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Conveyed meaning

Language is essentially a system of communication. In the paradigm case, we intend to communicate precisely what we say. And yet, as philosophers, linguists, and sociolinguists have often noted, in real-life conversations, far more is communicated than is actually expressed in words. For present purposes, we will talk about this level of meaning in a non-technical, catch-all sense as conveyed meaning.

Grice's theory of conversation

The first successful, systematic theory of conveyed meaning was developed by Paul Grice in his famous William James Lectures (1967). In these lectures, Grice develops a notion of conversational implicatures, within a more general theory of conversation. Conversational implicatures are for Grice a special class of conveyed meanings, which can be calculated on the basis of, and defined in terms of, the interplay between two basic notions. One is the notion of what is said, that is, what is strictly and literally meant by the particular words uttered, and which can be fully determined and explicated by a relatively unchanging theory of sentence-meaning. The second notion concerns what Grice calls the Cooperative Principle, which can be paraphrased as, "Make your conversational contributions suitable to the purposes at hand." A conversational implicature is roughly defined as whatever assumptions a hearer must make in order to render what is said consistent with the presumption that the cooperative principle is being observed.

Limitations of Grice's theory

For a number of reasons however, Grice's theory of conversation is only of limited value in studies of naturally occurring conversation. For one thing, and this is often overlooked in the literature in linguistics, Grice developed his theory in an attempt to defend the classical treatment of the so-called logical particles (e.g. "and," "or," "if..., then..."), especially in the face of objections raised by the ordinary language school of philosophy. Grice argued that certain non-logical features exhibited by these particles should be explained, not by an alternative conception of literal meaning, but by a theory of conversation. Grice then was not interested in a full blown, explanatory theory of conversation that would account for all types of conveyed meaning, but only in a theory specific enough to meet his narrower philosophical needs.

A more serious shortcoming in Grice's program lies in the fact that unlike the relatively fixed notion of sentence-meaning, the goals and directions of a conversation vary considerably, not only from one conversation to the next, but from one moment to the next

within the same conversation. And while Grice is well aware of the fluid nature of conversation, the successful application of the cooperative principle assumes that at any given moment in the conversation, the participants are mutually aware of the purposes at hand and hence know what would count as a suitable conversational move.

While this assumption of mutual awareness and consensus poses no problems for an a priori reconstructionist like Grice, for empirically minded linguists and sociolinguists, it raises far more questions than it answers. How do participants know at any particular stage in the conversation what moves are acceptable and what moves are not? What are the factors which enable participants to monitor, predict and influence the evolution of conversational purposes? How do the participants know when the purpose, direction, or topic has changed?

Without answers to these questions, we cannot give a fully explanatory, empirically based account of successful or unsuccessful instances of conversational implicature, as one of the key components in the calculation remains unexplained. Cooperation is possible only when there is some kind of shared purpose; but there can be a shared purpose only when participants successfully convey their own intentions and correctly judge the conveyed intentions of others. Our problem then is to expand Grice's general framework to include a theory of how intentions can be conveyed, and hence how shared purposes can be established and sustained interactively in on-going conversation.

Gumperz' theory of conversational inference

Gumperz' theory of conversational inference addresses itself to precisely these questions. It is an attempt to provide an account of the processes by which participants in a conversation recognize one another's intent and on the basis of which they then respond. Gumperz suggests that participants monitor and interpret conversational exchanges from two perspectives simultaneously, relying both on general expectations about speech activities or routines as well as on a moment by moment reading of conversational cues. By expectations about speech activities, we are referring to a culturally specific repertory of discourse schemata for such things as narrating, debating, lecturing, discussing, chatting, or more specific routines such as getting information from someone. (No taxonomy of these speech activities and routines has yet been adequately worked out.) These schemata constrain the range of possible conversational options with respect to topic selection, turn taking rights and obligations, politeness norms, etc. This level of discourse expectations is akin to Grice's general notion of conversational purpose and direction. And while speech activity schemata or a sense of purpose or direction do channel conversational moves and interpretive options, they are not sufficiently programmatic to determine at any given moment in a conversation, precisely what would count as a suitable move.

