

**Medical professionals and parents: A linguistic analysis of  
communication across contexts**

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ABSTRACT

The study is based on analysis of videotaped conversation that occurred in five different settings involving various family members and medical professionals in a single pediatric case. We examine (1) the elaboration and condensation of information through spoken and written channels; (2) the negotiation of information exchanged in interactions characterized by different participant structures; and (3) the methodological benefit of examining interaction across contexts. We find that (a) information is negotiated, as well as discovered, during the medical interviews; and (b) information exchanged is often less resilient than participants' cognitive schemas which precede and apparently outlive the exchange of information in the interaction. These findings contribute to an understanding of the negotiation of meaning as well as the creation of context in interaction. (Discourse, interactional sociolinguistics, context, doctor-patient communication, spoken and written language, schema theory)

A confluence of concerns among medical professionals and analysts of interaction, paralleling more general societal and scholarly trends, has resulted in increased attention to discourse in medical settings. Similar trends have led medical professionals to call for, and in some cases to implement, increased family involvement in medical encounters.

The interest of medical professionals in understanding the part played by communication in the delivery of health services has paralleled the rise of conversational and discourse analysis in linguistics, anthropology, and sociology. These fields have seen a burgeoning of interest in examining language as it occurs in everyday interaction, and in particular microanalysis of taped, transcribed discourse, in order to understand what Gumperz (1982) calls "situated

meaning'' – the meaning that speakers and hearers perceive through language in interaction.

Yet another recent development in linguistic and related research is served by analysis of discourse in medical settings: the comparison of language in its spoken and written guises. The medical setting, like most institutional contexts, entails a continual mediation between spoken and written modes: preprinted forms structure spoken interaction, which is condensed into written records, which are in turn elaborated in oral conferences and consultations. (Cicourel [1975] and Frankel [in press] have focused on this aspect of medical discourse.)

This article grows out of and contributes to all these developments. The study is based on analysis of videotaped conversation that occurred in five different settings involving various family members and medical professionals in a single pediatric case. By examining the kinds of information that were exchanged and distilled in five contexts, each involving different combinations of participants and varying participant structures (cf. Philips 1972), and the linguistic forms that gave rise to that information, we contribute to an understanding of the negotiation of meaning and the creation of context in human interaction.

From the point of view of linguistic and sociolinguistic inquiry, we examine (1) the elaboration and condensation of information through spoken and written channels; (2) the negotiation of information exchanged in interactions characterized by different participant structures (i.e., the rights and obligations associated with participant roles); and (3) the methodological benefit of examining interaction across contexts. In the process of this examination, we find that (a) information may be negotiated, as well as discovered, during the medical interviews; and (b) information exchanged is often less significant than participants' cognitive schemas – the structures of expectations and associations which precede and apparently outlive the exchange of information in the interaction. (See Tannen & Wallat [1983] for discussion of frames and schemas as they emerge in medical interaction.)

#### BACKGROUND: DEVELOPMENTS IN THE MEDICAL PROFESSION

Traditionally, health care was viewed as the diagnosis and treatment of infectious and organic illness. Heath (1979:106–7) notes that until 1960, medical sources agreed that communication between doctors and patients should depart from norms of everyday interaction in that doctors should (1) "restrict topics of conversation with their patients to the body and conditions creating or contributing to disease," (2) "converse only with patients," to the exclusion of friends or relatives, and (3) use "a predetermined format of obtaining information. . ." Finally, Heath notes, (4) "From the days of the Hippocratic Corpus, physicians have been warned against providing patients with the truth about their condition."

