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The relevance of repair for classroom correction

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ABSTRACT

This article attempts to align a familiar task of classroom teaching, eliciting from students correct answers about their lessons, with a major organizational domain in studies of natural conversation, that of conversational repair. Numerous studies have analyzed correction sequences in classroom discourse, and our discussion pays special attention to McHoul's (1990) treatment of "repair in classroom talk." McHoul directly measures the findings on repair in studies of natural conversation to the regularities of correction sequences in classroom lessons. It is argued, contra McHoul, that repair is a different, and prior, order of discursive work, and one that premises the very possibility of classroom correction. Further, the difference may have wider relevance for understanding repair and correction as "co-operating" organizations of talk-in-interaction more generally. (Conversation analysis, classroom discourse, correction, ethnomethodology, repair.)

INTRODUCTION

Insights gained from the analysis of natural conversation are now commonplace in classroom discourse studies. Classrooms are, of course, sites of natural, or informal, or desultory conversation. By most lights, however, they also constitute more or less formal, institutional, and professional occasions. Interest in how classrooms do the work of teaching and learning has led to the development of a substantial literature of classroom discourse studies whose findings are diverse and own no single program (cf. Green & Wallet 1981, Gumperz 1982, Michaels 1981, Cook-Gumperz 1986, Erickson 1986, Cazden 1988, Van Lier 1988, Lemke 1995, Wells 1996, Luke & Freebody 1997). But central among them has been the regularity of the three-turn sequence of direct instruction. The sequence shows the organization of "questions with known answers," and it begins with the observation that teachers (and others charged with the instruction of novices) often ask questions whose answers they already know.[1]

In classrooms, the "question with known answer" typically shows a sequential organization of three turns: the teacher's initiation in first turn (routinely a question), a student's reply in next turn, and remarks on the adequacy or correctness of the reply in the teacher's third turn. The sequence has been explored in

an extensive corpus of studies in the past 30 years (e.g., Bellack et al. 1966, Sinclair & Coulthard 1975, McHoul 1978, Mehan 1979, Michaels 1981, Heap 1985, Cazden 1988, Wells 1993, Macbeth 2000; see also Goffman 1969 on "information games," and Searle 1969 on "exam questions"). Often described as a sequence of Initiation-Reply-Evaluation, or IRE, it is organized by the understanding that teachers routinely know the answers to their questions, and that this is understood by everyone else in the room, whether those others know the answers or not. The question with known answer is a deeply familiar and pervasive way of organizing instructional sequences in classrooms, and it delivers the last word, and sequence closure, to the teacher.[2]

What these direct instructional sequences yield, and what they are posed to yield, is something like accountably correct answers, and, by implication, knowledge and competence. How "answers" fit with "knowledge" and then with "competence" is a large question, and the slippage has not gone unnoticed in the literature. Studies of "situated cognition" and "authentic practices" that trade on the differences between "knowing that" and "knowing how" (Ryle 1984) have raised the question of just what correct answers can tell us about student learning (e.g., Lave 1984; Bloome et al. 1989; Brown et al. 1989; Resnick et al. 1991; Chaiklin & Lave 1993; Kirshner & Whitson 1997). And Rogoff 1990 reminds us that classrooms are themselves local cultures of knowledge production, honoring and honing some kinds of knowledge and competence and not others. These topics are, however, beyond the scope of this article. Acknowledging the unavoidable provincialism of classroom contexts as well as their pervasiveness in the lives of students and teachers, producing "correct answers," and thus "correction," is nonetheless a prevailing task and orientation in the practical life of classrooms, for students and teachers alike.

That observation leads to the following more or less technical interest: Insofar as finding and/or building correct replies to teachers' questions about classroom lessons is a deeply familiar task, we can expect that there are organizational resources for doing it, including resources for fixing replies when "correctness" is not found. Studies of classroom discourse have thus taken interest in what those organizations and resources are and how they work, and how we routinely find them played out in the practiced production of the three-turn sequence.

THE RELEVANCE OF STUDIES OF NATURAL CONVERSATION

Analyses of the three-turn sequence of direct instruction have substantially relied on prior work in the analysis of natural conversation, and especially the sequential organization of adjacently placed turns. By Mehan's (1979) account, the IRE sequence is assembled as two consecutive adjacency pairs – the Question:Answer turns and the Answer:Evaluation turns – and each pair shows the regularities of placement and "tying" (Sacks 1992) found in the adjacency structures of natural conversation. Mehan's work was an early and widely read intro-

duction to classroom studies of the conversation analytic (CA) program of Sacks, Schegloff & Jefferson 1974 and their colleagues and students.

The relevance of studies of natural conversation for classroom studies is more extensive still. Studies of natural conversation have detailed multiple organizational domains. Included among organizations of turn-taking and adjacency are organizations of, for example, turn construction, sequence organization, party structure, preference organization, and also conversational repair. As Heap 1982 convincingly shows in his penetrating critique of earlier classroom interaction studies that relied on pre-coded action categories, the organizational domains of conversation are both heterogeneous and concurrent. There is, for example, no production of adjacently paired turns that shows only the order of adjacency, and to understand the production of any actual utterance, pair, or sequence implicates the full range of the finely ordered work of competent speakers.

THE RELEVANCE OF REPAIR FOR CORRECTION

I have made this point about the coincident organizations of conversation to preface a consideration of one of the most direct treatments of the sequential order of classroom correction to date: McHoul 1990. In this study, McHoul takes up the findings on "repair" in natural conversation reported by Schegloff et al. 1977, and produces a complex and detailed comparative analysis of correction in classrooms, to address the question: In what ways are the organizations of classroom correction sequences continuous with and/or different from repair in conversation? (See also Drew 1981, and Weeks 1985.) This work complements McHoul's prior and highly instructive treatment (1978) of classroom turn-taking organizations vis-à-vis turn-taking in natural conversation. In both studies, he finds significant continuities and also differences between classrooms and conversations, and in the more recent study, published in this journal, he finds organizations of classroom correction that are at some distance from those of repair in natural conversation.

I want to critically examine McHoul's comparative findings and then to present some of my own. Foreshadowing my argument, it may be that conversational repair and classroom correction are better understood as distinctive, even "co-operating" organizations (see Pomerantz 1978), and thus poor candidates for comparative analysis. Though correction may be a kind of repair in natural conversation, in classrooms these actions share a different category relationship: Correction in classrooms is an identifying task and achievement of classroom teaching. As is true of all discursive practical action, repair is then omnirelevant to it, having to do with the first achievements of common understanding that classroom lessons – and their correction sequences – rely upon and reflexively display. But as the argument unfolds, their differences may not only be relevant for our understanding of repair and correction sequences in classrooms. What

we find there may offer grounds for rethinking the relation of correction to repair in natural conversation more generally.

I want to begin with a general review of the repair structures found in natural conversation, with the aim of locating McHoul's classroom correction sequences within the "repair space" analyzed and described by Schegloff, Sacks & Jefferson 1977 (hereafter SS&J). The analytic distinctions, findings, and arguments of SS&J, and of McHoul as well, are too detailed and nuanced for comprehensive review here. The organizations of repair they describe, with respect to both conversational organization and the work that conversational repair achieves, are too rich for a summary account (a sense of the richness can be found in Jefferson 1972, 1974, 1987, and Schegloff 1979, 1987, 1992). Instead, my tack will be to present a sketch of conversational repair organization that is fitted to McHoul's discussion, and then turn to a summary of McHoul's comparative findings, using them to develop further the first literature of repair. I then make the case, via an analysis of some different classroom materials, that correction and repair in classroom lessons may be usefully different things. I then turn to the larger question of the relation of correction to repair, conceptually and organizationally.

ORGANIZATIONS OF REPAIR IN NATURAL CONVERSATION: SELF AND OTHER, INITIATION AND REPAIR

"Repair" in conversation refers to the fixing of a piece of talk, either in the course of its production or in subsequent turns. Reparative sequences begin with a "repairable" or "trouble-source" turn. Routinely, these are troubles in producing the turn or in hearing or understanding it, and the recognition of a troublesome turn and its subsequent repair may be undertaken by either party. As a course of action, repair shows both a sequential organization, or "trajectory," and an organization of the parties to achieve it. A repair is first "initiated," meaning roughly that a repairable is discovered and/or recognized AS a repairable, and then it is "repaired," routinely – but not only – by its replacement. Embedded within the canonical two-party organization of self and other, repair may be initiated by either self or other, and "done" by self or other as well, yielding a four-cell grid of possibilities: self-or-other initiation, and self-or-other repair.

Within these organizational possibilities, SS&J report from their extensive corpus a regular sequential "repair space" or "trajectory" wherein the work of conversational repair is routinely done. They identify a remarkably local, textured, and temporal organization of "opportunities" for the initiation of repair, consisting of four positions across three turns. That is, we can find a repair's initiation in

1. the same or "trouble-source" turn whose production yields the repairable;
2. in the turn transition between the trouble source turn and its next;
3. in next turn; or
4. in third turn.

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Centrally, SS&J report a decided "preference" for self-initiation and self-repair, a preference that shows itself across the organization of the three-turn trajectory as a decisive skewing toward self-initiation and repair (though frequencies are only a first, presenting evidence for this structure of preference).

