
CHAPTER 8

CONVERSATION ANALYSIS AND SOCIALLY SHARED COGNITION

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OVERVIEW

In this effort to develop an appreciation of how the social analysis of conversation relates to socially shared cognition, I will proceed in three stages.

First, it seems appropriate in a volume organized, sponsored, and supported by psychologists, and composed for the most part of contributions by psychologists, to indicate some of the resonances that the term *socially shared cognition* sets off for a sociologist, if only to provide some background for the different approach I take. This introduction will of necessity be limited to a sketch of some of the relevant intellectual background, so boldly drawn as to verge on caricature, but will focus on the relevance of a preoccupation with the *procedural* sense of—and basis for—“social sharedness,” and with talk-in-interaction as a strategic setting in which to study social sharedness.

In a second stage, I will outline briefly a few basic components of that approach to talk-in-interaction that represents the narrower usage of the term *conversation analysis*, and identify a number of distinct areas in which this approach has explicated ideas that would fall under—or might expand the scope of the study of—socially shared cognition. In the course of this account, I will

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introduce several central elements of the organization of talk-in-interaction that conversation analysis has focused on and that appear to have multifaceted relevance for the interface between interaction and cognition. I will particularly address the organizations of turn-taking and of repair, one of which provides the arena for the somewhat more detailed undertaking that follows.

In the third stage, I will examine a few aspects of that component of the organization of repair that furnishes what I call "the last structurally provided defense of intersubjectivity in conversation." By this phrase, I allude to the relevance for participants in interaction of "intersubjectivity"—the maintenance of a *world* (including the developing course of the interaction itself) mutually understood by the participants as some *same* world. I mean to underscore as well that there are structures operating to organize ordinary talk-in-interaction, that these structures engender opportunities to detect and repair problems in the achievement and maintenance of intersubjectivity, and that these opportunities and their use are describable. I will describe two variant forms that efforts to repair problems of intersubjectivity can take. In the present context, I take this topic to be a centrally relevant aspect of socially shared cognition.

HISTORICAL ECHOES OF SOCIALLY SHARED COGNITION

It is important to note the shift from terms such as *common culture* or *shared knowledge* to *socially shared cognition*. The former terms were part of an analytic and theoretical orientation in anthropology and sociology that, in the modern pantheon at least, can be traced back to Durkheim (1951/1897, 1915). There is not the space here to describe the vicissitudes of that theoretic stance in Western sociology over the last 50 years or so. Suffice it to say that it reached the peak of its influence in the social theory of Talcott Parsons (see, for example, 1937, 1951), for whom the "common values" that Durkheim had foregrounded served as the very glue of the social order. And, although Parsons himself paid virtually no attention to the epistemic thrust of Durkheim's concerns, vernacular or commonsense knowledge, insofar as it was itself informed and infiltrated by common values, was part of that same glue.

This theoretical stance came under severe pressure from a number of directions during and after the 1960s. Only one of these critiques will concern us here—that developed by Harold Garfinkel under the rubric *ethnomethodology*.

In a series of studies (collected in Garfinkel, 1967) prompted in the first instance by confronting the work of Parsons with the most sociologically relevant strands of phenomenology (cf. Heritage, 1984a for a lucid account of the theoretical lineages and interactions here), Garfinkel asked what exactly might be intended by such notions as "common" or "shared" knowledge. In the days when com-

puters were still UNIVACS, Garfinkel viewed as untenable that notion of common or shared knowledge that was more or less equal to the claim that separate memory drums had identical contents. When even the sense of ordinary words and very simple sentences could be shown not to engender identical explications when presented to different persons, when those explications themselves had to be reconciled to provide them a "sense of equivalence," and when *those* reconciliations in turn required such reconciliation, the notion of "common culture" or "shared knowledge" as composed of same substantive components—whether norms or propositions—held by different persons became increasingly difficult to defend.

Instead, what seemed programmatically promising to Garfinkel was a *procedural* sense of common or shared, a set of practices by which actions and stances could be predicated on and displayed as oriented to "knowledge held in common"—knowledge that might thereby be reconfirmed, modified, and expanded. Garfinkel's term *ethnomethodology*—with its explicit preoccupation with the procedures by which commonsense knowledge is acquired, confirmed, revised—can be partially understood by reference to this matrix of concerns.

Much subsequent work touching on these and related matters—whether prompted by Garfinkel's concerns or by others—has developed in recent years under various rubrics that reflect the changing concerns and professional identities of those doing the theorizing. In the title for this volume (and the conference on which it reports), the replacement of *culture* and *knowledge* with *cognition* seems to track the shift from the concerns of anthropology, classical epistemology, sociological theory, and the sociology of knowledge to those of psychology, cognitive science, and artificial intelligence. And the specification of *common* or *shared* as "*socially shared*" may reflect a concern with the *processes* of sharing and its embeddedness in the context of social situations. It suits my purposes to assume this concern because this chapter focuses on the embeddedness, the inextricable intertwinedness, of cognition and interaction. In my own work, I have explored this connection through the study of talk-in-interaction, specifically conversation. It may be useful to provide some background about this domain of inquiry.

BACKGROUND ON CONVERSATION ANALYSIS

Among the various lines of inquiry ultimately concerned with talk-in-interaction¹—whether termed *sociolinguistics*, *pragmatics*, *discourse analysis*, *interpersonal*

¹I use the term *talk-in-interaction* in what follows both to avoid the common understanding of "conversation" as "chitchat" or "small talk," and to reserve the term *conversation* for that unmodified organization of talk-in-interaction that is systematically transformed in the realization of other "speech-exchange systems" (Sacks et al., 1974) such as courtroom proceedings, debates, interviews of various sorts, ceremonies, lectures, and psychotherapy. The general term *talk-in-interaction* is used to include exactly what the term names—talk in interaction.

communication, or some other disciplinary label, an insistence on repeated and close analysis of recorded mundane scenes of ordinary interaction and detailed transcripts of them has served as a methodological hallmark of the work known as *conversation analysis* (CA). (For overviews, see Levinson, 1983, and Heritage, 1984a; for recent collections of representative work, see Atkinson & Heritage, 1984; Boden & Zimmerman, in press; Button, Drew, & Heritage, 1986; Button & Lee, 1987; Heritage & Drew, in press; and Maynard, 1987, 1988.)