The exclusive focus of medical professionals on the diagnosis and treatment of

bodily illness has become increasingly untenable. Figures compiled annually by the U.S. Department of Health and Human Services (1980a, 1980b, 1981) suggest that the demands on medical professionals to treat serious diseases have eased rather dramatically. According to the latest figures on the prevalence of acute conditions, among America's 39 million six- to sixteen-year-olds, infectious disease and organic illness account for less than 42 percent of the health problems reported for this age group (Kleinman 1980:140).<sup>1</sup>

In addition, a number of social and political as well as medical trends have led to a re-examination of the goals and methods of medical practice. These trends have included (1) the expansion of medical services into areas such as learning and family environment; (2) increasing recognition that an individual's health is influenced by many nonbiological factors; (3) increasing involvement of consumer advocacy groups in assessing health care; and (4) greater social and political commitment to maximizing citizen participation in all public institutions, including health care facilities. (See Tannen & Wallat [1982] for discussion of these and related policy implications.)

In response to these developments, and in stark contrast to the previously prevalent orientation described by Heath, the Carnegie Council on Children (Keniston 1977) proposed that a health care system meet the following exemplary participation criteria: (1) give attention to nonmedical influences on health throughout health service delivery, and (2) organize the health care system for children and parents in a way that emphasizes preventive, primary, and more humane care.

Sociologists and medical anthropologists have focused on institutional and psychological aspects of these issues. For example, Roth (1980), Kleinman (1980), and Frankel (1984) review studies that document widespread complaints that doctors do not impart enough medical information, are insensitive to patients, intimidate patients, and impose delays and long waits.

Can this situation be improved simply by getting doctors to change their behavior? Schneider and Conrad (1980:46–47) observe that the expansion of medical practice into nonmedical areas of behavior may entail traps for medical professionals seeking success and cures. Nonmedical problems, once accepted into treatment, are not easily cured nor disowned. Maurin (1980) questions the assumption that medical personnel could accommodate patient participation in every arena of medical care if they would only let go their tight hold on the reins of "control." She suggests that the processes of interaction are far more complex than that; hence the researcher's job is to "analyze the context, level, and consequences of any sample of negotiations" (330).

#### DISCOURSE ANALYSIS OF MEDICAL INTERACTION

The need for research on medical communication has been recognized by analysts of interaction as well. Cicourel (1975) points out that medical researchers

usually move too quickly to the stage of aggregating data. What is needed is analysis of actual interaction between doctors and patients. He recommends attention to the disjunctive quality of such talk and to the complexities of differing modes of discourse.

Observations of communication difficulties in medical interviews and examinations by Candlin, Brauton, and Leather (1974) led them to conclude that "the problem is one of two-way intelligibility between the professional practitioner and the lay patient" (10). Coulthard and Ashby (1975), Shuy (1983), and Fisher and Todd (1983) also report evidence of miscommunication in their studies of doctor/patient interaction. Their similar conclusions are that such exchanges are asymmetrical and that patients are unsure of their rights and obligations and the conventions of talk in this setting.

Coulthard and Ashby suggest that one of the causes of asymmetrical communication is the greater frequency of initiations of requests for information by doctors rather than patients. Shuy suggests a number of causes of this asymmetry, including use of jargon and patients' confusion about how much and what kind of information is needed from them and how to introduce it into the interaction. Frankel (1983), Harwood (n.d.), and West (1984) also find that patients have difficulty asking questions and using medical terms in the context of a medical examination.

Our analysis continues in this tradition of focusing on actual talk between doctors and patients. Furthermore, as Cicourel (1975) observes, analysis of interaction cannot be limited to dialogue alone. Communication processes result from assumptions, associations, and communicative habits that professionals and lay people bring to the medical encounter. Kleinman (1980) observes that the doctor/patient encounter is, on one level, a transaction between the patient's and doctor's "explanatory models." Similar observations are made by Yedidia (1980) and Danziger (1980).

#### ANALYSIS OF FAMILY/PROFESSIONAL COMMUNICATION ACROSS CONTEXTS

This paper is part of a larger research design aimed at investigating the processes and consequences of family involvement in an institutional medical setting. Our analysis has focused on videotapes of a series of interactions which took place and were recorded at the Georgetown University Child Development Center involving an eight-year-old cerebral palsied child, whom we call Jody. Jody, her parents, and her two sisters were variously involved in interactions with eleven professionals: a psychologist, dentist, occupational therapist, physical therapist, speech therapist, educational specialist, nutritionist, social worker, nurse, audiologist, and pediatrician. The parents brought Jody to the Child Development Center for counseling in relation to her school placement.

