fact that if we assume the ideally suitable answer to the question to be "vertically" – or a close variant – then the comment in lines 6–9 is in fact a form of other-correction, for the teacher has directly supplied that answer. However direct this might be, it is also modulated by the fact that the teacher then continues by inviting Chris to expand on the alternative ("horizontal") option at line 10. The modulated type, we might say, avoids twin classroom pitfalls. It stops the topic moving off at tangents, and it prevents the low morale students may feel if continually reprimanded for not being on target with their answers. Modulation marks a diplomatic assertion.

After looking at these cases, it appears that where cluing occurs in the next turn after an answer its function is, like requestioning and redirecting, to show the unsuitability or else the tentative (un)suitability of that answer. It shows that either a whole new answer or a filling out is required. Apart from this consideration, no other possible candidates for type 3 trajectories are found in my corpus of materials, though no doubt they can occur in some classroom regimes and other data collections will contain them. It will be of significant research interest to find out their dominant sequential environments.

## Cluing and initiation in expanded sequences

Further evidence for congruence between cluing and other-initiation is to be found in examples where cluing occurs alongside much more obvious, unmodulated types of other-initiation in expanded sequences. Let us consider the following materials:

Extracts 19 and 20 (("Cl" = several class members)) (I) T: Where else were they taking it before they (1.0)(2) T: started in Western Australia? (2.0)(3) T: m: hm? (0.5) (4) G: Melbourne? (0.5) (5) T: No::::? °( (6) H: ) (7) T: No:: (1.0)(8) T: Where does BHP get its iron ore from? (9) I: ( ) ]]] (10) J: ) ( [[ (11) K: ) (12) T: Doesn't (13) K: (New South Wales) (14) L: (used to)

(15) M:	Do::::es?
	(0.1)
(16) T:	You're guessing
	(2.0)
(17) T:	How bout South Australia?
	(2.0)
(18) T:	Y'heard of-
	((hands raised))
(19) T:	
	U::m Iron Knob
	Iron Knob a : : : nd?
(22) Cl:	Iron Baron
	[
(23) Cl:	
(24) T:	Ah you have heard W'that's good

An answer is given at line 4, followed by a very definite other-initiation, one which Schegloff et al. would have read as markedly upgraded "on a 'confidence/uncertainty' scale" (1977:378) or as one free of "uncertainty markers." Following this, at line 6, a second answer is produced and there is a similar response in the teacher's comment (line 7). The example is by no means atypical. Being the questioner, the teacher could be relied on to have an appropriate correction available, but here, as in many cases, she in fact withholds it over quite a number of turns. The two other-initiations at lines 5 and 7 do not produce self-corrections by students, and yet the teacher continues to withhold her correction. The question is reformulated at line 8 and this recasting *includes* the first clue (that is, the concept of "general places where iron ore is found" is transformed to the concept of "where some particular company recovers it"). There are a number of simultaneous answers in lines 9-11, followed by a further other-initiation in the comment at line 12.<sup>4</sup> A further correction reinitiation occurs at line 16, followed by a suitable gap for an answer to be given. At line 17, the second clue is given in a way similar to that in line 8, that is, the parameters of the question are further narrowed. They move from consideration of a particular company's mining site somewhere on the continent to the geographical delimitation of the site within South Australia. Again, there is a suitable answer gap. These manifold question reformulations and clues, all acting like other-initiations, build up to such an extent here that it's conceivable that the teacher has reached a limit to this recycling by line 18 and is about to correct the guesses by giving an admissible answer. Part way through her turn however, just as she is presumably on the point of this other-correction - and given the syntax, it looks as if a place name is in the offing – hands are raised. She selects an answerer at line 19 and a partially acceptable answer is given at line 20. Thereby self- or at least student-correction can finally occur.<sup>5</sup> But this selfcorrection is subject to further correction-initiation by the teacher in line 21, where she asks for a completion or filling out of the answer.<sup>6</sup>

Insofar then as cluing, question reformulations, and other "delays" occur

together in teacher talk as parallel efforts to have student self-correction done after them, in third turn after trouble source, they can be treated as other-initiations.

## Withholding

It is useful to see these next-turn-after-trouble devices as means by which the preference for (third-turn) self-(student-)correction in classrooms is realized. That is, we can read them as the classroom version of what Schegloff et al. called the "withhold." In everyday conversation, the withhold often functions such that other-*initiations* are delayed. This allows the maximum possible time, within the *trouble source* turn itself, for utterers of that trouble source to initiate and perform their own corrections within same turn. We have already noticed that the format other-initiation + self-correction (type 4b) appears to be the prevalent repair trajectory for classrooms and, accordingly, we might expect to find the other-initiation part withheld or delayed in a parallel way.