In order to translate general expectations into on-the-spot conversational inferences and moves, participants rely on a continual

reading of conversational cues. By conversational cues, we are referring to a range of linguistic and paralinguistic phenomena, such as lexical choice, formulaic utterances, prosody (including pitch contour, vowel coloration, rhythm, stress, pitch register), as well as nonverbal cues (such as nodding and eye-gaze direction). When interpreted in relation to syntactic and lexical choices, these cues serve two functions. First, they contextualize discourse, signaling what the appropriate schema is. Secondly, they provide information about how the discourse is tied together thematically, signalling such things as salience, contrastive emphasis, new versus old information, perspective, or topic shifts (Gumperz, Kaltman, & O'Connor; 1981).

The interplay between Grice's and Gumperz' approach can perhaps be most clearly seen through an illustration. Consider the following brief exchange:¹

A: Have 'you seen Grice today?

B: No, I haven't.

Using a Gricean perspective, one would say that in answering A's question, B says (albeit elliptically) that he hasn't seen Grice, and con conversationally implicates that he doesn't know where Grice is. The generation of the implicature can be rationally reconstructed in the following manner: A expects that B interprets A's question as not merely expressing an interest in B's recent perceptual history but rather as part of a broader attempt to locate Grice. Presuming B to be cooperating in A's endeavor, A can assume that B's negative answer to the question is all B can say in helping A achieve his goal; if he knew more, he would have said so. Therefore, B must not know where Grice is.

In order for an implicature to be generated in satisfying a mutual aim, cooperation must be assumed. But how is it that participants come to have a mutual aim in the first place? In this case, the shared aim (locating Grice) was achieved through B correctly judging A's intention in asking the question. But how was A's intention conveyed? It wouldn't do to say that A's intention was conversationally implicated because B's inference that A was trying to locate Grice was not an assumption required to make A's asking the question consistent with the presumption that A was cooperating over a mutual purpose. Rather it is the very inference made by B which established a mutual purpose over which they could then cooperate.

Gumperz' theory provides a systematic account of how A's intention was conveyed and how a shared purpose was arrived at, focusing on the conversational cues accompanying the words in the question and the schemata these cues evoke. From Gumperz' perspective, one would say that B judged on the basis of A's intonation (unmarked Yes/No question intonation) and facial expression (a serious, imploring look), that A was in need of help that an answer to his question might provide.

The role of conversational cues is especially apparent when compared with a case where the same question is asked with a dif-

ferent set of conversational cues:

A: Have ^{//}you seen ^{//}Grice today?!

B: [^]No!

In this case, the cues (emphatic high rises on "you" and "Grice", with vowel elongation on "Grice") lead to a very different assessment of A's intent. Here it appears that A's purpose is not to locate Grice but rather to indicate that A knows something of mutual interest to both A and B, concerning Grice. In this case, when B says he hasn't seen Grice, he does not conversationally implicate that he doesn't know where Grice is. That is, knowing where Grice is is not relevant to A's purpose in asking the question and hence, no such implicature is generated.

Gumperz' approach then attempts to explain how it is that in each case, a separate purpose is evoked and in each case, B's utterance is interpreted against a background of that purpose. He suggests that conversational cues channel interpretation in one direction rather than another, allowing the hearer to identify the speaker's intent and respond in terms of it, and in this way establish a shared purpose over which they can cooperate. Thus whereas Grice provides a theory of how conveyed meaning is possible against a background of shared purposes, Gumperz offers an explanation of how participants come to share a sense of purpose or direction in the first place.

Interethnic communication

Research on interethnic communication by Gumperz (1976, 1977, 1978, 1980, etc.) and his students (Hansell & Seabrook, 1978; Young, 1980; Mishra, 1980) has documented systematic ethnic or subcultural differences in discourse at the level of conversational cueing and discourse schemata. This work suggests that conversational strategies and discourse conventions are acquired as a function of a speaker's long term interactive history as a member of a particular linguistic community and a particular network of associations. Where these networks differ, as among different ethnic or social groups, conversational cueing conventions and discourse schemata differ as well, even in cases where speakers may generally be thought to speak the "same language" and in fact have very similar grammatical intuitions.