Work of this type has had a number of general concerns. One of these has been to enrich our capacity to analyze ordinary conversational interaction in a way that can account for the actual course that particular episodes of interaction take and that can capture the orientation of the participants to it. Another has been to develop a systematic explication of the recurrent and stable practices of talking in interaction that participants in ordinary talk-in-interaction employ to talk and to understand what is going on. Indeed, these concerns have gone hand in hand, one test of the adequacy of a description of some practice being its capacity to yield convincing analysis of singular episodes of conversation, and one result of incisive single case analysis being the formulation of recurrent practices of talking.

A substantial body of work in CA can be appreciated for its bearing on the interface between cognition and interaction. Much CA work brings general concerns with the *methodical* underpinnings (the *how*) of ordinary shared knowledge and skilled practice to a defined focus in the conduct of everyday interaction, accessible to empirical inquiry. Practices of conduct in ordinary interaction can be examined for the ways in which they furnish or embody procedures by which a sense of a world known in common is reinforced and implemented. Several different domains of research in CA are relevant to this topic, one of which I will develop in greater detail.

But before focusing on several specific themes in CA work that engage a concern with socially shared cognition, it is important to make explicit a fundamental theme embodied in this work that often seems to be missing from cognitivist concerns.

On the Interactive Foundations of the Cognitive

This theme is that the domain of social action and interaction outside the cognitive apparatus—whether conceived of as mind or brain, as hardware, software, or wetware—is not a structureless medium that merely transmits messages, knowledge, information, or behavior that are planned and processed inside the skull, with no further ado. Rather, the world of interaction has its own structures and constraints. Its shape not only bears on the fate of acts, messages, and utterances once they are enacted by persons. It also enters into the very composition, design,

and structuring of conduct and is part and parcel of whatever processes—cognitive or otherwise—are germane to the conception and constitution of acts, messages, or utterances in the first instance.

The very things that it occurs to speakers to express, their implementation in certain linguistic forms, and the opportunity to articulate them in sound with determinate and coordinate body movements—such as gesture, posture, and facial expression—are constrained and shaped by the structures by which talk-in-interaction is organized. And whether such utterances are heard or claimed to be heard, and how they are understood or misunderstood are also in substantial measure shaped by those organizations of talk-in-interaction.

However, it should not be thought that these organizations—of turn taking,² of the coherence of sequences of successive utterances, or of whole occasions of talk—merely give social shape to cognitive outcomes produced by autonomous cognitive processes and expressed by autonomously structured linguistic resources. As I hope will be apparent from the data presented and discussed below, the structures of interaction penetrate into the very warp of these apparently autonomous domains. On reflection, it is not implausible for this to be the case.

In many respects, of course, the fundamental or primordial scene of social life is that of direct interaction between members of a social species, typically ones who are physically copresent. For humans, talking in interaction appears to be a distinctive form of this primary constituent of social life, and ordinary conversation is very likely the basic form of organization for talk-in-interaction. Conversational interaction may be thought of as a form of social organization through which most, if not all, the major institutions of societies—the economy, the polity, the family, and the reproduction and socialization of the population—get their work done. And it surely appears to be the basic and primordial environment for the use and the development of natural language.

Therefore, it should hardly surprise us if some of the most fundamental features of natural language are shaped in accordance with their home environment in copresent interaction, as adaptations to it, or as part of its very warp and weft (cf. Schegloff, 1989a).

For example, if the basic natural environment for sentences is in turns at talk in conversation, we should take seriously the possibility that aspects of their structure (e.g., their grammatical structure) are to be understood as adaptations to that environment. In view of the thoroughly interactional character of the organization of turn taking in conversation (Sacks, Schegloff, & Jefferson, 1974),

²By *turn taking* I refer to the systematic allocation of opportunities to talk and the systematic regulation of the size of those opportunities. Psychologists may be more familiar with accounts of turn taking whose domain is differently formulated, such as Jaffe and Feldstein (1970) or Duncan (1974a, 1974b) and Duncan and Fiske (1977), but I am relying on the account in Sacks et al., 1974.

the grammatical structures of language should in the first instance be understood as at least partially shaped by interactional considerations (Schegloff, 1979).

There is another respect in which what might be thought to be intrinsic properties of natural language are partially the product of its fundamental situatedness in interactional contexts. The organization of conversation, and more generally of talk-in-interaction, includes among its generic components (those apparently relevant and in play when talk is in progress or even incipient, the latter making it potentially relevant to interaction beyond talk) an element that we call the *organization of repair* (Schegloff, Jefferson, & Sacks, 1977). This is an organized set of practices by which parties to talk-in-interaction can address problems in speaking, hearing, and understanding the talk.

The presence of such an organization in virtually all talk-in-interaction allows natural language to be constructed differently than might otherwise have been the case. Given that hearers have resources available for addressing problems in understanding, should they arise, the resources of natural language need not, for example, be unambiguous. They need not have invariant mappings of signs or symbols and their signifieds. They need not have a syntax that assigns only a single interpretation to a given expression. They need not be limited to literal usage, but may be used in idiomatic, metaphoric, and other nonliteral tropes.

Talk-in-interaction, then, is interactive quite apart from its contextuality (by reference to which it is virtually always responsive or proresponsive) and its collaborativeness (in the sense that whatever gets done is a joint achievement of speakers and their interlocutors). Those senses aside, the kinds of language components from which it is fashioned—sounds, words, and sentences—have the character they do and are formed the way they are in part because they are designed to inhabit an environment in which the apparatus of repair is available and in which, accordingly, flexible arrangements can be permitted.³

In like manner, our articulatory apparatus and our practices of articulation and hearing may have developed the way they did in part because repair is available to catch such problems in speaking and hearing as may arise. Similar considerations apply to other aspects of natural language.