Yet, the overwhelming evidence is that in cases where teachers do otherinitiations, this delay feature is frequently absent from them. That is, otherinitiations come mostly at the point *immediately* following the turn-transition point in students' answer turns, where these turns are relatively short (see extract 21 as well as extract 1:3-5, extract 2:11-12, and many others cited in the present article).

```
Extract 21
   (1) T: ... What's going on here
                  (1.5) ((hands go up))
   (2) T: Yes
   (3) A: Mining
                  (1.5)
    (4) T: Mining, what sort of mining?
                  (2.0)
   (5) B: Open cut mining
   (6) T: Open cut?
                  (0.5)
   (7) C: Iron ore
             [
   (8) D:
               Iron ore
   (9) T: Iron ore. Why iron ore?
                  (1.0)
  (10) T: Don't they mine other things (in) open cuts?
  Extract 22
• (1) E: S'where is the desert region?
■ (2) T:
         In the desert region? Well yes? Where in particular?
                 (2.0)
  (3) F:
         Mount Tom Price
 (4) T:
         Mount Tom Price, you're reading. Where else?
 Extract 23
 (1) T: The next question – where would the high income residences be built
                (1.0)
```

- (2) T: Martin
- (1.3) (3) M: I think around the s- CBD (0.5)
- (4) T: Why around the CBD Martin?
- (5) M: Because er rich people are (usually have) stores or something like that y'know
- (6) T: That's a possibility
  - (1.0)
- (7) T: that if a person becomes rich through ownership of a particular industry (0.7)
- (8) T: then it's possible that he will locate his residence near that industry but also you should remember that people with money can afford to live where they wish and it's also possible that high class residential areas will occur on the periph'ry of the city

It is important to note here that: (a) other-initiation regularly comes close to the earliest possible point, thereby avoiding overlap; (b) the answers preceding them are expectably short such that longer examples (such as extract 3) can get overlapped even closer to the trouble source itself, with the projected answer remaining incomplete; (c) instances of fractional withholds producing a *gap* after trouble source turn are less evident in the corpus (extract 19:4–5). The dispreference in classrooms for post-transition *gapped* delays of other-initiation is shown by those instances where teachers' other-initiations in fact come *prior* to (rather than immediately subsequent to) the turn-transition point of the prior (answering) turn. In extract 3:6-7, this is done as overlap, and both teacher's and student's turns continue simultaneously for a while. In extract 4:5-6, it is done as interruption, and the teacher's interrupting turn takes over immediately from the student's.

Consequently, the withhold does not function identically in informal conversation and classroom talk. In classrooms, it tends to mean a withholding of other-corrections following other-initiations, including multiple reinitiations. Deferring the actual correction, as we have noticed, can be realized as a recycling of other-initiations (*Doesn't; No:::*, etc.). Or else it can occur as reformulations (including redirected rephrasings) of the question. Again, it can also take the form of cluings or requests for "filling out" or "particularizing" a student's answer. That is, once an answer has been given (or once a slot has been provided for one even if it is not taken up by an "answer" as such) and providing the teacher has heard a repairable in that student's slot, teachers seem not to furnish other-corrections just there and then.<sup>7</sup> Rather, they withhold any corrections they may want to make, leaving students the space to self-correct. This form of withhold has already been seen in the materials (notably extracts 19 & 20). In the following example, an extended withholding of other-correction of this type occurs:

- (1) T: How do you *write* population density (0.5) Richard how do you write it (0.6) (Whatsorta) terms d'ya use
- (2) Ri: People per square mile

Extract 24 (simplified)

(3) T:	People per square mile? or : : : now we (you know=				
	we need)				
(4) ( ):	=Square kilometer=				
(5) Ri:	kilometers				
(6) T:	=Per square kilometer (0.4) Alright (1.0) Now let-(0.2) what is the av'rage pop-				
	ulation density of Australia Ian				
	(1.0) ((hands go up))				
(7) ( ):	°( square mile)				
(8) ():	°s::: three people per mile				
(9) T:	We mentioned this a few times what's the <i>av'rage</i> population ((looking at Ian))				
-	density 'v Australia				
	Short break in tape (4.0)				
(10) (Ia):	Three people ev'ry square – em mile?				
(11) T:	Three people f'r ev'ry square mile so that w'd be about five uh six people p'square kilometer f' the whole country $(1.8)$ but that's not realistic				

This sequence contains a number of subsequences. First, there is a preparation subsequence (lines 1-5) where it is established that answers concerning population density should henceforth be given in metric units. This subsequence contains a correction using the routine classroom format of other-initiation (line 3) and self- (or at least student-) correction (line 5). The second subsequence involves an informational question, building upon the prior preparation subsequence. Because the question has been prepared in this way, students can be expected to frame acceptable answers so as meet two conditions: (a) they should be accurate informationally in their representation of the average population density of Australia, and (b) they should be given in metric units. The question is addressed to Ian by a tag-positioned address term (line 6), but Ian is not the one who immediately answers. Hands go up between lines 6 and 7 and two unsolicited answers are given. These meet condition (a) but not (b). At line 9, the teacher does a requestioning withhold of other-correction, directing that question to Ian gesturally, thereby rejecting the out-of-turn answers in lines 7 and 8. Ian, if indeed it is he, offers an answer at line 10 that, again, meets the first but not the second condition, and only then does the teacher offer an other-correction by converting Ian's answer into metric units - not very successfully as it turns out. The teacher's factual error remains uncorrected.