In earlier investigations (Tannen & Wallat 1982, 1983) we focused on the

pediatric examination/interview, considering the pediatrician's discussion of the child's condition with the mother in light of her report on the same condition to her fellow staff members and her final report to both parents in the setting called a parent interpretive. In that analysis we showed that the mother's participation in the examination/interview placed significant demands on the pediatrician, who was forced to make frequent shifts in footing (Goffman 1981), for example, from examining the child to consulting with the mother – two activities which entail different and often conflicting demands.

In the present study, we confront the issues of family involvement by broadening our analysis to focus on interaction in three different settings, each with a different participant structure, while, again, including insights from two additional settings. The three contexts which provide the basis for the main part of our analysis are (1) as in the earlier study, the pediatrician's interview with the mother and the immediately following examination of Jody in the mother's presence; (2) an initial intake interview of both parents by a staff member, called a parent coordinator, who in this instance was also the physical therapist assigned to the case; and (3) a session in which a social worker met with both parents as well as Jody and her two sisters: one significantly older, the other her twin. The two additional contexts which are drawn on for relevant counterpoint are (4) the pediatrician's report to the multiple discipline staff, who have all examined Jody, and (5) the pediatrician's report to the parents in the context of the "parent interpretive" – a setting in which, immediately following their reports to each other in (4), the entire staff meets with the parents to report to them and interpret for them the findings of their examinations of Jody.

Analysis of the tapes and transcripts of these interactions showed that (1) the kinds and even the character of information that was exchanged differed with the context, and much of that information was necessarily not recorded in the records resulting from the interaction; (2) the nature of the information produced and recorded was not only elicited but also negotiated in the various contexts; and (3) in keeping with the observations of Schneider and Conrad, cited above, many of the concerns raised by the parents and addressed by the professionals were resistant to repair; the schemas of the participants seemed to outlive the illumination of the professionals' discourse. These findings will be illustrated and discussed in turn.

#### PARTICIPATION STRUCTURES AND THE EXCHANGE OF INFORMATION

Striking differences emerged in the kinds and character of information exchanged in the three contexts that were the direct focus of analysis: the intake interview, the pediatric interview/examination, and the social work session. The most highly constrained context of the three, in terms of the information offered by the parent, was the pediatric examination. The intake interview provided a format in which very constrained and specific questions elicited elaborate re-

sponses containing much information that was not always relevant, not always accurate, and mostly not recorded on the form which provided both the structural framework and the product of the interview. (The elaboration of information in this setting is documented and discussed in detail in Tannen & Wallat [in press].) In contrast to both the intake interview and the pediatric examination/interview, the social work session was relatively unstructured. It gave rise to the parents' expression of assumptions and concerns which did not surface in any other context. Many of the findings of the social work session were reported in the staff meeting, but they were not incorporated into the final report as presented to the parents in the parent interpretive.

The intake interview, the first face-to-face encounter between Jody's parents and the staff of the Child Development Center, had an almost paradoxical character with respect to the economy of information exchanged. The interview was relatively constrained by the questions contained in a form that the parent coordinator held and filled out as she conducted the interview. However, in contrast to the rigidity of these predetermined questions, the parent coordinator established and maintained a very relaxed and friendly atmosphere during the interview and encouraged the parents to volunteer as much information as they liked.<sup>2</sup>

And ... if at any time, ... um ...  
you'd like to elaborate, ...  
on some of the questions,  
please feel free.

The parent coordinator reinforced this invitation to elaborate by listening attentively to all of the parents' comments and giving encouraging responses of "uhuh," "okay," and head nods. She did not cut off their speech, even when their responses to her questions led to lengthy sidetracks.