Thematic Relations Between CA and Socially Shared Cognition

Before continuing the discussion of the domain of repair, it is important to touch on several other, quite different areas of conversation-analytic work that may be

³This stands in contrast to discourse domains such as science and logic in which such "flexible arrangements" (it is claimed) cannot be permitted, and whose building blocks must, therefore, be of a different character, as in so-called artificial or formal languages.

of interest to persons drawn to this general theme. Inadequate as these overly brief accounts will be, they may nonetheless point those interested in socially shared cognition from a psychological perspective toward work they are not familiar with that may be of substantial interest.

One such area of inquiry is concerned with forms of reference (most extensively examined for person reference by Sacks, 1972a, 1972b, but also for place reference by Schegloff, 1972) and their organization and deployment. One important line of research concerns the ways in which the organization of categorical terms of reference for persons (what Sacks termed *membership categorization devices*) organizes a broad scope of commonsense knowledge about persons (Sacks, 1972a, 1972b, in press). Another line of work focuses on how some reference terms for persons invoke, mask, or presume the absence of shared knowledge—what has been called *recognitional reference* (Sacks & Schegloff, 1979). The last of these lines of work transmutes the socially shared feature from being the researcher's characterization of the knowledge to being that of the interactants (Sacks & Schegloff, 1979).

An offshoot of Sacks' work on the membership categorization devices concerns some telling areas in which categories of person and the commonsense knowledge organized by reference to them are *not* shared (1979). There are, for example, terms used to identify sets of persons that are not used by those persons themselves. Such categories may be said to be owned and administered by dominant groups vis-a-vis others. There are numerous historical and ethnographic reports of such occurrences, but Sacks points to the recurrent invention or cooptation of categories such as *hotrodder*, *surfer*, *beatnik*, *flapper*, *punker* by *adolescents* or *teenagers*. The latter two terms are owned and administered by adults, who define conditions of applicability and what is known about members of the category, with the members of the category themselves having little or no control over the deployment of the terms. The former sets of categories (which Sacks terms *revolutionary categories*) come to be administered by their incumbents, who define conditions of membership and proper belonging, generally to the uncertain dismay of the "straight" society. This work points to a whole area of a sociology of cognition not currently envisioned by the cognitive sciences.

Another domain of work is concerned with the ways in which the types of activities that utterance types can do (utterance types such as "question" or "announcement") implicate shared knowledge. Thus, announcement-formatted talk, when it delivers what is taken to be already shared knowledge, can be understood by its recipients to be doing some other activity. Or, formulating some previously ongoing talk for a newly arrived interactant in a way that accommodates what the newcomer is taken to know about can serve to invite the newcomer to join the talk (Sacks, in press; Schegloff, 1989b).

Another line of CA work bearing on the cognition–interaction interface concerns how participants in talk-in-interaction can take up stances toward their

own knowledge states or that of a speaker, for example through the use of particles such as *oh* (Heritage, 1984b). *Oh* can claim a change in the speaker's state, but its utterance enacts an interactional stance and does not necessarily reflect a cognitive event. By discriminating these two quite different, but not always distinguished, domains, researchers can better explicate the empirical relationship between them.

A last direction of work to be mentioned here focuses on how an orientation to the distribution of knowledge among speakers and potential recipients or audience (both where the knowledge is shared and where it is not) can enter into the very constitution and design of utterances, as well as the deployment of bodies, in interaction (Goodwin, 1979, 1980, 1981).

In the remainder of this chapter, however, I want to take a different approach and explore how the organization of repair in talk-in-interaction affects the intersection of cognition and interaction, not as it bears on the character of language per se, but as it enters into the conduct of particular episodes of talk-in-interaction.

THE DEFENSE OF INTERSUBJECTIVITY

Socially shared cognition is nowhere more important than in the course of direct interaction between persons. The very coherence and viability of the course of such interaction, jointly produced by the participants through a series of moves in a series of moments that are each built in some coherent fashion with respect to what went before, depends on some considerable degree of shared understanding of what has gone before, both proximately and distally, and what alternative courses of action lie ahead. Such intersubjectivity is not always untroubled.

A Brief Introduction to the Organization of Repair

Of the various aspects of the organization of talk-in-interaction that contribute to the sustaining of socially shared cognition, one that is specialized for the task is called the *organization of repair*. This is an organization of practices of talk and other conduct by which participants can deal with problems or troubles in speaking, hearing, or understanding the talk. Such practices can be instituted at various places in the talk, but past work (Schegloff et al., 1977) has indicated that these places are properly thought of by their relationship to the source of the trouble. Using this organizing principle and a metric composed of turns at talk, it appears that virtually all efforts to deal with such problems in the talk, including problems in shared understanding, are initiated either in the turn in which the trouble or potential trouble occurs (as when a speaker stops to clarify a potential ambiguity before or just after finishing that turn at talk), in the next turn by some other

participant (a recipient for whom it may be relevant to respond), or in the following turn by the speaker of the trouble source—what we can refer to as *third position repair*.

The sequential basis for third position repair can be very briefly sketched. In turns at talk in ordinary conversation, speakers ordinarily address themselves to prior talk and, most commonly, to immediately preceding talk. In doing so, speakers reveal aspects of their understanding of the prior talk to which their own is addressed. And in doing so, speakers can reveal to speakers of the prior talk understanding that the latter find problematic, that is, *misunderstandings*. When this occurs, speakers of the misunderstood talk can undertake to repair the misunderstanding, and this can thus constitute third position repair, repair after an interlocutor's response (second position) has revealed trouble in understanding an earlier turn (the *repairable* in the first position). The ordinary sequential organization of conversation thus provides for displays of mutual understanding and problems therein, one running basis for the cultivation and grounding of intersubjectivity.