In classrooms, then, the regular conversational three-turn trajectory for other-initiated corrections can get expanded to include various withhold-turns on the part of teachers, where those withholds include cluing, reformulations, and redirections of questions as opportunities for students to reformulate their own repairable answers. From the materials we can also notice that these *expanded other-correction withhold sequences* can include answers offered by persons other than the teacher's selected answerer. Moreover, such out-of-turn answers can themselves be corrected – by a variety of means – in a subroutine of the expanded sequence. In extract 24 this is done by a reformulation of the question and a reaffirmation of the *initially intended* recipient, Ian. Also, in extract 20:12 and 16, we saw how multiple answers were marked for correction in an expanded sequence by explicit otherinitiation. The technique is interesting because it ties together classroom management strategies (marking out-of-turn talk) with pedagogy (marking correct vs. incorrect statements).

An inspection of cases of other-correction by teachers shows, then, that they occur in environments where means for obtaining student self-correction have (often repeatedly) been tried and have failed. Other-correction in classrooms, as in conversation, is very much a last resort. And we might make a stronger claim for the classroom version of the dispreference if only because the expansion phenomenon occurs so frequently. Other-correction, in classrooms, is dispreferred over third-turn self-correction; and this is the case even though other-*initiation* is the preferred means of starting a repair trajectory in classrooms.

#### Some other-corrections

Despite this general observation, there are one or two cases in the materials where other-correction does occur, along with its initiation, in the turn immediately after the trouble. But we can further notice that these type 4a trajectories are rare and are associated with particular environments or types of correction.

In extract 1, the initiation and correction occur in the single item "*Pil*?bara" (line 5) and consist of a correction of *pronunciation*. Note here that, at the level of information, the answer at line 4 is acceptable and accepted. Thus line 5, at the information level again, is a comment that, although it has questioning intonation, is one displaying the prior answer's success. The questioning intonation and the restressing ("Pilbara"  $\rightarrow$  "*Pil*?bara") act only to locate and correct the pronunciational trouble source. We are not dealing here with a correction of a substantive error.

In extract 4:5-6, cited previously as an example of the immediacy of otherinitiation, there is also an other-correction. "Manufacturing" is transformed to "residential." Here, what is being corrected is the student's mistake about the general topic area the class is dealing with. The initial question is: "could anyone see a concentric zone pattern developing for their particular Portsville model?"; but just prior to this there is a preparation subsequence in which the teacher establishes that only *residential* features of the model are henceforth in point. The student at line 5 is able to correctly locate a *concentric* pattern, but erroneously in the *manufacturing* districts. Therefore, if there had been no preparation subsequence, his partial answer would have turned out to be a successful one for the question at lines 2–3. However, the student's answer is immediately corrected by the teacher's interruption in order that it might be done again in conformity with the preparatory require-

ment for an *industrial* instance of concentricity. And it turns out that the student is in fact capable of meeting this condition. So here, the immediate other-correction acts very much like a prompt, a reminder of answer criteria *within* an overall sequence in which the student self-corrects and speaks to completion.

As with the previous case, there are two distinct answer criteria (in extract 1: pronunciation vs. information; here: any concentric pattern vs. a residential zone pattern). In both cases, one criterion is *immediately* other-corrected by the teacher so that the other aspect may proceed to completion under the student's control.<sup>8</sup> So, peculiarly enough, when Q-A sequences have dual criteria, they can involve immediate *other*-corrections allowing further *self*corrections or *self*-completions on the *second* criterion.

First criteria are typically noninformational and subject to preparation sequences. Second criteria are typically informational and embedded in the question-turn itself. Thus, whereas any Q whatsoever may turn out to have noninformational or "format" criteria, students can only be expected to respond to them if they are preannounced. Otherwise, Qs are to be heard generally as having single criteria and in such cases the pattern of *other*-initiation  $\rightarrow$  *self*-correction is prevalent. As Schegloff et al. (1977:376) stated: "other-initiations overwhelmingly yield self-corrections," and this is the case for both "natural" conversation and classroom talk, with the proviso that in the latter case, other-initiation is a far more prevalent phenomenon that in the former.