The sense of "preference" arises in part from how it is that when we examine the opportunities for the initiation of repair across these positions, in all but the third position (next turn) we routinely find the initiation performed by the speaker who produced the troublesome turn (self-initiation). Further, self-initiation just as routinely yields self-repair. Moreover, when we do find other-initiations (routinely in next turn), we overwhelmingly find self-repair in turns subsequent to it. In this sense, repair in natural conversation shows a structural preference for self-initiation AND self-repair, evidenced in the very order of the repair space and in how the parties to the talk articulate it. This preference structure is central in McHoul's treatment of classroom correction sequences, insofar as the outstanding variance he finds there is the prevalence of other – (i.e., teacher) initiation rather than self-initiation. We will see momentarily how this works in his materials.[3]

Alongside these technical findings about repair in natural conversation is a larger conceptual understanding of what the work of repair could be, and to what ends – what troubles – the parties could be oriented in producing its regular trajectories. Three contextualizing remarks are useful for understanding studies of conversational repair and the classroom observations to follow.

First, repair is oriented to the achievement of common understanding, an achievement first evidenced on any actual occasion of conversational interaction by the production of an appropriate next turn, on time (Moerman & Sacks 1988). The "understanding" referred to here is not so much a propositional object – as in speech act theory (Searle 1969) – as a local-interactional one, as in understanding a prior turn in the projectable course of its construction for what kind of turn it is, what work it is doing, what it calls for next, what understanding it evidences of prior turns, and so on. Although this work is exquisitely local, as we consider how understanding could be filled in on actual occasions, we come to appreciate how local orders of interaction assemble practical horizons of sense and meaning – and thus of order and structure – that are more global still. It is difficult to imagine a more foundational orientation, and problematic, for the "routine grounds of everyday life" (Garfinkel 1967). (See Schegloff's 1992 extensive discussion of repair as the most local organization for assuring the recurrence of intersubjectivity-in-conversation.)

Second, as SS&J observe, though repair can entail correction, correction is a lesser domain both conceptually and empirically. Correction premises "error," yet studies of repair routinely find repairs where no accountable "error" can be heard, and also find accountable errors that are not corrected. In this strong sense, repair constitutes a domain of conversation's organization, oriented as it is to the achievement of common understanding, wherein nothing escapes potential relevance:

> The term 'correction' is commonly understood to refer to the replacement of an 'error' or 'mistake' by what is 'correct'. The phenomena we are addressing, however, are neither contingent upon error, nor limited to replacement. . . . Accordingly, we will refer to 'repair' rather than 'correction' in order to capture the more general domain of occurrences. . . . It appears that nothing is, in principle, excludable from the class 'repairable'. (Schegloff et al. 1977:363)[4]

As for correction, Jefferson 1974 characterizes two of its major domains as "production errors," or errors in the production of a coherent utterance, and "interactional errors," or errors in speaking "appropriately," given the parties and occasion of the exchange. (See also Jefferson 1987 on "exposed and embedded" correction.)

Further, as SS&J observe:

> When the hearing/understanding of a turn is adequate to the production of a correction by 'other', it is adequate to allow production of a sequentially appropriate next turn. Under the circumstance, the turn's recipient ('other') should produce the next turn, not the correction (and, overwhelmingly, that is what is done). Therein lies another basis for the empirical paucity of other-corrections: those who could do them do a sequentially appropriate next turn instead. (1977:378)

Finally, SS&J report anecdotal evidence of a context of parties and occasion that runs counter to their findings for a strong, robust preference for self-initiation and self-repair. It pertains to talk between children and adults, and especially parents and children:

> We want to note one apparent exception to the highly constrained occurrence of other-correction. . . . The exception is most apparent in the domain of adult-child interaction, in particular parent-child interaction; but it may well be more generally relevant to the not-yet-competent in some domain without respect to age. There, other-correction seems to be not as infrequent, and appears to be one vehicle for socialization. If that is so, then it appears that other-correction is not so much an alternative to self-correction in conversation in general, but rather 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. It is, in that sense, only a transitional usage, whose superseding by self-correction is continuously awaited. (1977:380)

This passage is central to McHoul's treatment of classroom discourse as a setting wherein we routinely find an "apparent exception to the highly constrained occurrence of other-correction" (McHoul 1990:350).

For students of the literature, this review of the organization of repair in natural conversation, though incomplete, should be recognizable. It offers a first

reading of the conversational domain that figures centrally in McHoul's analysis of classroom correction sequences.

CLASSROOM CORRECTION

McHoul 1990 brings multiple interests to a complex analysis of classroom correction sequences. My treatment of it will, again, address only the central tendencies and findings. As suggested above, the summary finding by SS&J on conversational repair is that there is a decisive preference for self-initiation and an even more robust preference for self-repair, and it is in these terms of preference structure (and trajectory) that McHoul finds a different organization for classroom correction.

McHoul's analysis begins with SS&J's observations about adult-child interaction: "Schegloff et al. (1977:380) 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" (1990:350). He goes on to examine a corpus of materials recorded in Australian high school classrooms to see whether a "relaxation of the usual preference for SELF-correction [is] borne out by actual materials" (1990:350, original emphasis). And something like that is indeed borne out in his materials, in a nuanced way. To summarize McHoul's findings: As we find in natural conversation, classroom correction also shows a preference for self-correction, though a less robust one. But unlike natural conversation, classroom correction is routinely OTHER- (or teacher-) initiated:

> 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 tha[n] in the former. (1990:366)[5]

This is the central difference – a prevalence of other- (teacher-) initiation – that McHoul finds between repair in natural conversation and correction in classrooms, though his materials show other variances as well. Perhaps most surprising is the paucity of self-initiation yielding self-repair. It is a finding cited early on in the analysis, and though surprising in its own right, it may be especially relevant for understanding McHoul's larger treatment.[6] Embedded in his discussion of the relative infrequency of self-initiated self-repair is a fairly radical inversion of the orienting sensibility that we find in the analysis of conversational repair. Programmatically, whereas in conversational studies REPAIR is the prevailing domain, to which CORRECTION is the lesser domain or "restricted case," in McHoul's analysis the asymmetry is inverted. Specifically, not only are self-initiated, self-repairs relatively rare in his classrooms; when we find them, "these are often restricted to cases where the repairable or 'trouble source' is other than an ERROR in the strictest sense" (1990:353; original emphasis). Thus, "error in

the strictest sense" – and therefore the correction of errors – becomes the "unrestricted" case in his treatment of classroom correction.

Yet such a version of error correction is precisely what SS&J have set aside as a useful way of thinking about the range and order of conversational repair. It is central to McHoul's reading of the prior literature, as he acknowledges in the first footnote to his text, and it is a first instruction for our reading of McHoul's analysis and findings: It is an interest in "correction," or "correcting informational errors" (1990:374), that leads the comparative analysis of his classroom materials.[7] "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" (1990: 350). McHoul is thus treating repair-in-the-classroom not as a matter of the produced coherence of classroom discourse – that is, not as an orientation to the achievements of common understanding – but rather as the discursive production of classroom lessons and correct replies within them. Only with this reading in view can we begin to see into his materials and the organizations he finds for them. However, whether these are organizations of repair, and of a kind that can usefully yield the comparative analysis he intends, or whether instead we have a misaligned comparison, turns on how this rewriting of the "restricted case" plays out in his analyses.

R-E-C SEQUENCES

The inversion of the restricted case follows from McHoul's interest in sequences of direct instruction. This is indeed where we find classroom correction sequences, though not only there.[8] And this is perhaps the central instruction we must bring to our reading of McHoul's comparative analysis: that he is treating classroom correction as a constituent organization of direct instruction. He finds his correction sequences in the work of expanded IRE sequences wherein a student's reply has failed and is corrected (or correction is initiated) in a subsequent turn by the teacher. Recall that the normative IRE sequence shows three turns: a first question by the teacher whose answer she knows, a student's reply in next turn, and third-turn remarks by the teacher on the adequacy of the reply.

Recall, as well, that any regular sequential organization can present itself in its "simplest" form, yet can on any actual occasion show expansion to an "*n*th" turn (where in the production of expansions we sometimes see an orientation to the more parsimonious form). Thus, IRE sequences may in fact consist of many more than three turns, or two speakers, yet in every case the sequence will come to completion when a positive evaluation in third-turn position has been produced. Mehan 1978, 1979 speaks of sequence completion as a matter of achieving "symmetry" between the student's reply and the teacher's assessment of it.

In this light, we can see that the classroom correction sequences that McHoul examines are those in which a student's reply fails to receive a positive or accepting assessment in the teacher's third turn, and a correction-initiation pro-

duces sequence expansion. Rather than the third turn yielding sequence closure, we find third turns as teacher initiations, and student (or teacher) corrections in fourth or subsequent turns. Schematically, these correction sequences look something like the following:

Position	Speaker
Initiation	Teacher's question
Reply	Student [trouble source turn]
Evaluation	Teacher's Correction-Initiation
Correction	Student or Teacher Correction in 4th turn

In this way, McHoul locates what can be called a 'R-E-C' sequence, and it is within such environments that he compares the organization of classroom correction sequences with prior findings on conversational repair. The analytic distinction between initiation and correction is preserved, as is the attention to party structure (now "student" and "teacher" rather than "self" and "other") and trajectory. By slightly annotating the columnar display, we can see how these organizational features play out in classroom corrections:

Position	Party	Initiation/Correction
Initiation	Teacher	
Reply	Student	Trouble Source [opportunity for same-turn Student Initiation and/or Correction, including turn-transition]
Evaluation	Teacher	[opportunity for next-turn Teacher Initiation and/or Correction]
Correction	Student	[opportunity for Student and/or Teacher Correction][9]

In general terms, this is the organization of correction in classroom lessons that McHoul considers, and this is where he finds variances with findings for repair in natural conversation. This also clarifies the five correction trajectories and their frequencies that he identifies in classroom correction sequences.