This combination of features resulted in striking effects on the exchange of information in the interview. The parents did indeed elaborate, volunteering far more information than the parent coordinator could possibly enter on the written form. Furthermore, the parents' elaborations frequently led them astray from the questionnaire items. Some of these elaborations resulted from personal interpretations of questions included in the general questionnaire.

For example, one of the questions on the form asks whether Jody ever had any accidents. Presented with this question by the parent coordinator, the parents replied that she had had only one, when she was very young and walked out of the house and over a hill in her walker.

*Mother:* Well, the only time she had an accident uh ...  
I [looks at husband] think she was eighteen months old  
and uh ... she was in one of those uh ... walkers [uhuh]

*Coordinator:* ... um ... we lived up on the hill  
and the door was open  
... and she went over that with the walker  
and she did uh ... cut her lip.

And it did need stitches.

But uh ... sh ... she was not hurt anywhere around her [head]  
*Coordinator:* [uhuh]

But this was after we um] ...

*Father:*

*Mother:*

[found out [that she did have a problem.  
[that she had a problem.

This response led to an extended discussion of when the parents first became aware of Jody's handicap, a matter not relevant to the question about accidents since cerebral palsy is known to be a congenital rather than an acquired disability. But the parents were anxious to make clear that Jody was not handicapped as a result of this accident – in other words, their negligence.

The parents' comment that "she was not hurt anywhere around her head" is not tied to any previous topic or question. It makes sense only in light of structures of expectations, that is, schemas (Tannen 1979, 1985), about head injuries and brain damage. During the discussion which follows for one and a half minutes of talk (two pages of transcript), the parents jointly recount their discovery of Jody's handicap, at times agreeing and building their story together (as can be seen in the overlapping repetition in the preceding example segment), and at times disagreeing about the sequence of events, in which case they try to resolve the difference by thinking out loud. This long, highly personal elaboration was triggered by the questionnaire item about whether the child had had any accidents, a general question with very specific and serious implications from the parents' point of view.

This example of talk from the intake interview illustrates the process of information elaboration and condensation. None of the extensive elaboration following the accident question was relevant to the question on the form about accidents. Hence none of it was entered on the record.

Another example of the elaboration/condensation of information, which is simultaneously an example of the negotiation process to be discussed later, is seen in the talk surrounding a questionnaire item concerning Jody's history of hospitalization and her age at the time(s). In formulating an answer to this question, the parents enter into a negotiation of recall.

*Coordinator:* Let's see ...

Has she been hospitalized? At all?

*Mother:* Several times ... at the age of uh ... I believe it was ... was

*Father:*

[t ... several times [nods]

*Mother:* it seven ... seven years old?

*Father:*

*Mother:*

[No it was before that] [six]

that she went to uh ... General the first hospital she was /at/,

*Coordinator:* That's when she was six, you say?

*Mother:* I believe so.

*Coordinator:* Okay.

*Father:* Was it six or was it five?

Cause that's about two years ago.

And she just turned eight ...  
all right cause [she was here and →  
Mother: [That's right.]  
then she was at County Hospital] the following year that was last year.  
Father: [the following year. Right. A year later.  
Mother: [the following year. Right. A year later.  
Coordinator: Okay when so when she was six years old ...  
she was at General ... and ...  
Father: [Right.]  
Coordinator: What was the reason she was admitted there?

In the preceding segment, the parents offer a number of possible ages, from five to seven, for Jody's first hospitalization. The parent coordinator distills from this discussion that Jody was six, and the father concurs. But when the parents go on to report that Jody was later hospitalized at another hospital, her age at the time of the earlier hospitalization is again called into question.