Third position repair may be thought of as the last systematically provided opportunity to catch (among other problems) divergent understandings that embody breakdowns of intersubjectivity, that is, trouble in socially shared cognition of the talk and conduct in the interaction.⁴

It turns out that third position repairs have a highly recurrent format built of a very limited set of types of components. Detailed presentation of this format and the deployment of its components is not possible in the compass of this chapter (cf. Schegloff, in press-a). However, I offer several exemplars below to serve as a point of departure. What I wish to do in this chapter is present two *variant* forms. These are clearly instances of third position repair as we otherwise formulate and deal with it, but they are fashioned differently by their speakers.

The Canonical Format for Third Position Repair

The recurrent form of third position repair should be grossly recognizable from the following four instances:⁵

1. GTS 1:37

a→ D: Well that's a little different from last week.

b→ L: heh heh heh Yeah. We were in hysterics last week.

⁴As I am using the term, *repair* is not addressed to all divergences of understanding, but only to ones presented by the production and uptake of the talk itself.

⁵There are components not exemplified here, but the four instances presented embody the most essential features. See Appendix to this chapter for an explanation of the transcript notation conventions.

c→ D: No, I mean Al.
L: Oh. He . . .

2. FD IV:66

a→ A: Now what was that house number you said you were-
B: No phone. No.
A: Sir?
b→ B: No phone at all.
c→ A: No I mean the uh house number, y-
B: Thirty eight oh one?
A: Thirty eight oh one.

3. CDHQ I:52

a→ A: Which one::s are closed, an' which ones are open.
b→ Z: Most of 'em. This, this, this, this ((pointing to map))
c→ A: I 'on't mean on the shelters,
c→ I mean on the roads.
Z: Oh!

4. SPC, 74

G: Well what did Miss Jevon say when you spoke to her.
C: She said she would be glad to talk to you and she would be waiting for your call.
G: Boy, it was some wait. Everyone else in that clinic has been just wonderful to me. Both the Diabetic Clinic and the Psychiatric Clinic. It's just that woman.
a→ C: Well, what are you going to do, Mr. Greenberg.
b→ G: Well that's true. When you are a charity patient, when you are a beggar,
b→ you can't do anything about it, you just have to take what's handed out
b→ to you, and-
c→ C: No, I mean about yourself. What are you going to do for yourself. . . .

I hope that it is clear in each of these cases that the third position repair turns (marked by the *c* arrows) are addressed to repairing some trouble in understanding a prior utterance by the same speaker (marked by the *a* arrows), trouble revealed by an intervening turn by another (marked by the *b* arrows).

What is striking is that the highly recurrent format of the third position repairs appears to be one that is used when troubles in understanding arise across two quite different types of understanding trouble—claimed misunder-

standing of the reference of some element of the trouble-source turn (as in the first three instances) and (as in the fourth instance) trouble in assessing the sequential implicativeness (the action upshot) of the trouble-source turn (Schegloff, 1987). In general the organization of repair appears to be independent of the organization and source of trouble being addressed. However, in the materials to be examined below, when other than the aforementioned types of understanding troubles are being addressed—when the trouble is of hearing, of memory, of modality (e.g., between a serious utterance and a joke), or of sequential implementation—then it appears that the different source and type of trouble prompts a differently constructed instrument with which to accomplish it.

In referring here to *instruments*, I mean to underscore that the forms of talk involved are devices used to accomplish an undertaking—here, the resolution of some problem in understanding. We will examine two such different types of instruments, two of the variant forms that third position repair can take (each of which requires some explication of the interactional context in which it occurs).

Let me note in advance that the two fragments of interaction to be discussed below bear on intersubjectivity—or socially shared cognition—in multiple ways. One way is in the misunderstanding and repair contained in them. But in each of these cases, that which is misunderstood *itself* concerns socially shared cognition—what is or is not known in common. In one case, the issue is whether the two participants already share certain knowledge; in the other, it is whether the participants share an understanding of what exactly one of them is doing in the talk.

Third Position Repair With Memory Trouble

In the first fragment, M and N are two women roommates in their late 20s in Los Angeles in the mid-1970s,⁶ and Stuart (N's boyfriend) has been living on the East Coast. N has talked to Stuart earlier on the telephone.

5. M and N, 1

M: What' Stuart have to say.

N: Didn' I tell you?

a→ M: No::,

N: He's coming

⁶Formulating persons and settings in the manner used in the text is analytically problematic in a variety of ways, as sketched in Schegloff (in press-b). Because I have not supplied the relevant analytic warrant for the characterizations in the text, the account is informal, at best.

- b→ M: Oh that's right
 N: 'Yeah he's coming he's coming.
 b→ M: Oh that's right, he's going to Berkeley
 N: 'Yes.

The utterances marked with the *b* arrows are correcting M's earlier turn, "no," at the *a* arrow, a self-correction touched off by the intervening turn by N, "He's coming."

M's first turn in this sequence is heard (and designed) as an initial inquiry about the conversation with Stuart and as an incidental one. That is, the formulation as "have to say" does not appear designed to solicit some particular news that M has reason to think might have emerged in N's conversation with Stuart (as in "What did he/Stuart say?") or a question asking specifically about the anticipated news). M's inquiry is tantamount to asking whether anything reportable occurred.

It could be proposed that if anything reportable had occurred it would have been reported. However, it appears that members of this culture treat some occurrences and some news as of such strength as to warrant (with respect to a particular potential recipient) initiating a topic/sequence or even a conversation to report them, whereas other occurrences and news, although reportable in response to an inquiry that warrants their telling, are not of such strength as to warrant telling on one's own initiative (again, with relation to a particular recipient). Hence, a query such as M's here can be produced so as to license a telling of the latter sort, and to provide a sequential position in which it can be properly told.

Note that N's response is compatible with this account. She does not in the first instance answer the question. There *is* an answer; Stuart *did* have something to say, and in fact, what there is to tell is rather more than the minimum qualifying as a tellable in response to an inquiry. The outcome of the earlier conversation with Stuart was considered significant enough to warrant N's initiating a telling without waiting for an eliciting inquiry. That is, there was news, and N told M about it, or thinks she did. That news has already been shared, and N assumes M already knows it. That M apparently does not remember it is itself potentially a noticeable fact about the relationship between M and N, as it would have been if N had not conveyed news of this magnitude to M on her own initiative (i.e., without being asked).