## **Recursive** initiation

Given that the most regular trajectory of repair in classrooms is type 4b (nextturn other-initiation + third-turn self-correction), we can now see that the conversational convention restricting the repair space to a maximum length of three turns is sometimes altered in classrooms. That is, *fourth*-turn otherreinitiations can work on third-turn self-corrections, requiring *fifth*-turn selfcorrections, and so on recursively. However, if such fifth-, seventh-, and so on, turn self-corrections are not forthcoming, the silences in these slots may be heard as further repairables in their own right. Jefferson (1972:295) noted this recursive phenomenon in an interaction between a child aged 6 (Steven) and two older children (aged 8).

Extract 25 Steven: One, two, three, ((pause)) four, five, six, ((pause)) eleven eight nine ten. Susan: Eleven? eight, nine, ten. Steven: Eleven, eight, nine, ten. Steven: Seven, eight, nine, ten. Susan: That's better. ((Source: Schegloff et al. 1977:373)) In this case, the pattern is extremely like those to be found in classrooms:

First turn:	Trouble source
Next turn:	Other-initiation
Third turn:	Reaffirmation (failed correction?) = New trouble source
Fourth turn:	Other-reinitiation
Fifth turn:	Self-correction
Sixth turn:	Comment, acceptance

It is possible then that such recursive other-initiations and their expanded other-correction delay sequences may be general features of "learning," "socialization," or "competent/precompetent" interaction genres. This requires further investigation beyond the scope of the present summary. However, it is worth observing that in adult-child discourse (at least *outside* classrooms) some expanded sequences of this type actually fail to get beyond third turn, where failure is attributable to the inclusion of some item in third turn that remains uncorrected.

Extract 26	
Dale:	Mommy, you want to take that with you. You have to take this with you. You
	have to put it in your truck. My truck drive.
Mommy:	Your truck what?
Dale:	My truck drive. Why are you doing that to my truck? Are you trying to crash
	it?
Mommy:	Oh, no.
((Source: F	R. Brown "Dale Caldwell," 15/40))

# **Modulations**

That other-correction is dispreferred in the classroom is shown by the fact that even *other-initiations* (the standard precursors of other-corrections) are often done tentatively. This same phenomenon is addressed by Schegloff et al. as "modulation." They took modulated other-corrections as unproblematic cases of correction. But there is perhaps more justification in taking them as *initiations-with-modulated corrections* for they also (like other-initiations proper) provide a third, fifth, and so on, turn in which "self" may accept the suggestion, reject it, or modify the initial answer accordingly in some other way. The Schegloff et al. materials include the following example (1977:378):

Extract 27 Ben: Lissena pigeons (0.7) Ellen: Coo-coo:::coo::: Bill: Quail, I think. Ben: Oh Yeh? (1.5) Ben: No that's not quail, that's a pigeon,

Here, Bill's "Quail, I think" certainly offers a correction or replacement of Ben's "Pigeons." It is a clear case of modulated other-correction. In addition, it is a form of next-turn initiation whereby Ben can either accept or reject the replacement. It puts a shadow of doubt over some potential repairable while not finally correcting or replacing it. It indicates a possible trouble source but not with confidence or certainty. The producer of the possible trouble, Ben, then has a third-turn slot in which to make a selfcorrection should he want to concur that the initial item was in fact a repair candidate. In classroom talk, we also find modulated *initiations* of this kind. However, they do not necessarily *offer* a replacement. Here, we can read modulation as a method of putting off other-*correction* as such, and it is possible that this analysis could also be applied to some conversational items such as the one just given.

However we read them, these next-turn phenomena are fairly widespread in classroom talk. For instance, note the modulation aspects of this "accepting" comment by the teacher:

Extract 28

- (1) T: Tom w'll start with you ya come t' the screen an' illustrate (1.8) where there might be a region
- (2) Tom: (Delta) ((Indicates region on screen))
- (3) T: The delta alright (0.5) I think as I w'd agree wi'that and the people I've spoken to (or ev) looked at (0.3) would seem to agree

## Clearer examples are as follows:

		-
	Extract 18	
	(1) P:	'ts got s- ( swampy)
		[ ]
	(2) T:	'ts flat land
		(0.3)
	(3) P:	's fairly swampy
	(4) T:	's fairly swampy yes
		(2.4)
		Right thuh anything else?
	(6) ( ):	Eh the swamp shouldn't (settle to the Plain)
	(7) T:	(Field)? Yes well when I wa- when I walked around I noticed a lot of people
		- now that's not wrong
		(0.3)
	(8) T:	There's no wrong or right answer here
		(1.3)
•	(9) T:	Most people I think the ones that I've looked at – separated the swamp areas (1.8) ((Draws on slide))
	(10) T:	like that but there's no right 'n wrong answer - na Peter said tha's uh Coastal
		Plain 'n I said tha's alright
		(0.3)
	(11) T:	Tha's good <i>enough</i>
	Extract 24	(abridged)
		(Whatsorta) terms d'ya use
	(2) Rich:	People per square mile
	(3) T:	People per square mile? or : : : now we (you know=
		we need)