The trajectories of classroom correction, or the "correction space," are one of the findings at variance with repair in conversation. The trajectories in classrooms are more extensive and extendible: "We can now see that the conversational convention restricting the repair space to a maximum length of three turns is sometimes altered in classrooms" (1990:366; but see Schegloff 1992 on fourth-position trajectories in natural conversation). Of the five trajectories that McHoul identifies, his interest focuses on two of them (labeled 4a and 4b in his text):

	Turn location	Party
4a.	Next turn initiation and correction, and	teacher
4b.	Next turn initiation and third turn correction.	teacher + student

"Next turn" here is next to a student's reply, and it maps onto the teacher's third turn of the three-turn sequence of direct instruction. ("Third turn" here would then be the fourth turn of the sequence.)

Given the alternative trajectories for self and other initiation of correction, a full 74% of McHoul's correction sequences show teacher-initiation. This is the striking preponderance of "other-initiations" that he finds (alongside the relative infrequency of same-turn self-corrections: 26% combined for students and teachers), a recurrence that nonetheless preserves an orientation to self-correction in subsequent turns (55% of his sequences show student-corrections in next turn to teacher-initiations; 19% yield teacher-corrections). He writes:

> In light of this observation, we can offer an initial summary of the preferential organization of repair in classrooms. Other-correction can occur without difficulty, but self-correction is a much more routine and observable phenomenon, and … is frequently undertaken by students following initiation by teachers. (1990:353)

A final point in this review of McHoul's comparative analysis, before I proceed to an analysis of some different classroom materials, has to do with how these findings articulate with the "preference" structures found in conversational repair. In the technical sense intended, "preference" refers not only to something like "tendencies in the aggregate" but to the *in situ* production of sequential organization. Preference is then a production account of members' orientations, available to them (and to us) in the developing particulars of their talk.

In the literature, the "markedness" of preference refers to the temporal and sequential organizations whereby preferred and dispreferred next turns are produced (e.g., as in next turns to compliments, assessments, or bids to tell stories). As a practical matter, these organizations have to do with the timeliness of next turns. Given a preference for self-initiation and repair, on hearing a trouble-source turn, recipients routinely "withhold" an other-initiation in next turn, at once extending and co-producing turn-transitional space as a next opportunity for self-initiation by the speaker who produced the trouble. In this rough sense, "preferred" next turns are produced "on time," and "dispreferred" next turns (e.g., other-initiations) are produced with a slight pause, gap, or delay.

Continuing the comparison, McHoul regularly finds such "withholding" of the teacher's next turn to a student's reply that is correction-relevant, though he means a withholding of the teacher's CORRECTION: Teacher-corrections are routinely withheld, and in the markedness of their delays, by this account, we see a structural "preference" for student-correction.

The picture is complicated, however, by an allied finding that teacher-INITIATIONS are NOT delayed in McHoul's classroom correction sequences. Given how preference works in natural conversation, if there were a preference for student-initiation of correction in classrooms, we might expect a delay in the production of teacher correction-initiations as well. "Yet, the overwhelming

evidence is that in cases where teaches do other-initiation, this delay feature is frequently absent from them" (1990: 362).

Thus, McHoul's teachers tend to produce their correction-initiations immediately, sometimes even overlapping the trouble-source answer, and he finds in this regularity a preference organization that may be distinctive to classroom lessons: "a dispreference in classrooms for post-transition GAPPED delays of other-initiation" (1990:363, original emphasis). More simply, and holding aside how one would characterize a preference structure from such turn productions, teachers tend not to delay their next-turn correction-initiations.

One has to consult McHoul's materials to see just what this organization looks like. But if, indeed, we find that teacher-initiations are not delayed, then we have lost a major kind of evidence for the preference for student-correction that McHoul nonetheless finds. He works out the puzzle by setting aside the production of correction-initiations as constitutive of the larger preference for student correction, and attending instead to the production of the correction per se. It is in the production not of the initiation but rather of its projectable correction that we find the markedness of preference:

> 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 [that are themselves not withheld]. Deferring the actual correction, as we have noticed, can be realized as a recycling of other initiations. (1990:363, original emphasis)

According to this understanding, (recycled) teacher-initiations themselves are treated as "forms of withhold" which enact a preference for student correction by delaying the teacher-correction they project. On this point, the divergence from findings for conversational repair is perhaps most vivid. In conversation, other-initiation itself displays – in the order of its production across the trajectory – the larger structure of preference. Here, however, teacher-initiations show the markedness of a preference structure, but not in their own production. Rather, they are the thing done IN LIEU of the temporal withholding that pushes teacher-correction further into the correction space of the sequence. In this way, the preference structure McHoul finds exempts the production of teacher-initiations from the field in which the preference for student-correction is nonetheless displayed.[10]

It's a complex picture, and if there is a "knot" in McHoul's analysis of the preference organization of classroom correction sequences, it may be this: The treatment of his correction sequences yields an analysis of DISPREFERENCE – a dispreference for teacher correction – as the organizing preference structure. But it is only by a logic of the "excluded middle" that we can claim, at the same time, evidence of a preference for student-correction. The latter preference structure – as a matter not of logics or frequencies, but of actual, interactional productions across the correction space, and specifically in the production of teacher-initiations – is difficult to find in the materials. Instead, we tend to find a student-

corrections in next turn to the "on-time" production of teacher-initiations. But this would be a weak version of "preference," restricted as it is to a single turn position within the REC sequence.

Such a finding is, of course, admissible: that whereas the preference for self-repair in conversation is recursive across the repair space, the preference for student-correction in classrooms is more episodic than recursive. But the difference may be more substantial than it appears. The play of dispreference in the analysis is mindful of the inversion of "correction" and "repair" with which it begins. For studies of repair in natural conversation, repair is the organizing conceptualization, and preference the production description, to which correction and dispreference are cognate and derivative. These relationships, however, are inverted in McHoul's treatment of classroom correction, where dispreference organizes the evidence for preference, and correction organizes the repair space. Though the difference may seem only technical, or evidence of a significantly different organization for classroom discourse, it may also be troubling for the cogency of the comparative treatment, both conceptually and technically.

AN ALTERNATIVE ANALYSIS

This discussion does not exhaust McHoul's treatment of classroom correction, which is detailed and disciplined. But rather than continue the review, I want to proceed in a different fashion, and offer an analysis of some different materials, recorded in a fourth-grade classroom in San Francisco, California. Two things should be carefully noted at the outset. First, McHoul's materials are Australian, and there is no reason not to expect production differences across settings and cultures even within "same" institutions. Second, there may be even less reason to expect continuities across grade levels, and every reason to expect differences. Teaching in the early grades – teaching those who genuinely do not know their lessons – may be substantially different from teaching in the later grades (cf. Macbeth 2000, Peterson 1952).

Thus, my materials need not be read as a "counter" to McHoul's. At the same time, however, they are intended to show a different kind of analysis of the relevance of repair for classroom lessons. We will see that the organizations of repair we find in these materials return us to an appreciation of the first tasks and contingencies of common understanding. To those tasks and contingencies, classroom lessons, complete with questions, answers, and errors in the strict sense, are deeply indebted, in that what constitutes questions, answers, and sequences of them are themselves interactional achievements, showing analyzable – and contingent – productions in their course. The alternative analysis returns to common understanding as the first organizational problematic on the scene, to which classroom correction owes its familiar course and outcome – accountably correct answers. It thus begins with an understanding of the organizations of direct instruction (including the work of correction sequences), on the one hand, and of

repair, on the other, as distinctive – and concurrent – organizational domains, and thus poor candidates for comparative analysis.

THE MATERIALS

The school is in a working-class district of San Francisco and receives children from the neighborhood and children bused in from other neighborhoods. The students are African, Asian, and Hispanic American, many of them immigrant, nonnative speakers of English. In many ways, the school exemplifies the diversity we find in many urban American schools, and it enjoys a highly professional and dedicated staff of teachers, many of whom are bilingual. The school has received recognition from the local district and the state for its work with these students, their parents, and the wider community.

The materials below were recorded in a fourth-grade language arts class that was reviewing workbook assignments on the uses of punctuation. Individual students are nominated by the teacher to handle each next problem, and their task is twofold: to read a passage from the text, and to identify the correct punctuation for it. Each problem is produced as two consecutive IRE sequences: first the reading, and then questions and answers about its punctuation. The transcript begins with problem 9, so the class has already completed the first eight problems and has developed something of a local format for talking through each one. We will examine problems 9 and 11.

(1) la1:1 [Quotation marks indicate passages that are being read.]