Coordinator: Okay and that's when she was seven?  
Father: Right.  
Coordinator: Okay.  
Father [to mother]: Has that been over a year ago?  
I think it's been over a year ago now.  
[break in sound]  
year and a half ...  
I know it's /gonna have to be/ five and seven  
... five and six.  
Because her ... uh [twin sister] was in kindergarten.  
... Cause you remember they were both in kindergarten  
and they pulled her out of kindergarten  
and sent her over to the Special School.]  
Mother: [shaking head and smiling] [No, that was the first grade  
Father: Maybe I'm wrong.  
But I thought it was five and six  
because she hadn't had any trouble in over a year.  
[Well she did have but we sent] her to Public Hospital.  
Mother: [No it was /the/ first grade.  
Father: And uh ... they took a blood check on her,  
and then we brought her back to [County Hospital.]  
Coordinator: [Okay.] [So her  
her most recent hospitalization was at Public?

The parent coordinator moves on to the issue of a third hospitalization without settling the child's age at the second; furthermore, her age at the first is again called into question. The age six had been agreed upon, but the father now says "it's gonna have to be five and seven ... five and six." The mother, who originally said seven in contrast with the father's six, contends that Jody was in first grade, whereas he is convinced she was in kindergarten.<sup>3</sup>

Part of the elaboration by the parents is occasioned by their reluctance to contradict each other outright. In other words, when they are answering questions in collaboration, their relationship to each other is implicated and affects the information exchanged. For example, when asked, "What childhood illnesses has she had?" the father mistakenly answers "smallpox" for "chicken

pox." The mother seems to know this is the wrong name, but she questions her husband's answer rather than contradicting it and when he declines to revise it, she does not pursue the matter.

Coordinator: What what childhood illnesses has she had?  
Mother: She had the uh [smallpox.]  
Father: [smallpox.]  
Mother: [Was it the smallpox?]  
Father: [Yeah ... and she]  
Mother: [colds, uh

The parent coordinator corrects the error by verifying, "She had the chicken pox?" Then the mother ratifies the correction, albeit with a hedge ("I think") and initial question form, and the father too corrects his error.

Coordinator: She had the chicken pox?  
Father: Didn't she? [ ... chicken pox instead of the smallpox, →  
Mother: [I think it ... was it the chicken pox? →  
Father: yeah, chicken pox. That's /when you'll break out with a scab/, right? →  
Mother: [Chicken pox not smallpox]  
Coordinator: [Okay  
Father: Yeah chicken pox [ ... yeah, cause she still has a scar.  
Coordinator: [Okay]

Thus the parents' need to reach agreement and preserve their mutual and respective faces (in the sense of Goffman [1959]) results in elaboration which is not relevant to and in any case cannot be taken into account in the written responses to the questionnaire that is structuring the interview and will remain as its product.

As can be seen in these examples, much of the parents' elaboration comes in the form of narrative. To answer specific questions, they reconstruct the period of Jody's life about which information is asked. These narrative accounts are relevant to their recollection process but not to the interviewer's need to enter the answer to her question on a form. (The tendency of patients to think in terms of stories, in contrast to doctors' telegraphic and focused approach, has been observed by other researchers, including Ford [1978].)

#### THE NEGOTIATION OF INFORMATION

The intake interview and the pediatrician's interview both rely on the parents as sources of information about the child's physical condition. Yet the parents' recall is necessarily imprecise. This is seen clearly in the intake interview because there are two parents involved; their differences of opinion make clear the lack of certain accuracy of each one's recall.

The format of both the intake and pediatric interviews seems predicated on what Reddy (1979) identifies as the conduit metaphor that characterizes our cultural conception of information. We reify information as an entity that can be

inserted, extracted, conveyed, and otherwise manipulated. This assumption underlies elicitation of information in the medical interviews. However, analysis of interaction in more than one context shows that information is not so much elicited as it is negotiated in each. What is said is in part the creation of that interaction, not a preexisting entity which is brought forth and observed. Furthermore, at least some of the "information" thus negotiated does not outlive the interaction.

The way that information is asked for – indeed, the fact that it is asked for – can influence the information given in response. This is seen in the intake interview when the parent coordinator asks the parents what color Jody was at birth. We know from the way the parents initially answer this question, as well as the way they talk about the same topic during the social work session, that they remember simply that Jody was very pale, in contrast to her twin sister. However, the parent coordinator asks them to further specify whether Jody was white or yellowish white; in response, the parents engage in a negotiation that ends with their "reporting" that Jody was yellowish.