(4) (): =Square kilometer=
[]
(5) Rich: kilometers
(6) T: =Per square kilometer

Particularly interesting in this light are the tentative "Well yes?" in extract 22 and the interruption of T's metric units correction by an unidentifiable student and Richard in extract 24. This last case of modulation clearly relates to the requestioning format where a previous answer is partially acceptable but, in T's estimation, requires filling out. Note the following cases in point:

	Extract 30	
	(I) T:	and what else will it be like Tom
		(3.7)
	(2) T:	How else would that be diff'rent from surrounding areas
	(3) Tom: (4) T:	Would probably be a lot flatter Yes
	(4) T. (5) Tom:	
	(5) 1011.	(2.4)
	(6) Tom:	(sea)
	(0) 10111	(0.1)
	(7) Tom:	
		Yes well alluvial wouldn't it
	(9) Tom:	Ah::::yeh
		(1.9)
	(10) T:	Okay
	Extract 31	
	(I) T:	Gary what did you call that what did your group call that
		(1.4)
	(2) Gary:	em
	(3) ( ):	uh
	(4) Gary:	Eastern Ranges
	() <b>T</b>	(1.0)
-	(5) T:	Eastern? Ranges yes any other sensible names
	(6) T:	(1.6)
		Dave ((T nods))
	Extract 32	
	(1) Dave:	Coastal foothills
	(a) T.	(1.0) Coostel footbille
	(2) T: (3) ():	Coastal foothills °Coastal Ranges
	(3) ( ).	Coastal Kanges
	(4) T:	How far back are they they're back oo::
_	(T) - '	(1.2)
	(5) T:	Thirty forty kilometers yes – right any oth
	-	

In extract 30, T's "Yes well" at line 8 – comparable with the "Well yes?" in extract 22 – is followed by a modulated other-correction (or initiation of self-correction): "alluvial wouldn't it." Tom, as did Ben in the pigeon episode (extract 27), then has a slot (line 9) in which he may accept or reject the tentatively offered correction. In classroom talk, very few rejections of these offers occur, in which the student reaffirms his or her answer against the

one offered by the teacher. Reaffirmations against less modulated, more authoritative types are even more rare – but see extract 20:14–15, which is interestingly antagonistic. In extract 30:9, some response (preferably a selfcorrection or correction-acceptance) is very difficult to avoid given that the teacher's turn at line 8 is formed as an interrogative, "well alluvial wouldn't it." If this analysis holds, then we can suspect that there is a premium for teachers in doing modulations in comment slots. They can be heard as offering a degree of credence to students' answers while also asking for alterations to them and, moreover, while doing both of these things without putting students in much of a position to reject teachers' replacements.

However, the analysis that I advocate sees modulated initiations as primarily *locators* of a potential trouble-source. Insofar as these are only offered tentatively, there is then some onus upon teachers who use them to offer a *reason-for-an-initiation*; to say or at least to infer what it is they think might be specifically wrong with the answer. This can be done just after the initiation ("Where in par*ticular*?" in extract 22, "any other sensible names" in extract 31, "How far back are they . . . " in extract 32) or it can be done *via* tentative replacements – and I think this is the function of such replacements ("alluvial wouldn't it," "quail, I think," and in extract 24 T's overlapped formulation of metric units). Accordingly, we could read *tentative* replacements less like definite alternatives to the trouble and more like offers of reasons for doubt.

Modulation, in this case, clearly relates to the dispreferred status of othercorrection in classrooms. Modulations are possible other-corrections done in such a way as to be "downgraded on a confidence/uncertainty scale" (Schegloff et al. 1977:378). And, at least in classrooms, this downgrading suggests an organizational similarity with initiations, even where a replacement is offered.

Schegloff et al. noted that uncertainty markers can also be used "for a check by recipient-of-a-turn of his understanding of the turn" (1977:378). In conversation, this use may be quite distinct from correction. But in class-rooms, there are situations where it is difficult to distinguish the two. Why is this? Perhaps because when a teacher has to check his or her understanding of a student's turn, then it is the acceptability of that turn itself that is placed in jeopardy rather than the teacher's hearing. Classrooms by no means involve the same epistemic democracy as peer conversations. That is, teachers, unlike co-conversationalists, tend not to ask questions in order to find out something they didn't already know. Student answers that have understanding checks run on them thus become candidates for repair, with the understanding checks acting as potential initiations. If, on the other hand, we were to argue for distinct types, for instance, which type would extract 31:5 be? Here, T may be noticing that Gary's line 4 ("Eastern Ranges") is not a completely acceptable answer, thus marking it for correction. On the other

hand, we can note that T seems to accept the answer ("yes"), though we have noted that such "yes's" (extracts 22, 30) can mark tentativeness of acceptance – and in extract 2, "yes" even follows a direct other-correction by the teacher. "Eastern?" at line 5, then, may well be simply a check on T's own understanding. However, since students require teachers to call on them before they get rights to a next turn (McHoul 1978), this check doesn't and can't get clarified because no one is selected in order to clarify it. The lack of a clear distinction between understanding checks and modulations in classrooms is clearly connected with their unique organization as discursive sites, and it offers a promising nexus for further research.