1. T: Okay, number nine:, will you please do that one: (0.5)
2. uhm:: (.) Jason Linn.
3. (1.0)
4. J: "Let's go together ( )."
5. (1.0)
6. T: "ssaid Dianah."
7. J: "Dianah." =
8. T: = Good reading. = "lLet's get together tomorrow, said ah- Dianah:."
9. Alright. = Where d' tha quotation marks go Jason.
10. J: // Before tha (.)
11. llet.
12. T: B' for: let's(s)(s) an:d =
13. J: = after (.) ta'morow. =
14. T: = An af:ter tamorrow. = Duz it go before r' after tha caw:ma.
15. (2.0)
16. J: ** ( ) after. **
17 (1.5)
18. T: Duz it go- do tha quotation marks go before: r' af:ter tha caw:ma.
19. (3.5)
20. J: ** after **
21. T: That's correct(t)(t). Okay?
22. (1.5) …

To review this sequence in terms of our interest in the relevance of repair for classroom lessons, three further observations on the organization of IRE sequences are helpful. The first is that classroom lessons are organizations not

only of discourse, but also of parties and party structure (cf. McHoul 1978, Payne & Hustler 1980, Heap 1990, and Macbeth 1991 on classroom party organization). Payne & Hustler 1980 offer an especially instructive analysis of how classrooms assemble the practical, organizational identity of the cohort or "the class" from the gaggle of children that enters the room, and how the "occasion relevant identities" of the teacher and the class are reflexive to the order of the room.

The second observation tells us something about how this cohort organization organizes the discursive production of lessons. Specifically, when we examine the turn-transitional environment between a teacher's question to a single student and the student's reply, we routinely find a delay in the production of the student's turn, without competition from other, non-nominated members of the cohort. McHoul 1978 speaks of this as a period of "due consideration," and teachers and students mark it as such; delays in students' next turns are specifically unremarkable. Yet the temporal parameters of such delays are themselves delicate sites of order and meaning construction, so that a delay that continues opens the field to other hearings; for example, has the student heard the question, or is she able to answer it? These turn-transitional durations are known by all parties well enough that we commonly find "pre-positioned" remarks by the nominated student that are not themselves answers but indicate that she has indeed heard the question as hers to answer, and that she is engaged in formulating a reply that will be forthcoming.

The third observation pertains directly to corrections, or assessments of the adequacy of student replies, and their turn-transitional environments. In my materials (Macbeth 2000), the second turn transition of the canonical IRE sequence – that between the student's reply and the teacher's third-turn remarks – also shows a regular orientation to the production of delays. Briefly, students orient to delays in teacher's third turns much as conversationalists orient to delays in the production of second turns to adjacently paired turns (as in assessments, requests, or offers): Delays in next-turn production work as virtual harbingers of dispreferred next turns, and are heard that way (cf. Jefferson 1974; Sacks & Schegloff 1979; Pomerantz 1978, 1984; Davidson 1984; Sacks 1987). This is also true in classrooms. Delayed teacher's third turns – whether they prove to be corrections, correction-initiations, or something else – are heard as projectable for negative evaluations, and this organizes a way of hearing the adequacy of a reply that has no need for knowing, in some propositional way, what the correct reply would be. Rather, "correctness" can be seen and heard in these temporal durations. It permits a way of hearing the adequacy of replies publicly and observationally, in the temporal parameters of the production of the teacher's third turn, where the production of public knowledge and understanding is perhaps the standing task and achievement of classroom instruction.

The first relevance of these observations to our transcript is to make sense of the duration of line 3. Having been nominated in last position of the teacher's turn of line 2, Jason delays and begins his reading in line 4.[11]

(2)

1. T: Okay, number nine:, will you please do that one: (0.5)
2. uhm:: (.) Jason Linn.
3. (1.0)
4. J: "Let's go together ( )."
5. (1.0)
6. T: "ssaid Dianah."
7. J: "Dianah." =
8. T: = Good reading. = "lLet's get together tomorrow, said ah- Dianah:."

Apparently it is a fitful reading, the last part of which cannot be heard (at least by the transcriber), though we can be sure that Jason heard it. But it was apparently not heard by the teacher either, who, following the duration of line 5, completes the "missing part" himself, to which Jason repeats the completion in line 7, and to that the teacher latches his third-position assessment and repeats their joint reply. (The latching of third-turn evaluations is a common placement of strong, positive evaluations in my materials.)

As for the "kind" of reparative sequence we have here, lines 4–7 appear to be a "production" repair in Jefferson's (1974) discussion, whose object is the practical production of the reading, as the second turn to the sequence.[12] Only when a reply is in hand would we have the relevance of correction in the strict sense, and the sequence reminds us that answers themselves are contingent productions, for which the analysis of repair, rather than correction, may show its relevance first.

We can also see, in the particulars of line 5, that repair is not the only organization operating here. We find in the duration of line 5, a 1-second pause, concurrent orientations to repair AND to the IRE sequence that is underway. In brief, Jason, hearing his own completion in line 4, is waiting for third-position remarks from the teacher (and hearing the delay of those remarks, we might imagine he is feeling a pulse of anxiety as well). But the teacher, not hearing the end of the reading, is awaiting its completion; we could say line 5 is, for him, a delay across normal turn-transition space to give current speaker further opportunity to self-repair and complete the reading (the production repair mentioned above). Both student and teacher are then "withholding" next turns, but via orientations to different sequential organizations, and in this way the duration of line 5 is collaboratively built.

(3)

9. Alright. = Where d' tha quotation marks go Jason.
10. J: // Before tha (.)
11. llet.
12. T: B' for: let's(s)(s) an:d =
13. J: = after (.) ta'morow. =
14. T: = An af:ter tamorrow. = Duz it go before r' after tha caw:ma.

In line 9, the teacher continues with a direct question and next initiation about the punctuation. Jason evidently knows this is his question to answer, and he

starts up in overlap at the teacher's first possible completion. Something of a duet then sets in, with a round of latchings whereby Jason and the teacher parse the question into embedded sequences: The first is answered and assessed in lines 10 through 12, and the *an:d* of line 12 works as a virtual next question (where positive evaluations are also evidenced by repeating the answer, and by the production of next questions). The latches across lines 12 through 14 mark both Jason's "on task" engagement and a positive assessment by the teacher.

(4)

14. T: = An af:ter tamorrow. = Duz it go before r' after tha caw:ma.
15. (2.0)
16. J: ** ( ) after. **
17 (1.5)
18. T: Duz it go- do tha quotation marks go before: r' af:ter tha caw:ma.
19. (3.5)
20. J: ** after **
21. T: That's correct(t)(t). Okay?
22. (1.5)…

Line 14 initiates a next embedded IRE sequence, addressed to the same problem and student. The 2.0-second pause of line 15, collaboratively produced by all the parties in the room, strikes me as part of the business of "due consideration," albeit a long one. It may suggest uncertainty, as does Jason's very soft answer in line 16, after which we find the 1.5-second duration of line 17. The teacher then begins line 18 as a repeat of the question of line 14, initiates its repair (*duz it go-*) and goes on to repair the indexical *it*.

(5)

18. T: Duz it go- do tha quotation marks go before: r' af:ter tha caw:ma.

Then we get the even more marked duration of line 19 (3.5 seconds). The pauses of lines 17 and 19 are especially relevant to our interest in the work of repair in the sequence.

The pause of line 17 (1.5 seconds) looks similar to that in line 5: a duration built by asymmetrical hearings of their exchange, yielding orientations to different sequential organizations. For Jason, who surely heard his answer, next-turn evaluative remarks by the teacher are in order (whose delay is projectable for a negative or "dispreferred" evaluation). Yet the teacher is speaking in line 18 as though his question of line 14 had not been heard or understood. In this light, the duration across lines 15–17 looks like a substantial "withhold" which ends when he poses the question again and repairs it, displaying in the repair his analysis of Jason's problem in hearing or understanding. Line 18 then shows a repair in next turn – a repair of his question – but in third position to his first-turn initiation of line 14 and the opportunity for reply that the withholding across lines 15–17 affords.

The intersection of these concurrent organizations of repair and instruction is then immediately produced again in line 19, and its substantial duration of 3.5 seconds. For Jason, line 19 may be evidence of a genuine interpretive problem:

Routinely, question-repeats are also heard as marks of a failed answer. Yet having produced his answer the first time in line 16, and having offered the only correct answer he knows, what other answer can he give? But for the teacher, who figures that Jason has only now heard and/or understood the question in line 14, the repaired question of line 18 recycles the positional structure of the IRE sequence. For him, line 19 is then hearably a prolonged yet "due" delay – due to a question that has evidently been difficult for the student to field. The contingencies and orientations of their respective hearings are then brought into alignment when Jason proceeds with uncertainty again and repeats his answer in line 20. The teacher then rejoins with an "on time" and explicit positive evaluation, and sequence closure, in line 21.[13]

What can be seen across this lesson problem is that the organization of repair and the work of producing IRE sequences – including the orientation to assessments in third position – are concurrent rather than same organizations, and further that the work of repair is in no sense restricted to the work of assessment and/or correction. To the contrary, repair is implicated in the interactional work across the sequence, in an abiding orientation to the problematics of common understanding, especially with respect to the interactional production of questions and answers.[14] Reparative organizations are relevant THROUGHOUT the production of IRE sequences, and the next sequence of the same lesson shows more of their cross-cutting organizations, especially with respect to the production of correct replies.