Moreover, this work has shown that where participants do not share the same communicative background and expectations, conversational exchanges are often highly problematic, evidencing all the outward signs of lack of cooperation: interruptions, confusion, and misinterpretation of intent. These are of course not cases where participants simply "opt out" of the cooperative principle. Rather, in spite of their cooperative intentions, they are nonetheless unable to come to a mutual consensus as to what the conversational purpose or direction is and what the appropriate moves would be -- all of which is required to make the cooperative principle operative.

From the analyst's perspective, interethnic encounters often provide the clearest picture of the unconscious, systematic nature of conversational processes, highlighting the interactional work that generally goes unnoticed in smooth exchanges. It is in cases of

conversational discord or breakdown that the very processes that fail become highlighted.

But aside from providing useful data for conversational analysts, interethnic encounters are often cases where establishing cooperation is not merely a theoretical problem, but a practical problem with practical consequences as well. Moreover, as Erickson (1975) has pointed out, modern life offers certain "gatekeeping" encounters which determine access to occupation, official redress and educational opportunities. Within such key situations, group specific differences in discourse style assume great importance, because misunderstanding frequently results in misevaluation of ability or denial of access to some social opportunity. The study of interethnic communication in key situations then is of both theoretical and practical significance.

Intra- and interethnic encounters in a first grade classroom

The data that we will look at come from an integrated (half Black and half white) first grade classroom during one such key situation. The activity was called "sharing time" (also known as "show & tell" in some classrooms), where children were called upon to formally describe an object or give a narrative account about some past event to the entire class. The teacher, through her questions and comments tried to help the children structure and elaborate their discourse, encouraging them to be lexically explicit and assume no contextual or background knowledge on the part of the audience. As such, sharing time could be seen as a kind of oral preparation for literacy. However, where teacher and child did not share the same discourse conventions and narrative expectations, cooperation and collaboration were often unsuccessful. As a result, these children did not get the same kind of practice using literate discourse strategies as did other children. We will now examine in detail two examples of teacher/child collaboration at sharing time (one successful, one unsuccessful) in an attempt to study more systematically 1) the processes underlying cooperation, and 2) how such processes related to differential access to learning in this classroom.

Previous analyses of the children's discourse at sharing time (Michaels & Cook-Gumperz, 1979) suggest that Black and white children in this class used different discourse styles in giving narrative accounts, differences which could be traced to differing networks of communication and home-based narrative experiences. The white children tended to use a discourse style which has been called "topic centered," that is, tightly organized discourse, centering on a single topic or series of closely related topics. Prosodically, topic centered turns tended to evidence the following pattern: sustained rising tones were used to establish the scene or perspective. Changing tones (both rise-falls and fall-rises) were used to elaborate, and low falling tones were used in closing. This style closely matched the teacher's own discourse style as well as her notions about what constituted "good" sharing. In contrast to a topic centered style, the Black children (and particularly some of the Black girls) were far more likely to use a "topic chaining" style, that is, loosely structured talk which appeared to move fluidly from topic to topic, relating a series of person-oriented anecdotes. The topic chaining style was generally characterized by an absence of lexicalized connectives relating the

topics other than "and," without any explicit statement of an overall theme or point. While topic shifts were generally signalled prosodically (by means of a high holding pitch followed by a pause), this kind of discourse was difficult to follow both prosodically and thematically for those who, like the teacher, expected the narrative to focus on a single topic with clausal units marked off by sharp rising and falling pitches.

Interactive consequences

With children who used a topic centered style, Mrs. Jones was highly successful at recognizing the child's topic and expanding on it through her questions and comments. In the following example, a single topic, making candles at Day Camp, is introduced and elaborated upon.