## Correcting gestural and procedural features

In classrooms, modulated forms can be used to commence corrections of other things than talk. For example, they can be used to correct gestures, though to be sure, gestures may be used, just as talk is, to indicate content or information. In extract 33, T requests expansions of a partially accepted answer.

```
Extract 33
   (1) T: Where's another region?
                 ((P indicates on screen))
   (2) P: Uh this is the Coastal Plains
                   (1.1)
• (3) T: Whereabouts Peter which er
                   (0.6) ((P sweeps hand round large area))
   (4) P: Round here
                    (0.7)
   (5) P: There
   (6) T: W'll where's the border, where's the bound'ry of it
                    (0.9)
   (7) P: Well the bound'ry's - the forest there
                 ((indicates))
   (8) T: Alright one bound'ry along there I'll put that in
                    (3.2) ((draws line on slide))
• (9) T: Pete says that's one bound'ry of the Coastal Plain where's the
  (10) P: Along the - sand dunes there ((indicates))
                    (1.8)
• (11) T: Along there?
                    (1.5) ((draws line))
  (12) P: An along those sand dunes
                  ((indicates further line))
  (13) T: Right
                    (1.2) ((draws further line))
```

This expansion request is congruent with some other cases we have looked at (extracts 17, 30, 31, 32), as well as the following:

Extract 34 (1) X: An as you move further out there's higher class (0.2) (2) X: 'n there's more room (in between) (0.3)

(3) X:	an on the (third )	that the	higher cl	ass region
■ (4) T:	Right've you- have you m	entioned	multiple	
	(0.8)			
■ (5) T:	units?			
	(0.4)			
(6) X:	Yeh - right on the outski	rts of the	("	")
		1		]
(7) ( ):			("	")
(7) ( ):			("	")

However, the answer in extract 33 takes the form of both talk and gestures (P indicates area on screen, "Uh this is the Coastal Plains"). The same format is repeated – producing an expansion sequence – in lines 4–6, where Peter's gesture (P sweeps hand round large area) and his talk ("Round here . . . There") are candidates for even further expansion, which in this case takes the form of a particularization. Throughout the rest of the example, T and Peter negotiate the finer particularities stemming from Peter's initial answer (lines 1-2). Finally, Peter understands the exact kind of gesture that would not be subject to correction. That is, he learns the correct procedural format for his informationally acceptable initial answer.

Thus, repair sequences can occur around things that are substantively or informationally correct but procedurally unacceptable. The problem here for students is that it may not always be clear to them, or have been *made* clear to them, that it is procedure that is being "tested" and not substance or information. In the following example, these distinct types of answer criteria are conflated.<sup>9</sup>

```
Extract 35
     Why was Aladdin surprised when he got in the cave
T:
              ((Hands))
T:
     Yes
S1: It was dark and dreary
T:
     No
             ((Hands))
     Yes
T:
S2: It was dra:::b
T:
    That's right
((Source: IMS "teaching practice"))
```

In this sequence, the teacher had previously told a story about Aladdin that described the cave as drab. In the Q-A session, what she wanted from the class as a procedural requirement was that each child should be able to *remember* the vocabulary of her story. So, although S1's answer was informationally correct ("drab"  $\rightarrow$  "dark and dreary"), it was procedurally unacceptable. Yet S1 had no way of knowing this because T had not made it explicit that memory for vocabulary and not (simply) information would be tested in the Q-A session following the story.<sup>10</sup>

Apart from students' answers, breaches of the classroom turn-taking rules (McHoul 1978) can also be subject to correction. In such cases, the breach may be taken by teachers as identical with a "content"-type repairable:

Extract 24 (abridged)

(1) T: what is the av'rage population density of Australia Ian

- (1.0) ((hands go up))
- (2) (): °( square mile)
- (3) ():  $\circ$  s::: three people per mile
- (4) T: We mentioned this a few times what's the *av'rage* population ((looking at Ian)) density 'v Australia

Here, T uses a question-repeat to the intended recipient of his Q (Ian) in order to correct the out-of-turn (unselected/unsolicited) but informationally correct answers in lines 2-3. In extract 36, Peter is obviously (but inaudibly to the transcriber) talking out of turn, perhaps schismically (Sacks, Schegloff, & Jefferson 1974).<sup>11</sup>

```
Extract 36

(I) T: E::r those who have not finished

(I.0)

(2) T: Peter please

(0.8)

(3) (): sh:::

(0.5)

(4) T: those who have not yet finished e:::r I'll give you

(0.4)

(5) T: ten minutes next lesson
```

T's turn at line 2 acts as a direct correction of this occurrence. Interestingly, this makes another student's *unsolicited* turn (at line 3) acceptable insofar as it supports the correction done by the teacher. The sequence running through lines 2-3 in fact acts as a side sequence (Jefferson 1972) because T recommences his turn from line 1 with an exact lexical and syntactic repeat of that line at the completion of the side sequence (line 4).