Hence, if N has any doubt that she did already tell M, there is some point in displaying that she treated their relationship as one in which this news would have prompted an earlier, self-initiated telling. If it should turn out that she has not told N, it is because she "failed to carry through an intention," not because she doesn't think M a proper recipient of news to which she accords the status

she is about to display. The shared character of this knowledge is, then, itself a matter of concern.

In any case, the fact that N believes she has already told M the news makes problematic a response to the current inquiry. N "knows" that M already knows the news, and there are constraints on telling a recipient something the speaker supposes (or ought to suppose) the recipient already knows. Therefore, she does not simply offer a straightforward response to the inquiry.

N's "Didn't I tell you?", then, projects news. On the one hand, it serves as a prompt to M to retrieve some news that N has recently told her and then to retract the question, and suggests the order of object M should be searching for—something that would have been grounds for her initiating a telling to M. On the other hand, this question can serve as a "pre-telling," one that marks what is to be told as sufficiently worthy of telling as to have been told without benefit of inquiry. Accordingly, it projects or augurs big news.

Note, then, that the alternative response types to this yes-no type question are not simply *yes* and *no*. A yes-class response, for which the question is markedly constructed to display a preference, should be realized not by a *yes* answer, but by some self-repair, some touched-off memory by M that she *had* been told and some demonstration of what she remembers the news to be. A no-class response, on the other hand, should be realized by a *no* answer, to be followed by the telling by N, which would be responsive to the question by M that initiated this sequence.

If "Didn't I tell you?" projects "big news," how big is "big"? Whatever magnitude of news N's pre-telling orients M to, M overshoots and overlooks the news that N had, in fact, conveyed to her (that the boyfriend is relocating to the West Coast), news that M will show she remembers a moment later by adding it to N's preannouncement. At first, however, she does not recall being told news from the previous N-Stuart conversation, and she responds accordingly, "no," whereupon N provides the response to the initially proffered inquiry: "He's coming." With this utterance, a well-formed sequence is completed—a question-answer pair with a question-answer insertion expanding it (Schegloff, 1972).

But the delivery of the news touches off in M the recollection that she has indeed been told this before, and in response she undertakes to repair her earlier answer to "Didn't I tell you?" "Oh that's right" is, of course, not a verification that "He's coming," but a confirmation that N had, in fact, told her, and M follows that up with a demonstration that she has more of the information than N has reannounced here; she adds to it a detail from the earlier telling as evidence that she does, in fact, remember. (For a fuller treatment of "Oh that's right" as a form of utterance for doing this interactional job, see Heritage, 1984b.)

Note that M's "Oh that's right" turn repairs her own prior turn, and not only expresses a belated recognition that she had been told the news before, but

also articulates the form of utterance that ought properly to have occurred in its place. To "Didn't I tell you," M might properly have responded, "Oh that's right" (as well as "he's going to Berkeley").

This utterance is a third position repair as that term has been applied to other, differently appearing, segments of talk. The same speaker's prior utterance is what is in need of repair. And the relevance of repair has been occasioned by the intervening turn by an interlocutor; it is by virtue of what the interlocutor says in the intervening turn that the repair is undertaken and addresses the job that it does.

Note that the intervening turn does not itself address the problem. After M denies having been told what Stuart had to say, N does not try to correct her, to jog her memory to reverse her answer. N's ensuing talk displays an acceptance of M's claim and does an appropriate next turn in light of it. It is that appropriate next turn's *occasioning* of the repair, rather than itself *initiating* it, that embodies a distinct path by which the parties come to a shared understanding of the situation and marks this as an instance of third position repair.

The form that the repair takes, however, is different in this case from that of vast majority of third position repairs. In most such repairs, the problem is a misunderstanding by the second speaker of something in the trouble-source turn, a misunderstanding that is addressed in the turn following the one that displays it. And the format of most third position repairs is designed for the major exigencies of that type of problem. In this instance, however, the problem is not misunderstanding by interlocutor.

In the first instance, the question that M asks displays a wrong grasp of the speaker's own circumstances. The issue here is precisely socially shared knowledge and what *is* shared by the interlocutors. The two questions with which this sequence starts go directly to this matter. The first, in inquiring, disclaims knowledge; the second, in inquiring, means to remind its recipient that the inquired-after is already known and known in common. What gets repaired is the response to that inquiry, and the repair reverses the response in light of the intervening turn. As noted, it replaces the wrong response with the right one.

It is perhaps worth remarking that this repair is done at all, that M acknowledges that she *had* been told the news and had forgotten it. For news of this importance, and to her roommate, this may be a not inconsequential forgetting and acknowledgment. M could, alternatively, re-receive the news on its redelivery as if she were hearing it for the first time. Then, to "He's coming," she might have responded, "Oh how *marvelous!*" We note, then, that what is being accomplished here is not only passing on the information about Stuart, but also keeping straight the record about N's memory, about N's assessment of the status of the news vis-a-vis the status of her relationship with M, about M's memory and the place of N's telling of her news in the personal "economy" of M's current

affairs and relationships. This interactional and cognitive "bookkeeping" overrides whatever might have been gained by a bland re-receipt of the news. (That participants do sometimes rerun a sequence for "another first time" has been shown with other recorded interactions.)⁷

Third Position Repair With Unit Trouble

Sometimes the problem addressed by repair concerns a lack of shared understanding of the discourse unit being built, its boundaries, and the appropriate place and manner in which to respond to it. Here again, third position repair may take a form different from the canonical one. The following excerpt is taken from a telephone call to a radio talk show in New York City in the mid-1960s.

6. BC Gray, 74-75

B: This is in reference to a call, that was made about a month ago.

A: Yessir?

B: A woman called, uh sayin she uh signed a contract for huh son who is-who was a minuh.