(6)

49.		Okay. (0.7) Number eleven. (0.5) Will you please do that one
50.		Latesia. "Joey said." (0.7)
51.	L:	"Joey said," (0.5) "Joey said (David) let(s)(s) play after school." =
52.	T:	= Okay, where duz tha quotation marks go.
53.	S:	( )
54.	L:	// school? (0.5)
55.		No wai- =
56.	T:	= Af:ter sschool: an after tha period, an' whut about tha- tha
57.		beginning.
58.		(1.0)
59.	L:	Joey.
60.		(1.0)
61.	T:	No. =
62.	L:	= I mea-
63.	S:	David.
64.		(2.0)
65.	T:	Whut did Joey sssay:.
66.		(1.5)
67.	L:	"David let's play (after school)."
68.	T:	// Okay:
69.		So it goes: (0.5) aroun: whut Joey ssays:.
70.		So it goes before: Dave, and af:ter sschool an after tha period.
71.		Awright will you do tha las:' one Eddie Jones(s)…

In line 49, the teacher selects Latesia in last position to the turn and offers her the first phrase of the reading passage (*Joey said…*). Following a pause, Latesia

repeats the phrase, pauses (0.5), and then restarts and completes the reading in line 51. We can say that she assembles an ample space of "due consideration," built in part of a recycled turn-beginning.

In line 52, the teacher latches his third-turn assessment of her reading and produces the first "real" question: *Okay, where duz tha quotation marks go*. In 53, another student speaks up, and Latesia starts up in overlap and (re)claims the turn with *school?* We can note a couple of things about her answer. First, it is "try marked" with the uncertainty of a questioning intonation that shows her orientation to the correctness or adequacy of her reply. Second, following the trailing duration (0.5), Latesia initiates a self-correction in line 55 (*no wai-*), and the sequence so far looks very much like a correction-relevant sequence, anchored to her reply as the trouble-source turn.

Though tempting, it is inconclusive at best to say that Latesia hears in the trailing 0.5-second duration of line 54 – very nearly a normal turn-transition duration – the markedness of a delayed next turn by the teacher, and therefore initiates a correction of her answer. We may be on safer ground to say that she is oriented to the adequacy of her reply, has doubts about it, and initiates its correction within turn-transitional space. If so, then the correction sequence so far looks quite normal alongside findings for the trajectory of repair. As a practical matter, however, the teacher's latching next turn (line 56) takes the turn resources for doing the correction that her self-initiation projects. But we can further note that *No wai-* is not only a correction initiation. It is an initiation that is itself REPAIR-initiated in the cutoff, but not repaired, and we again seem to be witnessing an orientation to two co-occurring organizational domains: classroom correction, and repair.[15]

In the teacher's latching turn of line 56, he amends Latesia's answer and accepts it, thus accepting an answer that she herself suspected. In doing so, he accepts as Latesia's first answer what has been the second "item" in the local format of their answering. (The format of the answering has been to locate the first quotation mark first, the last quotation mark next, and its relation to sentence punctuation last.) His turn continues on to complete the last part of the answer (about the period), and to ask (again) for the first part: *an' whut about tha- tha beginning*.

This next question in lines 56–57 (*and what about the beginning*) recycles the IRE organization. There is a due delay in line 58, and Latesia answers in 59 with *Joey*, which is the beginning of the reading passage but not of its dialogue. Third-turn remarks by the teacher are then in order, but we hear instead the pause of line 60. Produced and oriented to from within the organization of direct instructional sequences, such delays are projectable for a dispreferred evaluation in next turn, and the teacher does indeed say *No* in line 61 (a teacher's correction-initiation, in McHoul's treatment). To this, Latesia latches a correction-initiation but no correction. Instead, and again, the initiation is itself repair-initiated in the cutoff: *I mea-*. Both the repair and correction trajectories are thus still alive, and

another student offers an answer in line 63, *David*. His answer is both correct and "ignored." More to our interest, it is produced and placed in an orderly and attentive manner: It does the correction that Latesia initiates in line 62, in next turn.[16]

The duration of line 64 (2.0 seconds) is a nice puzzle in terms of its construction: How it may be part of a repair AND correction space that would afford (and show a preference for) Latesia's self-repair and correction in next turn, how both (and all) students may be listening for the markedness of turn transition and party structure, and how the teacher may be co-producing whatever it is that the students might be listening for.

In line 65, we hear a next question and the initiation of a next embedded IRE sequence. Though there is no named address, we can hear its tie to the teacher's question of lines 56–57, and apparently the class hears it that way too. Following the 1.5-second pause of line 66, Latesia takes it as her question without competition for the turn and answers it (or does the reading it calls for), and the teacher overlaps in line 68 with a positive evaluation, having heard just enough of her reading to formulate the (known) answer. We can say that rather than finding the answer, Latesia has been led to produce it, and following his evaluation, the teacher tells the class how the punctuation rule works here and reassembles the answer in its normative form. We then hear the next question and student selection.

DISCUSSION

These materials suggest a different understanding of the work of repair in sequences of direct instruction, and in correction sequences as well. As Sharrock & Anderson suggest, classroom instruction can be glossed as the work of "talking through a subject in such a way that it can be learned" (1982:171). In the instruction of novices of one kind or another, it is presumed that there are things they do not know or cannot do, and their instruction is then unavoidably played out on fields of normative knowledge and expectations.[17] If knowledge (re)production is the charge of classroom instruction, the production of correct knowledge, and thus correction, unavoidably become a part of the practical and professional organization of the setting, and one of the prevailing orientations of the parties in the room.

These are tasks that premise their machinery, and the three-turn organization of direct instruction and its allied party structure are commonly central to it. The question for our common inquiry, then, is how to understand the play of repair in the routine discursive works of classroom direct instruction. In my view, McHoul has restricted this play to correction "in the strictest sense," and two immediate implications follow: The analysis then has no particular use for reparative work throughout the canonical IRE organizations of direct instruction, and within that, no use for the "successful" IRE sequence either, or the sequence that goes to

completion without "correction." Working with a conceptualization of repair AS correction, we may particularize to a certain organizational window an indefinite organizational domain wherein problems of hearing and understanding are addressed without "time out" from the practical work of the occasion, and thus miss its operations elsewhere. The problems that follow are not only a matter of how we then read the work of repair in classrooms, but also of how we understand classroom correction as well.

Like instruction, classroom correction is a practical, vernacular achievement, one of the endless achievements whereby the "rational properties of indexical expressions" are assembled by members' ordinary – and disciplined – discursive and interpretive practices (Garfinkel 1967). It shows an "operation" and entails the accountable construction of things like questions, answers, certainty, markedness, structures of address, the organization of parties, and their occasioned identities. To each of these constituent achievements, an orientation to the problematics of common understanding seems fairly relentless, and practical too. Correction premises those achievements of common understanding.

What is problematic about the notion of "correct in the strictest sense" can be seen in our materials in Latesia's first answer, which was marked with uncertainty by her and accepted by the teacher as "adequate for all practical purposes." The difference between "exposed" and "embedded" correction (Jefferson 1987) makes the point in a different fashion, as we also see in the teacher's rereading of Jason's reading of the first passage. Jason's reading is both reformulated and accepted as correct: *Let's go...* becomes *Let's get...* (see extract 2 in McHoul 1990:356 for a similar organization.):

(7)

→4. J: "Let's go together ( )."
5. (1.0)
6. T: "ssaid Dianah."
7. J: "Dianah." =
→8. T: = Good reading. = "lLet's get together tomorrow, said ah-Dianah:."

Correct and incorrect answers are locally produced and measured in and through the interactional order of their production. Correct answers are better understood as locally adequate or acceptable answers for the practical purposes at hand, and perhaps this is the "strictest" sense of classroom correction.

Rather than treating the work of repair and classroom correction as alternative expressions of a same organizational domain, we may be better advised to understand them as different organizations that can bear on the production of a same sequence, or, in Pomerantz's (1978) phrase, "co-operating" organizations. We certainly find correction sequences in classroom lessons in the particulars of expanded IRE sequences. They are central to the professional work of teachers and the practical experience of students. That correction-initiations in classroom lessons tend to be a teacher's turn (e.g., the teacher's *No* in line 61) would seem

to be so because correction is both a contingent AND a normative exercise, routinely assigned to teachers and played out in their assessments of students' replies in next turns. This seems a surer path to understanding why we commonly find teacher correction-initiations, and one that need not implicate a rereading of reparative organizations in classrooms, or within correction sequences themselves.