- 1 Mindy: When I was in 'Da:y Cāmp / we made these /um candle:s /
- 2 T: You máde 'them? /
- 3 Mindy: And uh / I-I 'tried it with 'different cōlors / with 'both
- 4 of them but / 'one just came out / 'this one just came
- 5 out blue / and 'I don't know / what this color is /
- 6 T: 'That's neat-o // 'Tell the kids how you do it from the
- 7 very start // Pretend we don't know a 'thing about candles
- 8 ...OK // What did you do first? // What did you use? //
- 9 Flour? //
- 10 Mindy: Um ... there's some / hot wax / some real hot wax / that
- 11 you / 'just take a string / and tie a knot in it // and
- 12 'dip the 'string in the um wax //
- 13 T: What makes it uh have a shāpe? //
- 14 Mindy: Um / you just shape it //
- 15 T: Oh you shaped it with your hānd // mm //
- 16 Mindy: But you have / 'first you have to 'stick it into the wax /
- 17 and then water / and then 'keep doing that until it gets to
- 18 the size you want it //
- 19 T: OK // 'Who 'knows what the string is for? // ...

In this sharing turn, Mindy introduces her topic with temporal and spatial grounding (line 1), while holding up two small candles in her hands. She uses distinctive sharing time intonation (sustained rising tones and vowel elongation)², pausing after a low rising tone on "candles." The teacher, whom I will call Mrs. Jones, comes in at this point, saying "You made them" with a high rising contour on "made," signalling pleasant surprise, in the form of an echo question, as if to say "Oh my, did you really make them (by yourself, by hand)?" Mindy does not overtly respond to the question (i.e., she does not produce the canonical Yes/No response to a Yes/No question). Instead she continues her discourse beginning with "and" in line 3, which suggests that this turn is directly linked to her previous turn. She goes on to talk about the color of the candles, a theme that bears little relation to Mrs. Jones' comment, in that it refers to an essentially peripheral step in the process of making candles. In lines 3-5, Mindy relies heavily on anaphoric pronouns ("it," "them") and deictic forms ("this," "this one"), which are by definition rooted in the context of speaking. There is minimal lexical elaboration, but because she is holding the candles up for everyone to see and gesturing with one hand and then the other, one would have no problem filling in the intended semantic information.

Mrs. Jones waits until Mindy pauses on a low falling tone (on "color") and reiterates her interest in the actual process, but this time, does so more explicitly. She provides a clear and elaborate set of guides for how she wants Mindy to talk about making the candles. "Tell the kids how you did it from the very start. Pretend we don't know a thing about candles." The last remark is of course an instruction to assume no shared knowledge and to be as explicit as possible. Mrs. Jones then pauses and gets no response. She rephrases her instruction as a question, "What did you do first?" She pauses again and follows with an additional clue by offering an obviously wrong answer to the question, which nonetheless suggests to Mindy an example of the type of answer she has in mind. "What did you use? ... Flour?" At this point Mindy responds, building upon the base which the teacher's questions have provided. She describes the materials she used ("hot wax") and the steps involved. In addition to a description of the sequencing of activities involved in the business of making candles, this passage introduces several context-free lexical items ("some hot wax," "a string," "a knot"). The use of lexical items provides explicit information about the activity and the materials used in candle making. This contrasts with the use in the preceding turn (lines 3-5) of anaphoric and deictic items which rely on context for interpretation. Additionally the use of definite and indefinite articles grammaticalizes the distinction between new and old information: "some wax" and "a string" become "the piece of string" and "the wax" (lines 10-12).

When Mindy pauses on a low tone, Mrs. Jones asks a further question about how one goes about shaping the candles (which had a wavy shape to them). Mindy responds somewhat uninformatively saying, "You just shape it." The use of "just" and the low falling pitch on "shape" (giving the utterance unmarked declarative force), conveys that how

how you shape it goes without saying. Mindy thus relies on her listeners to fill in what she left unsaid, that you simply shape candles with your hands. Mrs. Jones evidently has no difficulty understanding this conversational implicature. She begins line 15 with "Oh," as if to say "I see," and then repeats the gist of Mindy's utterance, making the implicature fully explicit.

Several things are notable about this episode as a whole. Most of Mrs. Jones' questions occur when Mindy pauses after a low falling tone. Such cues indicate some kind of closure. Hence Mrs. Jones' questions occur at the end of a complete unit and are not seen as interruptions. Furthermore, the teacher's responses and clarifications build collaboratively on Mindy's contributions. Finally, it is important to note that Mindy's discourse in response to Mrs. Jones' questions and comments is far more complex than the spontaneous utterances produced without Mrs. Jones' guidance.