A: Mm hm,

B: And she claims inna contract, there were things given, and then taken away, in small writing.

((pause))

A: Mm hm

B: Uh, now meanwhile, about a month ehh no about two weeks before she made the call I read in, I read or either heard-uh I either read or hoid onna television, where the judge, hadda case like this.

⁷I might mention that not all cases in which a speaker reverses a previous utterance, such as a previous answer, take this form. First of all, some of them take the form of fourth position repairs; this happens particularly when the originating question was misunderstood (Schegloff, 1988). But there are also third position repair treatments of such "wrong" answers. For example:

O: And this is a-this is the junior high school you went to?

J: Uh huh.

O: Uh oh::: how was it.

J: I didn't go there.

O: Oh

J: I thought you meant Sam go there.

O: Sam went there.

Here, "I didn't go there" replaces and repairs the same speaker's "uh huh" as an answer to the question, and the repair is prompted by the intervening follow-up question. But as the ensuing diagnostic utterance makes clear, this was based on a misunderstanding of the initial question, and this sequence is thus an alternative to fourth position repair. Instead of, J: "Oh you mean me"; O: "yeah"; J: "I didn't go there," we get a third position repair plus a diagnostic utterance. In the instance treated in the text, however, the problem was in the speaker not *remembering*, rather than *misunderstanding*, and the repair takes a quite different form.

- A: Mh hm,
 B: And he got disgusted an' he says "I"—he's sick of these cases where they give things in big writing, an' take 'em, an' take 'em away in small writing.
 A: Mmhm,
 B: An' 'e claimed the contract void.
 A: Mh hm?
 → B: Uh what I mean is it c'd help this woman that called. You know uh, that's the reason I called.

A few paragraphs will be necessary to sketch the sequential structure by which this talk is shaped by its participants, a sequential structure that provides both the context for and the substance of the problem in understanding that is addressed.

After the initial exchanges in the opening of the conversation, the caller launched into the talk reproduced here in the sequential position at which first topics (in this setting, typically the *only* topics) are introduced, ordinarily designed and heard as the reason for the call (Sacks, in press; Schegloff, 1986). The topic in this instance is built from the outset as a telling, as a sort of story. It is, in any case, designed to comprise more than one of the units out of which turns are ordinarily built, units (such as clauses and sentences) on whose possible completion an interlocutor may (and sometimes *must*) properly begin a next turn (Sacks, 1974; Sacks et al., 1974).

One way an interlocutor can cooperate with such a conversational undertaking is to withhold full turns at talk at the places where they might otherwise be initiated and, instead, provide little tokens that display an appreciation that an extended turn at talk is still under way, is not yet complete, has not presented problems of hearing or understanding that recipient will now raise, and that the speaker should continue with the unit in progress (hence these interpolations may be called *continuers*; see Schegloff, 1982).

For story telling, when recipients agree to such a partial transformation of the ordinarily operative turn-taking organization, the locus of monitoring for the possible end of the current speaker's talking shifts from these "turn constructional units" (e.g., clauses, sentences, some phrases; Sacks et al., 1974) to the story as a unit. Recipients then monitor for the arrival of that type of element in the telling that the speaker's precharacterization of the story may have projected as its point (Sacks, 1974). In other (i.e., nonstory) types of extended units as well, recipients monitor the extended discourse unit for the point at which it will have reached the embodiment of a sequentially relevant unit, given the context, and at which they may or should enter the talk with a sequentially appropriate next turn.

In the case at hand, the radio personality has understood that some such extended unit has been launched, and at a series of what might otherwise be possible completions of the speaker's turn, he indicates his grasp that the talk is

not over (and his willingness to let it go on) by providing a series of these continuers, albeit in at least one case after a bit of delay. (Note that, in that case, the caller does not continue until his interlocutor eventually provides a continuer.)

We have here, then, a case of socially shared cognition in a most practical, indeed, pragmatic sense, and a procedural one as well. The cognition concerns the project in which these participants are engaged, an engagement that is at every point constituted by and renewed *as a project*, by their acting appropriately on that understanding.

The trouble arises here over the understanding of when the caller's talk has been brought to a recognizable and sequentially implicative conclusion. In brief, at a point at which the caller thinks he is done, his recipient does not perceive that he is done. Without here providing a detailed explication, this divergence can be roughly characterized along the following lines.

On the one hand, the talk is designed to do "ending a story," with the report of a recognizable final action in a course of action by one of the characters being reported in the story (Sacks, 1972b): A judge makes a disposition of a case. But in this instance, "story completion" is not tantamount to "extended turn completion" for its recipient, in part because the story has been premarked as having some bearing on another conversation previously broadcast. Although the story may have been brought to a recognizable possible completion, its bearing on the previous caller's problem has apparently not been adequately displayed for its recipient, and the project being pursued in this extended turn is accordingly not recognized as being possibly complete. And so the recipient (the host) utters another continuer.

This continuer, of course, displays to the caller that some failure of understanding has occurred. It should be noted that, in such a case, a continuer (even though it is, in effect, passing the opportunity for a full turn at talk and is, in that sense, semantically vacuous) can serve to display its speaker's misunderstanding of the ongoing talk in some respects, here with respect to its sequential status (cf. Schegloff 1982, pp. 91-92, Note 16). But the misunderstanding here does not concern the substance of the talk, either its lexico-semantic-topical reference or its action-pragmatic upshot. It concerns instead the procedural infrastructure of the talk, the organization of turns and their components, out of which the talk is built.

This contrast is, to a considerable degree, an artificial one, for it is by recognizing that a turn has been built to be complete that a recipient may gauge what it is being used to do. And, in failing to grasp what action some unit of talk is doing, and that that action has in effect been completed, a recipient can fail to see that the turn has been designedly completed. The latter is the case in the present instance. Still, this is a different type of misunderstanding from the problem in grasping the sequential implicativeness of an utterance explored elsewhere

(Schegloff, 1984, 1987), where utterances designed to do one action are instead understood to be doing another.