In the following transcription of that negotiation, it can be seen that the reply that Jody was yellowish at birth was negotiated in the course of this interchange.

- Mother: Uh . . . the only thing I noticed is that she was very pale  
 ..... compared to her sister who was [looks at father]  
 Father: [uhuh]  
 very reddish. [turns to parent coordinator]  
 Coordinator: Uh huh. Did you ever note notice  
 that she was um having kind of a yellow tinge to her  
 skin? [Or was it  
 Mother: It was extremely pale.  
 Coordinator: Was it a white? Was it [Uh ... would you say  
 Mother: [to father] it was white or yellowish-white?  
 She was [very pale.  
 Father: Yeah. [clears throat]  
 I would say more so than a yellowish-white  
 because she ... she ... well she did seem ... more ... pale. [Uhuh.  
 Coordinator:  
 Father: [Yknow  
 Mother: Well her sister looked like she had a Florida tan. [Yeah.  
 Father:  
 Mother: She [laughs] just looked extremely ... [reddish. →  
 Father: [reddish. [Uhuh.  
 Coordinator:  
 Mother: and she looked very yellowish. [Okay okay.  
 Coordinator:

The parent coordinator entered into the permanent record: "The parents describe her color as 'pale and yellowish' compared to her sister who was 'rosy'."

Leaving aside the choice of the synonym "rosy" for "reddish," we can see that although the parents did finally describe Jody's color as yellowish, they did so not because that was their recollection but because it was suggested to them by the parent coordinator's question. The mother states that "the only thing I

noticed" was that Jody was "pale," and she repeats that Jody was "pale" two more times. The father is the one who finally determines that Jody was yellowish, although his utterance is ambiguous: "more so than a yellowish-white" seems to emphasize the color by naming it, but literally the phrase "more so" means that some other (deleted) color was "more so." Moreover, when he searches for a reason for this conclusion, he finds none other than that she was "... pale."

Further evidence for this interpretation is found in the transcript of talk in the social work session. There, when the parents are discussing their recollection of Jody's birth, the mother volunteers,

- [her twin sister] was red-faced.  
 But she was smaller. ...  
 And Jody ... uh ... weighed about a half a pound, ...  
 to a pound? ... more. ...  
 But she was very pale.

The social work interview took place later than the intake interview, so it is clear that the parents' conclusion that Jody was "yellowish" did not become part of their own script, or memory, but was a temporary creation of the intake interview.

Another example of the form of questioning constraining the information given in response is found in the pediatric examination. The pediatrician asks about two marks (hemangiomas) on Jody's face. As the pediatrician later told us during playback, she was then trying to explain that the size of an arteriovenous malformation in Jody's brain can change. To demonstrate this point, she drew a parallel to the hemangiomas on Jody's forehead and lip which are also malformations of veins and/or arteries:

- Doctor: Now when did these show up.  
 Were they present when she was born? ...  
 or did they get bigger as time went on.  
 Mother: They were present at birth.  
 Doctor: Okay. Were they this large? ...  
 Or did they get larger.  
 Mother: uh: ... I guess ... they might appear larger. ...  
 Of course at the time they were very bluish.  
 Doctor: mhm mhm !/?  
 Mother: And I think they were more ... u:m ... prominent . .  
 at the time.

Here the transcript of the intake interview offers a clue to the parents' view. In answer to a question about any unusual factors at birth, the mother said, "the only thing that we were aware of" was that Jody had "these ah lumps on her face." The mother then renamed them: "bruises like or black and blue marks." The mother and father concurred that "she still has it" but the mother added, "it's not as uh noticeable" now.

The way the pediatrician asks her question, however, ("Were they present when she was born? ... or did they get bigger as time went on") gives the mother two choices to reply, neither of which is that the marks got smaller. In her

response, the mother concedes what the pediatrician seems to be assuming ("they might appear larger") but sticks to her recollection ("they were more prominent at the time"). Thus she skirts the issue of size, which is the crucial one from the perspective of the point the pediatrician is trying to make.