Thus we can see in this example how cooperation is established and sustained without conscious effort. With a shared sense of narrative style, and coordination in the use and interpretation of conversational cues, participants arrive at a negotiated consensus as to conversational purposes and suitable moves. Teacher and child are able to cooperate, in rhythmically synchronized exchanges, maintaining a high degree of cohesion within and across turns. In this way, the teacher is able to build on the child's contributions and help her produce more focused and lexically explicit discourse.

With many of the Black children, on the other hand, the teacher appeared to have difficulty discerning the topic of discourse and predicting where the talk was going. Her questions were often mistimed, stopping the child mid-clause. Moreover, her questions were often thematically inappropriate and seemed to throw the child off balance, interrupting his or her train of thought. In the following example, we see how a mismatch in narrative schemata and a misreading of conversational cues creates a situation where cooperation ultimately breaks down.

- 1 T: Deena / I want you to share some-^{one} thing / that's 'very important //
 2 one / thing // from 'where you are // ... is 'that where you are // ...
 3 is that where you were //
- 4 D: no //
- 5 T: OK //
- 6 D: um // ... 'in the su:me:r / ... I mean / ... w-when um / I go back to
 7 school / I come back to school / in Septe:mber / ... I'ma have a new
 8 coat / and I already got it // ... and / ... 'it's / ... u:m / ... (...)
 9 got a lot of bro:wn in it // ... a:nd / ... when- / um / and I got it
 10 ye:sterday / ... and when ... I saw it / my um .. my mother was .. was
 11 going some .. where / when my .. when I saw it / ... on the cou:ch / and
 12 I showed my si:ster / and I was readin' somethin' out on .. on the ba:g /
 13 and my 'bi:g sister said (...)
- 14 C: um close the door

- 15 D: my¹big sister said / Deena you have to keep that away / from Keisha /
 16 'cause that's my baby sister / and I said no // ... and I said the
 17 'plastic bag / ... because / ... um / ... when / ... um / .. sh-when t
 18 um .. she was u:m (with me) / wait a minute / ... my / cou:sin and her
 19 (...)
- 20 T: wait a minute // you stick with your coat now // I s-said you could tel
 21 one thing // ... that's fair //
- 22 D: 'this 'was 'about my c-
- 23 T: [OK / alright / go on
- 24 D: [this was-
- 25 D: and today / and yesterday when I .. got my coat / ^{dec}my cou:sin ran outsi:
 26 and he (...) ran to/ tried to get him / and he / he he start- / ... an' wh
 27 he 'get in- when he 'got in my house / ... he 'layed on the floor / and I
 28 told him to get up because he was cry:in' //
- 29 T: mm-what's that 'have to do with your coat //
- 30 D: 'h-he ... 'becau- he 'wanted to go outside / but we .. couldn't // (exasper
- 31 T: why //
- 32 D: 'cau:se my mo:ther s-wanted us to stay in the house //
- 33 T: what does that have to do with your coat //
- 34 D: bec- um uh
- 35 C: (whispers)
- 36 D: because / 'I 'don't know //
- 37 T: OK // [thank you very much Deena //
- 38 C's: [(talking)
- 39 T: OK / do you understand what I was trying to do // Deena / I was trying t
 40 get her to stick with one / ... thing // and she was talking about her /
 41 C's: coat //
- 42 T: new /
- 43 C's: coat //
- 44 T: coat // it sounds nice Deena //