The form that the repair takes is also different from the form it takes in more reference- or upshot-implicated misunderstandings. In effect, the caller here provides the grounding of the story in the intended action of "help[ing] this woman that called" (last line of the excerpt). But he does this not as a simple continuation or conclusion of his telling; by framing it with "What I mean is . . ." he does it in the manner of a repair, as a re-take on what he has been doing in the preceding talk. He then re-completes the unit by formulating its sequential-functional status in the talk. In formulating it as the reason for the call, he, in effect, brings it (again) to a conclusion.

Here, as in the first "variant" examined earlier, a speaker is prompted to undertake some reparative operation on his or her preceding talk by virtue of a problem revealed by the intervening talk of an interlocutor. Although in this instance the problem is one of understanding, that problem is not in understanding some reference in the talk or the action implication of a turn, but the sequential status of the talk through which whatever is being done is accomplished, the constituting structure of the talk. And this appears to prompt a variant form for the repair.

Format Variation

In these two cases, we have noted that different forms of the turn that does third position repair seem fitted to different types of trouble being addressed. But these instances, each a singular display of its trouble type, are not alone as exemplars of this point. It may be noted as well that, when the problem involves a mistaking of joke for a serious utterance, or vice versa, or when the trouble is one in which an interlocutor has misheard rather than misunderstood, the form that the repair initiation and solution take may be different again. At the same time, all kinds of potential discriminations between different types of misunderstanding, for example, between misunderstandings of reference and of sequential implicativeness (Schegloff, 1987), appear not to engender a differentiation in the device used to deal with them.

REVIEW AND CONCLUSION

Built into the very organization by which opportunities to talk are allocated to participants in ordinary conversation is a related "understanding-display" device (Sacks et al., 1974). The consequence is that speakers almost necessarily reveal their understanding of that to which their talk is addressed, whether that is prior talk, other conduct, or events and occurrences "scenic" to the interaction. When an utterance

is addressed to prior talk, its speaker reveals some understanding of that prior talk, an understanding that the speaker of that prior talk may treat as problematic. In the immediate aftermath of such problem-revealing utterances, there is a structurally provided opportunity to deal with and repair the problem of understanding. Insofar as shared understanding by the coparticipants in conversation of the import or upshot of an utterance is part of what would be meant by *intersubjectivity*, and this, in turn, is part of what would be meant by *socially shared cognition*, this discussion has been addressed to one socially central locus of socially shared cognition. It is central in that it is an inescapable element of any ordinary interaction of which talk is a part, and this is where a good part of the society's work—including the socialization and "encognizing" of the young—occurs.

The specific theme of the preceding discussion has been the following. Although in general the organization of repair is *not* sensitive to the type of problem being addressed, in the case of third position repair, we do appear to find variant forms of the repair utterance fitted to particular variant types of the source of the problem, although other types of gross differentiation are not so marked.

The underlying conception behind this discussion stresses an orientation to an organization of activities, of conduct, and of the practices by which activities and conduct are produced and ordered. This conception departs sharply from the cognitive apparatus as the focus of inquiry, and it may be useful to end with a comment on this divergence of perspective between the idiom common in cognitive science and that of conversation analysis.

Various sources have imparted to the Western cultural and intellectual tradition a decidedly individualistic and psychologistic cast. In Western tradition, it is the single, embodied, minded individual who constitutes the autonomous reality. Organized aggregations—whether of persons or of activities—tend to be treated as derivative, transient, and contingent. They are something to be added on, after basic understandings are anchored in individual-based reality. It has accordingly seemed appropriate in the cognitive sciences to study cognition in the splendid isolation of the individual mind or brain, and to reserve the social aspect for later supplementary consideration.

I have not explicitly stated, but have meant to suggest, that such a stance may be deeply misconceived, because our understanding of the world and of one another is posed as a problem, and resolved as an achievement, in an inescapably social and interactional context—both with tools forged in the workshops of interaction and in settings in which we are answerable to our fellows. Interaction and talk-in-interaction are structured environments for action and cognition, and they shape both the constitution of the actions and utterances needing to be "cognized" and the contingencies for solving them. To bring the study of cognition explicitly into the arena of the social is to bring it home again.

References

- Atkinson, J. M., & Heritage, J. C. (Eds.). (1984). *Structures of social action: Studies in conversation analysis*. Cambridge, England: Cambridge University Press.
- Boden, D., & Zimmerman, D. H. (Eds.). (in press). *Talk and social structure*. Cambridge: Polity Press.
- Button, G., Drew, P., & Heritage, J. (Eds.). (1986). Interaction and language use [Special Issue]. *Human Studies*, 9(2-3).
- Button, G., & Lee, J. R. E. (Eds.). (1987). *Talk and social organisation*. Clevedon: Multilingual Matters.
- Duncan, S. (1974a). Some signals and rules for taking speaking turns in conversations. In S. Weitz (Ed.), *Non-verbal communication* (pp. 298-311). New York: Oxford University Press.
- Duncan, S. (1974b). On the structure of speaker-auditor interaction during speaking turns. *Language in Society*, 2, 161-180.
- Duncan, S., & Fiske, D. W. (1977). *Face to face interaction: Research, methods and theory*. New York: Wiley.
- Durkheim, E. (1915). *The elementary forms of the religious life*. London: George Allen & Unwin Ltd.
- Durkheim, E. (1951). *Suicide: A study in sociology*. (J. A. Spaulding & G. Simpson, Trans.). Glencoe, IL: The Free Press. (Original work published 1897)
- Garfinkel, H. (1967). *Studies in ethnomethodology*. Englewood Cliffs, NJ: Prentice-Hall.
- Goodwin, C. (1979). The interactive construction of a sentence in natural conversation. In G. Psathas (Ed.), *Everyday language: Studies in ethnomethodology* (pp. 97-121). New York: Irvington.
- Goodwin, C. (1980). Restarts, pauses and the achievement of a state of mutual gaze at turn beginning. *Sociological Inquiry*, 50(3/4), 272-302.
- Goodwin, C. (1981). *Conversational organisation: Interaction between speakers and hearers*. New York: Academic Press.
- Heritage, J. (1984a). *Garfinkel and ethnomethodology*. New York: Polity Press.
- Heritage, J. (1984b). A change of state token and aspects of its sequential placement. In J. M. Atkinson & J. C. Heritage (Eds.), *Structures of social action: Studies in conversational analysis* (pp. 299-345). Cambridge, England: Cambridge University Press.
- Heritage, J., & Drew, P. (in press) *Talk at work*. Cambridge, England: Cambridge University Press.
- Jaffe, J., & Feldstein, S. (1970). *Rhythms of dialogue*. New York: Academic Press.
- Levinson, S. C. (1983). *Pragmatics*. Cambridge, England: Cambridge University Press.
- Maynard, D. (Ed.). (1987). Language and social interaction [Special Issue]. *Social Psychology Quarterly*, 50(2).
- Maynard, D. (Ed.). (1988). Language, interaction and social problems [Special Issue]. *Social Problems*, 35(4).
- Parsons, T. (1937). *The structure of social action*. New York: McGraw-Hill.
- Parsons, T. (1951). *The social system*. Glencoe, IL: The Free Press.
- Sacks, H. (1972a). An initial investigation of the usability of conversational data for doing sociology. In D. N. Sudnow (Ed.), *Studies in social interaction* (pp. 31-74). New York: Free Press.
- Sacks, H. (1972b). On the analyzability of stories by children. In J. J. Gumperz & D. Hymes (Eds.), *Directions in sociolinguistics* (pp. 325-345). New York: Holt, Rinehart and Winston.