But if "repair" and "classroom correction" are to be understood as co-operating organizations, then we need to possess their respective organizational identities as usefully non-identical.[18] Put directly, while the literature on repair understands correction as of one piece with repair's organizational domain, our classroom materials offer grounds to consider whether correction may be a different organizational province. We may have in classroom materials at least the possibility of an organization of correction that is non-identical to that of repair, and whose organizational home and trajectory issue from the regular forms of talk that we find there. Thus, our critique of McHoul is not that he (and others) have not found a robust organization of classroom correction, but that in pressing a direct comparison to organizations of repair, we may lose sight of organizational differences. However, on consideration, those differences may not be restricted to classrooms, and the next section explores a reading of correction and repair as different, co-operating organizations more generally.[19]

Co-operating organizations

The gambit of co-operating organizations can be pursued in several ways (for instance, in the further study of classroom correction sequences). But I want to return to SS&J's first work on repair, and to suggest that resources there open up the possibility of co-operating organizations, notwithstanding that the literature is otherwise quite clear as to where the larger organizational circle is to be drawn: Correction is a kind of repair, and it is to repair, and not correction, that we turn to understand the organizational filaments of both.[20]

The resources have already been cited above. One is the observation from which McHoul begins, that there are tasks in society for which other-correction is exceptionally common. SS&J discuss adult-child interaction and parent-child interaction in particular, and they observe that this class of exceptions may be "more generally relevant to the not-yet-competent in some domain without respect to age … and appears to be one vehicle for socialization" (1977:380).

The socialization of the not-yet-competent is of course an enormous topic and domain. However much the exceptions to the preference for self-repair that it houses may be, in SS&J's lovely phrase, "transitional usage[s], whose supercession by self-correction is continuously awaited" (1977:380), the house itself is quite large. Socialization to competence is a standing task and achievement of every social order. At the risk of overcharging their discussion, the tasks of inducting the not-yet-competent into whatever the "community of practice" may be can usefully be summarized as the tasks of instruction, or pedagogy, or even

social reproduction (as a practical rather than theoretical undertaking). Classrooms are one site of this work, and parent-child interaction another, along with apprenticeships, professional training, and so on. In this light, the exceptions to the preference for self-repair begin to look exceptional in a different key, with respect to their place in the routine work of ordinary worlds. As we expect that such tasks will have their machinery (cf. Moerman & Sacks 1989, Schegloff 1991, Sacks 1992), and as CA has demonstrated elsewhere in remarkable detail, so we might expect here.

A second resource in SS&J elaborates the first, and it entails bringing a certain reading to a central passage in the repair paper, central to its methodical demonstration of a preference for self-repair, and a paucity of other-correction:

> When the hearing/understanding of a turn is adequate to the production of a correction by 'other', it is adequate to allow production of a sequentially appropriate next turn. Under the circumstance, the turn's recipient ('other') should produce the next turn, not the correction (and, overwhelmingly, that is what is done). Therein lies another basis for the empirical paucity of other-corrections: those who could do them do a sequentially appropriate next turn instead. (1977:380)

The reading is this: Where a sequentially appropriate next turn can be done – that is, where a prior turn is understood well enough to reply – one must have a "special motive" to produce a correction in next turn instead. This is not a reading of disengaged possibilities but rather, it follows from the continuing discussion cited above. Where correction is done, participants routinely see such a motive at play, namely disagreement:

> Therein, as well, lies the basis for the modulation … of other-correction: if it were confidently held, it ought not to be done. . . . Therein, finally, is a basis for much of the other-correction which does occur being treated by its recipient on its occurrence, as involving more than correction, i.e. disagreement.[21] (1977:380)

About motives

The topic of motive is both rich and delicate. Motives, commonly conceived – in both the disciplinary literatures and folk wisdom – as wellsprings of action of one kind or another, were among the identifying tropes of the "normative paradigm" (Wilson 1971) that CA and ethnomethodology (EM) were actively engaged in topicalizing from their outsets (see Mills 1940 for a prior, suggestive investigation). It is not that they had no use for motives. Rather, in the effort to rescue motive as a topic in the construction of accountable worlds, and compelling as it may be in common parlance, it was not to be admitted as an unexamined resource for formulating the cogency of social action. It was instead to be examined and appreciated as one of the resources for assembling action's ac-

countabilities. Its treatment would then be consistent with CA's disciplined insistence on inferentially minimal analysis.

In the particulars of CA's sequential analyses and EM's analyses of practical action, motive was to be understood as among the "surface" features of scenic coherence. The very notion of the projectability of utterance completion makes motive relevant not as an "antecedent condition" but as a constituent feature of the intelligibility of action, thus owning a praxiological foundation. Motive was a hearable thing evidenced in talk's projectable structure, as in the hearability of a pre-sequence AS a pre-sequence, for participants and analyst alike. Motive, then, is not antecedent but reflexive to scenic sense, and this treatment of motive is emblematic of the extraordinary departure of sequential analysis from the habits of formal analysis and its 'footing' in the natural attitude of taken-for-granted worlds. The motives of which we are speaking are endogenous to intelligible action, and CA and EM were engaged from the beginning in disclosing the ignored organizations of "intelligible actions performed on singular occasions" (Lynch & Bogen 1996:265).[22]

With these understandings, the reading of a "special motive" for the production of other-corrections and their initiations can be elaborated in at least two directions. One turns on what "special' could mean, and this strikes me as fairly straightforward within the orbit of CA's program: "Special" stands with respect to talk's prevailing orientation to the achievement of common understanding. Intelligibility is the prevailing orientation. It is evidenced in countless ways, and perhaps emblematic of these is the way in which each next turn displays the speaker's understanding of what has gone before. "Special motives" are special to this.

The second direction leads us to appreciate how sequential analysis was from the outset a sociological program. It was oriented to sociology's canonical topics of social action and order, while proposing an entirely different understanding of where and how the "order" of action and order might be pursued and disclosed naturalistically, and in that sense technically, as the order of competent practice in ordinary worlds (cf. Garfinkel & Sacks 1970, Sharrock & Anderson 1986, Sacks 1992, Schegloff 1992, Lynch 1993). What was to be seen in the compelling detail of material analyses was that "motives," for example, had worlds attached. They directed our attention not inward but outward, to the witnessable fabric of meaning, action, identity, relationship, task, occasion, context, and structure and recurrence, and the yield of accountable worlds-in-common.

In the particulars of our interest here, "motive" attaches to the intelligibility of identity and relationship. It figures centrally, for example, in membership category analysis (see Sacks 1992, Hester & Eglin 1997), as in how we hear that the crying baby described in Sacks 1972 is the baby of the mommy, each doing what babies and mommies do, and thus why the mommy has picked the baby up. The intelligibility of the story is imminent to the intelligibilities of its storied actions, identities, and relationships, and "motive" is reflexive to them all. By

this understanding of motive and its intertwining in accountable worlds, to speak of motives, or special motives, is to read into relevance the manifold organizations of meaningful action on actual occasions. If correction is evidence of special motive, then sorting out correction from repair leads us to consider its occasions in these ways and terms.

The task that this line of discussion projects – to collect and examine occasions of correction to find organizational regularities of task, identity, and relation as they bear on sequential productions – is well beyond its preliminary character. Instead, I wish to offer three suggestive examples of correction sequences to serve the hunch that correction, rather than repair, is routinely produced – but certainly not only produced – on occasions when we can say something like instruction is going on, with the full entailments of task, identity, and relation that instruction implies. Parent-child interaction is, of course, emblematic. In the particulars of these three sequences, we may see more of what could be co-operating about the organizations of repair and correction.[23]

In the first fragment, Schegloff reports a dinner-table exchange between a mother and her son. It begins as the son is gnawing on a piece of meat, speared on his fork:

(8) (from Schegloff 1989:144)

M: Cut that (up)/(out), Rob.
(0.2)
R: Hm?
M: I saidd, "Cutt itt."
R: ((Transfers fork from right to left hand))

The analysis leads us to see how the mother's first remark (a correction-initiation) is produced and placed to achieve the visibility of its object, and how the son's repair-initiation in line 3 (*Hm?*) is produced to "defeat" the recognition of the correctable thing that the correction-initiation points to, and how the mother, in next turn, defeats this virtual claim of ignorance: She "disallows Rob's disavowal of guilty knowledge" (1989:150) by producing her reply without the repair of the indexical "that/it" that his repair-initiation calls for (see Macbeth 1990 for a similar contest in a classroom context). The analysis is concise and revealing. For our purposes, it also shows a course of instruction in table manners, and also the "co-operating organizations" of correction and repair in how repair is deployed as a sequential organization and action distinct from, embedded within, and here in "opposition" to, the correction sequence that occasions it. It is Rob's orientation to the correction sequence (and its special motive) that is underway that makes the implicit claim of his repair-initiation of line 3 intelligible, relevant, and defeasible for this mother.

The next fragment is well known to students of conversation analysis as the first sequence in Jefferson's (1972) treatment of "side sequences." It shows a correction sequence as three children are playing a game. Steven is six years old;

Susan and Nancy are eight. They are playing a kind of hide-and-seek for which Steven is counting while the others, normally, would go off to hide:

(9) (from Jefferson 1972:295)

1.	Steven:	One, two, three, ((pause)) four, five, six, ((pause))
2.		eleven, eight nine ten.
3.	Susan:	"Eleven"?—eight, nine, ten?
4.	Steven:	Eleven, eight, nine ten.
5.	Nancy:	"Eleven"?
6.	Steven:	Seven, eight, nine ten.
7.	Susan:	That's better.[24]

A central technical interest for Jefferson's analysis, in addition to the larger framing of how side sequences articulate "at the edges" to whatever the work of the sequence that is underway may be, is the work of "repeats," and how they have their objects, and how those objects are identified and dealt with. In the particulars here, *Eleven?* is produced twice before Steven recognizes it, and we are led by the analysis to note the timings and placements, and how all repeats are not doing the same work.