In this example, Deena begins her turn in line 6, explaining that she has already gotten a new coat that she will be wearing when she returns to school in the fall. Her discourse is rhythmically chunked, and marked by vowel elongation and high holding pitches, with no sharp intonational contours. From our analysis of Deena's other sharing turns and discourse in other settings, it is clear that this is not her typical narrative accounting style. Rather it appears to be discourse that serves to orient or qualify a person-oriented narrative. In line 9, her discourse changes rhythmically and prosodically into typical narrative style, a style we have identified in narrative

accounts during sharing time as well as in peer/peer conversations outside the classroom. As Deena shifts into narrative prosody, there is a corresponding shift in verb tense as well (from future and present tense verbs to simple narrative past). It appears that the early talk about her coat is a preamble or descriptive aside, setting the scene for a narrative account. There is further evidence that the preamble is separate from her narrative in that Deena says, "yesterday" with a marked rise-fall intonational contour. "Yesterday" with this intonational cue is used frequently by the children as a sharing time formula at the very beginning of a narrative account. In Deena's case, however, the formula occurs in the middle of her talk, just as she begins the narrative proper.

It appears that the teacher misses this transition to the narrative proper, seeing Deena's talk about the plastic bag and her sisters as peripheral but still loosely related to the topic of her new coat. But in line 18, when Deena begins to talk about her cousin, the teacher loses the thematic thread completely and interrupts her, telling her to stick with her original topic, her new coat. Deena responds, in line 22, that the talk about her cousin is in fact related to her coat. She even tries to make this connection explicit when pressed, saying, "and yesterday when I got my coat, my cousin ran outside." However, Mrs. Jones is looking for a lexically explicit, thematic connection, not a narrative listing of temporally contiguous events. Mrs. Jones continues to press for an explicit semantic link until Deena gives up and sits down. For Mrs. Jones, Deena's shift from the coat to her cousin was an unsuitable conversational move. For Deena, given her topic chaining schema, it was entirely suitable. Each was working within her own sharing schema, and without a shared sense of topic, direction, and a mutually shared prosodic signalling system, cooperation was unsuccessful.

Moreover, while no consensus as to topic or purpose was ever achieved, thus making cooperation impossible, neither of the participants saw the problem in this way. Mrs. Jones saw the problem as due to Deena's lack of planning, at the level of topic selection. When asked what she made of this and other topic chaining turns, she explained that children like Deena didn't really think about what they wanted to say in advance and were simply talking "off the top of their heads," thinking up things to say as they went along. This is the same response we get when we play topic chaining turns to other middle class informants.

From Deena's perspective, things looked quite different. In an interview with Deena, she reported that she was frequently interrupted during sharing time and felt quite frustrated by this. She sensed that the teacher was simply not interested in what she had to say, explaining, "she was always stoppin' me, sayin', 'that's not important enough' and I hadn't hardly started talking!" During the course of the interview, many of the unstated connections in her discourse were verbalized and clarified as well. Firstly, when questioned about the link between her baby sister and the plastic bag, Deena hesitated momentarily whereupon her 10 year old sister chimed in saying, "My mama say keep plastic out of Keisha's reach, 'cuz she might put it over her head," with which Deena quickly agreed. Secondly, Deena explained the link between her cousin and her new coat, saying that

her cousin was "a bad little boy, and when he came back in the house, he started to put his hands on my coat, and his hands was dirty!" Thus it appears that for Deena, there was an intended semantic link between the coat and the two sub-anecdotes in the narrative, her baby sister and her cousin. In one case she was protecting a young child from the coat and in the other case, she was protecting the coat from a young, messy child.

Why Deena was unable to make these links explicit during the actual telling is not completely clear. It must be kept in mind however that from the time Deena first mentioned her cousin (line 18) until she sat down, she was interrupted twice mid-clause (lines 20, 23) and questioned three times (lines 29, 31, 33) by Mrs. Jones. There is evidence from other sharing episodes that this kind of questioning with topic chaining children often interferes with their train of thought, causing the child to stop talking or revert to one or two word responses. Deena may have had one idea in mind but was unable to express it in the face of Mrs. Jones' questions.³ Thus in contrast to the interaction with Mindy, where the teacher's questions helped to focus and expand on the topic, with Deena, Mrs. Jones' questions served to disrupt and cut short the sharing turn. Deena did not get the same kind of practice doing literate-style accounting as did Mindy.

These two examples are not isolated incidents. Rather, they are representative of stable patterns of sharing time interaction over the course of the entire school year. Over time, this resulted in differential amounts of informal practice using literate discourse strategies for Black and white children in this classroom.