Not all schismic talk is subject to correction, especially if it is related to the *exact* topic at hand. In extract 37, a schismic sequence fits almost exactly into a teacher's intra-turn pause so that his turn is not syntactically interrupted (but contrast extract 36).

```
Extract 37
  (I) T:
           'd like you to take out your
             (2.0) ((T empties envelopes of pieces for model))
  (2) T:
           (form)
             (0.4)
(3) S1:
           What form?
■ (4) S2:
           °(Score form)
                  I
  (5) T:
                   and land fill
                  (2.0)
  (6) T:
           and recreational land use
                  (1.4)
           sheets
  (7) T:
```

Also it is perhaps significant here that the potential of this schismic sequence for repair is marked by the *whispered* reply S<sub>2</sub> provides to S<sub>1</sub>'s question, a

question directly related to the *exact* topic at that point in the (interrupted?) teacher's turn. That is, the student's "what form?" occurs immediately after the teacher's "(form)" in a situation where there is every indication that there is just about to be prolonged intra-turn pause by teacher – one of classroom talk's routine organizational features (McHoul 1978:209).

# Other-initiation and error replacement

Schegloff et al. (1977) offered no strict co-occurrence rules for particular *kinds* of repairables with particular repair trajectories in conversation. However, there is one fairly broad generalization that can be made in this respect for classroom talk, namely other-initiated corrections are performed only on error-type troubles, whereas self-initiated self-corrections are performed on errors *as well as* on types of repairable where no error as such can be heard. Why is this distinction analytically important? Correction, it seems, can be associated with such things as word searches, and non-errors *can* be corrected whereas obvious audible errors are left to stand. This evidence leads Schegloff et al. to conclude that repair is not limited purely to *replacement*. And this is, indeed, why they chose to refer to the general sequential phenomenon as repair rather than correction (1977:363), the latter being associated with the particular sequential move in which faulty conversational items are replaced.

Yet in every case of second-turn other-initiation, both within my classroom corpus and the Schegloff conversational corpus, it is error replacement as such that is in the offing. This is the case even if the candidate error is only a tentative candidate and the correction is accordingly modulated. The Schegloff et al. investigation of types of trouble (word replacement, repairs on person preference, and repairs on next-speaker selection) with respect to any possible correlations with initiation trajectory types (1-4) shows that they can have their initiations done in same turn, in transition space, in next turn, or in third turn. For all this, we can still limit next-turn other-initiations to at least the more general category of error replacements.

In classroom talk, as we have seen, this is largely a matter of correcting informational errors, though it would also take in a variety of procedural errors – errors of pronunciation and grammar, errors of memory, errors of turn-taking, and so on, as well as errors of *distinction* among and between these alternatives, for example, hearing a predominantly procedural question as requiring an informational response.

SUMMARY

1. Same-turn self-initiations and self-corrections (trajectories 1 & 2) are less numerous than next-turn other-initiations.

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- 2. The latter are observable in classroom talk *en masse*, especially when followed by student self-corrections (trajectory 4b).
- 3. Other-corrections (trajectory 4a), though rare, are to be found in particular sequential environments. For example: (a) where redirections and reformulations of questions (and/or cluings) have failed to generate self-corrections or (b) where a single (often procedural) questioncriterion is corrected so as to allow some other (often substantive) criterion to proceed to completion. That is, they are formulated as last resorts or as completion facilitators.
- 4. Where same-turn self-corrections are found (trajectories 1 and 2), they are not limited to error-types but can be, for example, word searches.
- 5. Other-initiations (trajectories 4a and 4b) are regularly found in the comment slots of Q-A-C triads in classrooms with their trouble sources in prior answer slots.
- 6. Type 3 trajectories (self-initiation and self-correction in third turn) are absent from at least the present corpus of materials and require further investigation.
- 7. Following other-initiations by teachers, reaffirmations or reassertions of candidate repairables by students are rarely found. This is especially the case where the initiation is definite rather than tentative or modulated.
- 8. Other-initiation of correction can go on recursively, as can its close relatives, cluing and requestioning. This recursion produces expanded sequences in which other-correction is deferred.
- 9. Other-corrections are frequently structurally delayed (except for the cases falling under 3b). This delay may last over quite some number of turns, allowing third- (fifth-, and seventh- etc.) turn self-corrections to take place.
- 10. Other-initiations are done either (a) immediately a trouble source turn is over, with usually no gap occurring or (b) immediately the repairable itself is spoken/heard. The latter cases of other-initiations either (i) overlap the trouble source turn or (ii) interrupt it. In instances of (i), teacher and student can both be heard to be speaking, albeit briefly, at the same time. In instances of (ii), the student immediately yields the floor to the teacher.
- 11. Where these overlapping or interrupting other-initiations occur, this is generally in environments where the correctness or acceptability of an answer has more than one criterion. The other-initiation serves to produce a correction of *one* criterion so that the other may be successfully completed, preferably by the speaker of the (partial) trouble source, preferably in third-turn.
- 12. The type that Schegloff et al. called "modulated other-*corrections*" are difficult to distinguish in classroom talk from (highly) modulated

other-*initiations* of correction; these too provide spaces in which some *candidate* repairable can be dealt with at another time by the speaker of the (possible) trouble source.