- Sacks, H. (1974). An analysis of the course of a joke's telling in conversation. In R. Bauman & J. Sherzer (Eds.), *Explorations in the ethnography of speaking* (pp. 337-353). Cambridge, England: Cambridge University Press.
- Sacks, H. (1979). Hotrodder: a revolutionary category. In G. Psathas (Ed.), *Everyday language: Studies in ethnomethodology* (pp. 7-14). New York: Irvington.
- Sacks, H. (in press). *Lectures on conversation (1964-1972)*. Oxford: Basil Blackwell.
- Sacks, H., & Schegloff, E. A. (1979). Two preferences in the organisation of reference to persons in conversation and their interaction. In G. Psathas (Ed.), *Everyday language: Studies in ethnomethodology* (pp. 15-21). New York: Irvington.
- Sacks, H., Schegloff, E. A., & Jefferson, G. (1974). A simplest systematics for the organisation of turn-taking for conversation. *Language*, 50, 696-735.
- Schegloff, E. A. (1972). Notes on conversational practice: Formulating place. In D. N. Sudnow (Ed.), *Studies in social interaction* (pp. 75-119). New York: Free Press.
- Schegloff, E. A. (1979). The relevance of repair to syntax-for-conversation. In T. Givón (Ed.), *Syntax and semantics, Volume 12: Discourse and syntax* (pp. 261-286). New York: Academic Press.
- Schegloff, E. A. (1982). Discourse as an interactional achievement: Some uses of "uh huh" and other things that come between sentences. In D. Tannen (Ed.), *Analyzing discourse, text and talk* (pp. 71-93). Washington DC: Georgetown University Roundtable on Languages and Linguistics, Georgetown University Press.
- Schegloff, E. A. (1984). On some questions and ambiguities in conversation. In J. M. Atkinson & J. Heritage (Eds.), *Structures of social action* (pp. 28-52). Cambridge, England: Cambridge University Press.
- Schegloff, E. A. (1986). The routine as achievement. *Human Studies*, 9(2/3), 111-152.
- Schegloff, E. A. (1987). Some sources of misunderstanding in talk-in-interaction. *Linguistics*, 25, 201-218.
- Schegloff, E. A. (1988). Presequences and indirection: Applying speech act theory to ordinary conversation. *Journal of Pragmatics*, 12, 55-62.
- Schegloff, E.A. (1989a). Reflections on language, development and the interactional character of talk-in-interaction. In M. Bornstein & J. S. Bruner (Eds.), *Interaction in human development* (pp. 139-153). New York: Erlbaum.
- Schegloff, E. A. (1989b). Harvey Sacks' lectures on conversation: The 1964-65 lectures—An introduction/memoir. *Human Studies*, 12, 185-209.
- Schegloff, E. A. (in press-a). Repair after next turn: The last structurally provided defense of intersubjectivity in conversation. *American Journal of Sociology*.
- Schegloff, E. A. (in press-b). Reflections on talk and social structure. In D. Boden & D. Zimmerman (Eds.), *Talk and social structure*. Cambridge: Polity Press.
- Schegloff, E. A., Jefferson, G., & Sacks, H. (1977). The preference for self correction in the organisation of repair in conversation. *Language*, 53, 361-382.

APPENDIX

A brief guide to a few of the conventions employed in the transcripts may help the reader in what appears a more forbidding undertaking than it actually is. Some effort is made to have the spelling of the words roughly indicate the manner of their production, and there is often, therefore, a departure from normal spelling. Otherwise:

- Arrows in the margin point to the lines of transcript relevant to the point being made in the text.
- () Empty parentheses indicate talk too obscure to transcribe. Letters inside such parentheses indicate the transcriber's best try at what is being said.
- { } Interlocking left-brackets indicate where overlapping talk begins; interlocking right-brackets indicate where overlapping talk ends.
- ((points)) Words in double parentheses indicate comments about the talk, not transcriptions of it.
- (0.8) Numbers in parentheses indicate periods of silence, in tenths of a second.
- ::: Colons indicate a lengthening of the sound just preceding them, proportional to the number of colons.
- A hyphen indicates an abrupt cut-off or self-interruptions of the sound in progress indicated by the preceding letter(s).
- He says Underlining indicates stress or emphasis.

A fuller glossary of notational conventions can be found in Sacks et al., 1974, and in Atkinson and Heritage, 1984, pp. ix-xvii.

PERSPECTIVES ON
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