Our interests in the sequence are somewhat different. As Jefferson notes, on Susan's correction-initiation in line 3 (*Eleven*), producing the correctable in next turn to Steven's prior turn, and calling for its recognition in third turn, "the halting of the game is cooperatively and instantly accomplished and attention is shunted for game activity to the dealing-with of a single word, such that further progress of the game awaits an outcome" (1972:295).

As she further notes, the error here is not a game-relevant error, insofar as the play of the game turns on a count of paced intervals, rather than on how the intervals are filled: "The substitution of 'eleven' for 'seven' does not alter that interval as would, for example, an omission" (1972:295). In this sense, the correction has some other warrant, as in "how we count," and when the correct counting is produced by Steven in line 6, we hear Susan's assessment *That's better* in line 7. She is, apparently, entitled to it. That is, as a matter of identity and relation, as an eight-year-old speaking to a six-year-old, perhaps as an old hand in the game (of counting) speaking to a novice, she has an unremarkable authorization to produce and assess a correction that is otherwise not game-relevant: She could well do a sequentially appropriate next action instead (i.e., hiding). The hearable correction, for us and for Steven, is thus tied to the occasion and identities of a not-yet-competent performance. Instruction in competent performance per se is the correction's warrant, and in that sense its motive. Note further Steven's orientation to the adequacy of his counting across the disfluencies of his pauses in producing his count the first time. For these children, competence and correction, and the identities and relations that organize its exercise, may be prevailing orientations in addition to – and co-operating with – the alignments of common understanding that permit the first possibilities of game play.

Yet intelligibility, and thus repair, has its play too. The correction-initiation is Susan's in line 3. But in Nancy's repeat of *El*<u>*e*</u>*ven?* in line 5, produced just the way Susan says it the first time, we have a <u>repair</u>-initiation, initiating repair on Steven's hearing of Susan's first repeat, as evidenced in his next turn (line 4). Simply put, he missed the correction-initiation and its relevance for his performance. Nancy then repair-initiates his hearing in third turn (measured to Susan's line 3), and on Steven's recognition and correct production in line 6, Susan, as the correction-initiator, offers her assessment of the found correction in line 7. Thus, a reparative organization is implicated in the work of showing and finding the correction's object, without which the correction, and the instruction it enacts, cannot proceed. Note that the tasks of correction and repair are produced in turn, and by different speakers, and show an orientation to different sequential contexts of action. In each of these two sequences we can say, as of the parties' orientations, that a spate of instruction is going on, resisted and then accepted in the first, and unremarkably received in the second, for which a repair is embedded in the correction work that is already underway.

The third fragment throws a different light on the discussion, returning us to classroom instruction and the non-identical relevance of correction and repair that we find there. In the exchange, from McHoul's (1990) materials, a student replies to a teacher's question about models of urban development. With the student's answer in hand, the teacher's next turn is normatively the place for correction if correction is to be done (and is so treated in McHoul's analysis). But here it is repair and not correction that is operative. Correction will show its relevance, if at all, only in the presence of the achievement of common understanding about the sense of the question, and it is to THAT achievement that the parties are oriented:

(10) (from McHoul 1990:353)

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

McHoul treats the sequence as an example of the teacher-corrections we commonly find in classrooms, whereas in natural conversation they are relatively rare. And indeed, something is being "corrected" in line 6; however, it is not the student's answer, but rather his understanding of the question as displayed in his answer, that the teacher is oriented to in line 6. The repair that it initiates is then

received with the student's *Oh* in line 7, as he proceeds to answer in light of this new understanding of what the question was. The "trouble-source turn" is not the student's answer of line 5, but the teacher's question of lines 2–3, an organization again mindful of third-position repair, as discussed in Schegloff 1992.[25] The orientation here thus seems to be to the common understanding of a question, rather than to the normative correctness of a reply, on which the exercise of correction, should it be relevant, is contingent. Repair is then seen to be "co-operating" throughout the production of the sequence. The two prior sequences, and our lesson on punctuation, further suggest an order to the co-operation, when we find them co-operating, wherein problems of understanding will find their completion first before initiations of correction can find theirs.

CONCLUSION

Returning to our reading of McHoul's project to compare the findings of conversational repair with classroom correction sequences, the alternative reading is as follows. Whereas classroom correction seems tied to a normative order of correct and correctable replies, repair in conversation – and classrooms – is tied to the practical achievement of common understanding, whose achievements include things like sensible questions, accountable answers, and the organization of correction sequences themselves. As we examine the sequential production of classroom lessons, including their correction sequences, we may be looking at a local, practical, interactional "sociology of knowledge" in the room, in whose service organizations of repair are a praxiological foundation that is not identical with but omnirelevant to its diverse practices and achievements.

But if there are grounds to consider repair and correction as co-operating organizations in classrooms, the observation opens the further question of whether repair might be at play in the production of correction's objects and organizations in other settings as well, especially in the instruction of the not-yet-competent – a description that leads us to consider other organizations of task, occasion, membership, and relations. Initial grounds for the inquiry are already in hand: Other-initiation and other-correction are far more commonplace on instructional occasions than in ordinary conversation. In pursuing them, we should be clear that the question is not one of association; it is not that instructing is "associated" with correction sequences. It is rather that whatever else instructing entails, correction is one of its imminent, interactionally assembled evidences. Correction sequences are one of the ways in which members display and recognize that instructing is going on. One can "read instruction" (or disagreement) in the identities and relations that are reflexive to the technical production of an other-correction, and in this light, the formal structures of practical action (Garfinkel & Sacks 1970) are not only sequential structures. The parties themselves see repair and correction differently, as taking up different work, owning different orientations (and

motives), and they seem to produce and place them in ways that display those orientations.

There may then be both conceptual distinctions and technical organizations that set correction apart from repair. The discussion so far has largely been conceptual; the only technical development of what could be co-operating about these organizations has been of a few sequences that show repair embedded in sequences of correction. The critical reading of McHoul's analysis, though technical, has been conceptual too, addressing the question of whether we have a category mistake in his comparative program. A return to classroom lesson materials and other occasions of instruction may show additional production features of correction sequences – and the relevance of repair for them – as constituent features of the instructional tasks and organizations we find there (e.g., how delays in teacher's third turns leverage instruction for novices; see Macbeth 2003).

In at least this other way, however, the landscape is substantially unchanged by the proposal of co-operating organizations. Repair is still understood as the hugely larger domain, both logically and praxiologically. Repair is implicated in the very organizational possibilities of correction, as in the production of what a correct or correctable utterance, reply or response, could be. My point is that without the sense of difference and co-operation, we would not only lose the work and relevance of repair in classroom lessons; we would be left with an understanding of correction – irrespective of setting and occasion – that is uncoupled from the first work of common understanding and the organizations that ensure its recurrent achievement.

NOTES

[1] The task of teaching novices is as ancient as the membership category and shows diverse cultural pedagogies (cf. Bateson & Mead 1942, Phillips 1972, Rogoff 1990, Lave & Wenger 1991, Au & Kawakami 1994, C. Lee 1995). In the West, "questions with known answers" are first encountered in childhood socialization (see French & Maclure 1981). The Socratic method substantially consisted of asking such questions (cf. *Meno* 82d and *Protagoras* 350).

[2] Though analyses of these familiar instructional sequences were once considered a promising moment in classroom studies, offering revealing descriptions of how classrooms do their work (cf. Bruner 1986, Erickson 1986, Cazden 1988, Newman et al. 1989), more recent discourses on power, hegemony, and cultural study in the classroom have been decidedly less appreciative (cf. Fairclough 1995, Guiterrez et al. 1995, Gee 1996, Luke & Freebody 1997). Centrally, they take a critical view of the power relations implicit in this kind of instruction (as in how teachers would have first and last words, for example). This paper does not engage those issues and disputes. (See Macbeth 2003, and the exchanges between Wetherell and Schegloff 1998, and Billig and Schegloff 1999.) Nor does it understand studies of the sequential organization of classroom instruction as recommending how teachers should teach. Rather, they have been studies of how teachers and students routinely conduct their lessons to acquit the canonical tasks of instructing novices and producing and assessing knowledge and competence in the room.

[3] The larger notion of "preference" is a delicate one, having to do with how alternative next-turn possibilities are differently produced and realized (rather than with the vernacular sense of what an individual might "prefer"). Thus, a request, for example, can receive a consent (more likely, an offer) or a demur in next turn, just as an assessment (e.g., *It's a lovely day*) might receive agreement or disagreement. But offers and demurs, and agreements and disagreements are differently produced:

Offers and agreements tend to be produced "on time," i.e. within unmarked intra-turn durations, whereas demurs and disagreements tend to be marked in their production, most commonly by a delay in their onset (and in other ways too; see SS&J 1977, Heritage 1984, Levinson 1983 on markedness, Pomerantz 1984, and Lerner 1996 for extensive discussions). "Preference" is then a production account of how the sequential order of conversation – and thus meaningful action – is produced.