- 13. These indirect next-turn phenomena (whether they have the status of corrections or initiations, whether or not they contain a candidate replacement) are more frequently used than *direct* other-initiations (such as "No:::," "Doesn't," and so forth).
- 14. The modulated types are difficult to distinguish from understanding checks in some classroom cases.
- 15. Other-initiations can be used on interactional items other than talk. For example, they can indicate troubles with gestural items as well as matters of conversational or classroom procedure, such as where answers are framed for their informational correctness but are marked out for their mnemonic faults or where turn-taking expectations are transgressed in cases of, for example, schism or unsolicited response.
- 16. Other-initiated corrections are performed, in every case, on repairables that are errors. They are formulated as attempts to yield eventual replacements by the speaker of the trouble source or by other students.
- 17. Both teachers and students are involved in same-turn self-corrections, but next-turn other-initiation is the prerogative of teachers and thirdturn self-correction the prerogative of students.
- 18. Teachers correct themselves and so do students. But, contrary to what may be a popular image of the classroom, teachers tend to show students *where* their talk is in need of correction, not how the corrections should be made.

#### NOTES

1. I assume familiarity with the Schegloff article, its terms, and distinctions throughout. I am very grateful to the anonymous *Language in Society* reviewer who pointed out that, technical matters notwithstanding, "repair" and "correction" cannot be used synonymously; and I have tried to correct the undue amount of synonymy which had crept into an earlier draft. The section immediately preceding the summary takes up this matter again and raises a possible qualitative distinction between the two terms. That is, Schegloff et al. (1977:363) appear to confine the term "correction" to error replacement, thus allowing "repair" to cover both errors and other types of trouble-at-large. What then should we call the specific "moves" in which nonerrors are altered? The terminology itself may still be in need of correction. Or is it repair?

2. Here, as previously, my corpus of data is drawn from formal lessons in Australian high schools. Ian Malcolm and Jim Heap, whose experiences in the area are far superior to my own, have kindly shared their reservations with me about the extension of high school findings to primary school (elementary school) situations.

3. In classroom talk, we may also find quite significant errors being made by teachers that remain uncorrected:

Extract 24 (abridged)

- (1) (Ia): Three people ev'ry square em mile?
- (2) T: Three people f'r ev'ry square mile so that w'd be about five uh six people p'square kilometer f' the whole country . . .

4. Note incidentally a relatively rare phenomenon here (extract 20:14-15): the reaffirmation of an answer that has already had teacher-initiation performed on it; a possibility encountered by Schegloff et al. (1977:373, fn. 26) in their conversational materials.

5. In treating any student's correction of another student's trouble as *self*-correction, I am mindful of Payne and Hustler's (1980:60) belief that individual students stand in a synecdochal relation to the whole class.

6. Lines 20-23 are more fully dealt with in McHoul (1978:202-03). The phenomenon of partial acceptance of an answer that requires completion or filling out is a regular classroom occurrence. Filling out can be done by same answerer (extract 34), a further answerer (extract 17:5-13), or indeed by the teacher:

Extract 38

(I) T: What type of jobs do most people have before the industrial revolution how d'they live
 (0.6) ((T raises brows, nods and spreads out palms horizontally at next speaker))

(2) (): Farm(er)s

(3) T: Farming agricultures cultivators

7. The distinction between answers-as-such and the slots provided for them is a potentially vexed one. One possible way of treating the problem is to remember that question slots do not have to take the grammatical form of the interrogative, thus freeing analyses of conversation structure and context from "sentential" considerations. See McHoul (1987).

8. Note that T may have an interest in doing this correction quickly insofar as it could be heard that the faulty nature of X's answer is a consequence of T omitting from his question at lines 1-3 a *reminder* of the residential question-criterion. That is, a potential repairable in T's Q only comes to light upon X's production of an answer, and T might be using an other-correction of X's answer to belatedly correct that item of his own initial Q.

9. This fragment was reconstructed by a faculty member of a university Education Department from a student teacher's teaching practice. It is not a transcript of an audio or video recording.

10. See Cicourel (1973:142–149) for a parallel example.

11. By "schism" Sacks et al. meant to indicate discursive exchanges that split off from the main talk within an event. "Talking at the back" is a classic case in point.

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