We do not mean to imply that the difficulty Mrs. Jones experienced with topic chainers like Deena was due either to prejudice or incompetence. She was, to the contrary, an excellent teacher, highly regarded by both her principal and fellow teachers. The consistent problems that Mrs. Jones had with certain children had to do, not with attitudes, but with automatic, unconscious processes at the level of discourse style, stemming from a systematic mismatch between teacher and child's conversational cueing system and narrative schemata. Such mismatches made it difficult to achieve the kind of consensus needed to make cooperation and synchronized collaboration possible. And as all too often happens in cases where no consensus is achieved, both participants interpreted the other as being somehow uncooperative. Cumulatively, this kind of disharmonious interaction may have serious repercussions for the child, resulting in a pattern of differential treatment and negative evaluation which in their turn, further diminish the student's access to learning opportunities.

Conclusion

In most of the work on conversation, whether philosophical or empirical, cooperation among participants has been seen as a starting point and assumed to be unproblematic. In contrast to this approach, we have suggested that establishing and sustaining conversational cooperation requires on-going interactional negotiation, whereby participants signal and interpret activity schemata and conversational cues in assessing one another's intent. Through our analysis

of sharing time exchanges, we have attempted to document the systematic nature of these processes as well as the conversational basis for breakdowns in cooperation, in those cases where participants do not share the same discourse expectations and signalling conventions.

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Endnotes

¹Prosodic and paralinguistic cues are transcribed using a simplified form of a system developed by John Gumperz and his collaborators, based on the work of John Trim. In this system, speech sequences are first divided into tone groups, that is, continuous intonational phrases. A phrase can be marked by a minor, non-final boundary "/" (signalling "more to come") or a major or final boundary "//". Within a tone group we indicate: 1) location of the nuclei (i.e., the syllable or syllables marked by change in pitch) "\ " low fall, "/ " low rise, "/ " high rise; 2) other accented syllables in the tone group, " | " high, " | " low; 3) paralinguistic features such as a) vowel elongation, indicated by ":" following the elongated syllable, b) shift to high pitch register "┌" or shift to low pitch register "└" (both applying to the entire tone group), c) pausing: ".." indicating a break in timing and "... " indicating a measurable pause, d) speech rate: "acc." indicating accelerating tempo and "dec." indicating slowing down, e) loudness over an entire tone group is indicated by "f" (loud) or "p" (soft). Doubling of one of the above symbols indicates extra emphasis.

²In giving narrative accounts at sharing time, the children used highly marked, formulaic intonation. This "sharing intonation" was an integral feature of sharing discourse and occurred in no other classroom speech activities. In this classroom, the Black and white children used different but comparable intonation patterns, both clearly identifying the talk as sharing-talk. The contour used primarily by the white children was a gradually rising contour, stretching over the last word or two of a tone group. The accompanying utterance was often a syntactically complete, independent clause where an adult speaker would often use falling intonation. The contour used exclusively by the Black children occurred in exactly the same environments (independent clauses), and was characterized by vowel elongation and a lilting high rise with a mid-fall at the end. For some children, especially for those who used the second

contour, this sharing prosody involved rather sharp pitch modulations, giving the talk an almost sing-song quality.

³ A more detailed analysis of this sharing turn can be found in Michaels (in press). On the basis of the interview with Deena, it might well appear to some that the term "topic chaining" is something of a misnomer. Further analysis of these turns indicates that these children do not actually skip from topic to topic in a random and unmotivated manner (as the term implies). Rather their discourse often consists of a series of subtly related anecdotes, all linked implicitly to some particular topical event or theme. Thus elaboration is characteristically anecdotal rather than descriptive. It is worth noting that while a topic chaining style does not match the teacher's sharing time expectations, similar styles have been reported among other minority speakers. For example, in a study of a group of Black adolescents in an informal discussion, Fred Erickson (1971) found that connections between themes had to be inferred from a series of concrete anecdotes, a mode of expression he called the "logic of the particular." Similar findings have been reported in a study of speech making styles of Native American college students.

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