[4] Not only is the class of repairables indefinite, repair seems to systematically co-occur within an array of other conversational tasks and organizations, and can even be usefully regarded as a kind of "tracer" for taking note of what other work the parties may be doing. For example, turns that initiate a change of topic, or begin in overlap of an ongoing turn, are routinely produced with a repair in turn-initial position (Schegloff 1987), just as repairs can show an orientation to the interactional delicacies of person reference or account construction (Jefferson 1974). Schegloff 1987b sums up these "sources of misunderstanding" as problems of reference and sequential implicativeness. Thus, though their technical organizations are remarkably regular, their practical occasions are difficult to encompass.

[5] The differences are not limited to other-initiation: "Other-correction – 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" (1990:351). See Weeks 1985 for similar findings.

[6] In natural conversation, self-initiations and repairs routinely have to do with the commonplace hitches, disfluencies and "word searches" that we find in our own talk and that of others; for example:

(10) (A high school honors English class)

39.	T:	What do you think, Sam.
→40.	S:	Uhm, I think- that- it has nothing to do- the question has
→41		nothing to do with what they're ( ). Cuz' n-, cuz, we were
→42.		discussing like in Cyrano, when Roxanne said (.) all our souls
43	T:	// yeah
→44.	S:	are written in our eyes, we were talkin' about, like- (.) don't
45.		judge people by what they look like.

It is difficult to imagine any naturally produced discourse so largely relieved of these kinds of self-initiations and self-repairs as McHoul reports (see his frequencies, below). But as will be seen, this order of repair is not the order of correction he has in mind.

[7] The footnoted acknowledgment is equivocal. While he allows that "'repair' and 'correction' cannot be used synonymously," and that there may be a "qualitative distinction between the two terms," he concludes with a wry question as to his own (and SS&J's) deployment of the terms: "The terminology may still be in need of correction, or is it repair?" (1990:376, n.1). As a practical matter, however, his analysis elides the question and proceeds with a treatment of classroom repair AS correction.

[8] McHoul sees the relevance of correction in non-lesson sequences as well, as in corrections of pronunciation or violations of turn-taking rules (1990:372). Even there, however, a focus on correction leads to a search for errors: "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" (1990:374). Yet the replacement of a word or the "error" of a turn taken "out of turn," for example, would seem to be very different objects from the error (and correction) of a calculation or the recitation of a historical date. Neither repair nor replacement, nor correction for that matter, necessarily premises error in the strictest sense. (See Jefferson 1974 on "embedded correction" for further examples of the difference.)

[9] As with every such device, the display unavoidably treats the sequence as a post hoc formulation. But (failed) answers, like questions, are themselves products of interactional work, as different than "a common intersection of overlapping sets" (Garfinkel 1967:30). What the representation cannot show, and what this formulation of "correction" tends to take for granted, is the course and contingency of what indeed constitutes questions and answers. Those contingencies are addressed in the materials presented below.

[10] The picture is further complicated when we consider that "withholding" is not the only way in which preference is displayed in the production of dispreferred next turns. "Modulations" are also a recurrent feature of other-initiations, meaning how an initiation may be produced with qualifications

or hearable uncertainty (see SS&J 1977:378). The complication is that McHoul finds modulations in teacher-initiations too: "That other-correction is dispreferred in the classroom is shown by the fact that even *other-initiations* … are often done tentatively. This same phenomenon is addressed by Schegloff et al. as 'modulations'" (1990:367; original emphasis). If so, then it seems that we do indeed find an orientation to the preference for student-correction in the production of teacher-initiations. McHoul reconciles his discussion of teacher-initiations by treating modulated teacher-initiations as modulations not on behalf of a preference for student-correction, but rather as evidence of a DISpreference for teacher-correction: "Here, we can read modulation as a method of putting off other-CORRECTIONS as such" (1990:368, original emphasis).

[11] As McHoul 1978 observes, the play of party structure is alive in the production of teacher first turns: Until the question has been assigned to some one of them, each member of the cohort has a strong warrant to listen to the turn-so-far, since the question may become hers. Thus, though certainly not always, student nominations are routinely placed in last position to the teacher's initiating turn.

[12] See Weeks 1985 for an analysis of classroom correction working from materials similar to these: a spate of round-robin reading in the early grades where teachers "invite," "guide," and "complete" corrections of the students' readings, while preserving a preference for student correction (as we see here; in some useful sense, Jason corrects his reading in line 7). As does McHoul, Weeks builds a comparison between the regularities, trajectories, and preference structures of conversational repair and classroom correction.

[13] To my hearing, the teacher's *Okay?* in line 21 is both a question and a change in the structure of his address. It seems to be addressed to everyone in the room as an "understanding check" produced at sequence closure, for which the duration of 22 would be an opportunity for questions, if there were any.

[14] See Lee 2001 for a careful analysis of the collaborative construction of the sense of questions in undergraduate ESL classrooms.

[15] Insofar as an initiation promises the action it initiates, and if the speaker has not found that projectable action, initiating repair of the initiation is a practical way to "stop" a sequence whose completion cannot be produced. We see it again in line 62, and in the particulars of these turns, the coincident organizations of repair and correction are especially visible in the production of a same utterance. Corrections themselves can be occasions of trouble and candidates for repair.

[16] As an impression, such cohort-produced other-corrections in next turn to a self-initiation are not uncommon in classrooms, and may be understood as simultaneous orientations to correction and party structure. They may also be a useful place for furthering an interest in the organization of classroom correction sequences.

[17] In the context of a professional field chronically awash with new proposals for "better" teaching, learning, and knowledge, we can expect that every next proposal will encounter the practical tasks of teaching those who do not know. However it is to be done, pursuing the sequential analysis of teaching's enactments would seem to be a promising program for describing how it is done.

[18] The "co-operating organizations" that Pomerantz 1977 elucidates are those that come to bear on compliment sequences, in the cross-cutting organizations of assessments and agreements, and the delicacies of receiving and affirming praise.

[19] The sketch of an argument that begins here developed from close readings by the manuscript reviewers, and especially by Anita Pomerantz of how the critique of McHoul's project might hold a larger interest. The argument that follows has not had the benefit of their reading. I am indebted to Paul ten Have for his careful reading of an early draft.

[20] That the terms are at times equivocal, moving between repair and correction, is a first observation. This is the uncertainty that McHoul cites in his footnote referenced above, and the difficulty is not his alone; see also Drew's (1981, n. 7) "anxiety" about the apposite usages, especially in "instructional" contexts. The discussion in SS&J moves between "repair" and "correction" in ways that are both effectively descriptive and at times unmarked (as in the title of their publication). Pomerantz (personal communication) clarifies the prevailing usage: "Correction" is understood as that which is regularly achieved on repair's initiation, typically the replacement of the item that the initiation points to. By this reading virtually every repair initiation that goes to completion would show a correction. But insofar as ERROR is conceptually implicated in what we mean by "correction" – in classrooms or elsewhere – we would then need to reconcile this usage with SS&J's discussion of "error" as the restricted case (1977:363). We are therefore led to ask, in a preliminary fashion, whether

there are (further) grounds for distinguishing between repair and correction, conceptually and organizationally.

[21] See Jefferson 1987 for further elaboration of what "reasons" could motivate corrections, as understood by the parties to the occasion, e.g. instructing, complaining, forgiving, accusing, which she collects as the "class of activities 'accountings' " (1987:88).

[22] Lynch & Bogen offer an ethnomethodological formulation of this analytic program. Schegloff 1972 offers an early and kindred CA formulation: how "the production of a world of particular specific scenes through a set of general formal practices is accomplished and exhibited" (Schegloff 1972:117).

[23] My purpose is not to sketch a formal structure of correction sequences. If there are grounds to figure that there is such an organizationally identifying domain, that will be a substantial task, complete with "boundary cases" (Schegloff 1997). As a brief example of what such a boundary case might look like, Schegloff 1997 reports the following "911" phone call exchange, in which an address is being confirmed:

(11)

6. Police: Four six nine South Hampton?
7. Caller: One six nine South Hampton.
8. Police: That's one six nine,
9. Caller: Yes…

It looks like we have here a correction in next turn to line 6 (and self-correction in the third turn of line 8). But as Schegloff observes, the turn of line 6 is designed to "check" the address, and in this the motive for its production and for the correction in line 7 is intrinsic, rather than special, to their shared task and orientation. Other such cases can be imagined, as when colleagues engaged in collaborative work "correct" one another in their common orientation to a task. (See Greiffenhagen et al. 2003 on the collaborative work of grammar school students at the keyboard, and Hindmarsh & Heath's (2000:1873) workplace study, wherein one colleague produces a potential correctable as a possible solution to a problem of reference, and has it corrected in next turn by the other.) The "motives" in the particulars of these scenes are not at all special—or treated that way by the parties. The analytic task is not then to adjudicate what constitutes "special," but rather to examine whether and how corrections are demonstrably so for the participants.

[24] Line numbers have been added for ease of discussion.

[25] Such repairs have to do with misunderstandings of prior turns, as they are revealed in next turns, and "caught" in third turns by the party who produced the turn that was misunderstood. Schegloff continues to identify the turn components of such third-position repairs, and observes:

> Although third position repairs may initially appear to be disagreements with the prior turn, and 'no' may appear to signal such disagreement, it should be noted, first, that in the remainder of these turns the speakers operate ON THEIR OWN PRIOR TALK, not on that of the other. . . . The first component of third position repair, with "no" as it turn initial particle, is best understood as initiating repair, rather than as betokening disagreement. (1992:1305, n. 6, original emphasis)

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