#### THE RESILIENCE OF SCHEMAS

The examples of the responses to the questions about Jody's color at birth and the size of the hemangiomas on her face show both that the responses offered in the interview contexts did not reflect precisely the parents' recollections, but also that the answers they devised for the current negotiation did not replace their own recollections in their minds. In other words, though the parents negotiated on the spot to achieve conversational cooperation (Gumperz 1982), their own knowledge structures or schemas remained intact. In the case of recollections such as these, this is a good thing indeed. But there are other instances in which the parents' schemas represent assumptions or associations which are erroneous from the point of view of medical science. In these cases, the resilience of their schemas trigger an elaboration and repetition of talk on the part of the professional and make it impossible for the parents to benefit sufficiently from these time-consuming elaborations.

An example of such a stubborn and probably unfounded schema is an assumption that surfaces only in the social work session. Whereas it is agreed that the parents have brought Jody to the Child Development Center in order to evaluate her for educational placement, the deeper hope motivating the parents' concern is that if Jody is placed in the right school program, she will stop regressing in skills and as a result will be able to live as an independent adult. As the mother puts it,

I'm just afraid that ... if ... her needs aren't met right now ...  
what's gonna happen to her ... ten years from now? ...  
Will her condition just ... get that much worse  
because ... what she needs now, ... uh ... is not being met?

This is a powerful and unfounded assumption. It is unlikely that Jody will be able to live as an independent adult, regardless of what is done for her now. It is unlikely that her regression, which the parents have correctly observed, is the result of inadequate school programs; rather, it is probably the unavoidable result of the progress of her physical condition.

The mother's comment quoted above evidences her assumption of a causal relationship between "now" (the help Jody receives) and "then" (her future as an adult). In her response, the social worker separates "now" and "then":

*Social worker:* It's not only whether ... what she needs now,  
but you're wondering ... what her future is for her perhaps.  
*Mother:* Exactly.

By lowering her volume and speeding her delivery when she says "what she needs now," as well as lexically marking this phrase with "not only," the social

worker downplays the issue of NOW to focus on FUTURE. Although there is apparent agreement evidenced in the mother's response ("Exactly"), she has not actually accepted the social worker's separation of NOW and FUTURE. Shortly thereafter she reiterates her unfounded hope: "What if she regresses because her needs have not been met now." The mother goes on to say that Jody will not always have her parents to take care of her, and they don't want her to be dependent on her sisters.

*Mother:* We want to avoid that.  
We want to help her in every way we can  
so that she can grow up to be ... uh: independent. ...  
and not have to  
*Father:* [She talks about ... when she grows up  
she wants to have two boys and a girl]  
*Mother:* [she wants to be a mommy ...

This crucial underlying assumption, which emerges only in the social work session, is not directly addressed at any point in the parents' dealings with the Child Development Center, and it seems to remain despite the social worker's attempt to substitute an interpretation which separates present and future.

Another concern of the parents which is expressed repeatedly and also is resistant to reassurance is that at night, when Jody sleeps, her breathing is noisy. Following is an example of the mother raising this issue in the course of the doctor's examination of Jody.

*Mother:* She worries me at night.  
Because uh ... when she's asleep  
I keep checking on her so she doesn't  
*Doctor:* [As you know the  
important]  
*Mother:* [I keep thinking she's not breathing properly.  
*Doctor:* As you know the important thing is that  
she does have difficulty with the use of her muscles.

The doctor continues at length explaining that the noisy breathing is a result of muscle weakness associated with cerebral palsy, not evidence of difficulty breathing.

But this does not settle the matter. Later in the examination, when the doctor listens to Jody's heart, she has her breathe deeply, and the resultant breath sounds are very noisy. The mother then interrupts the examination to observe, "That's the particular noise she makes when she sleeps." When the doctor does not interrupt her examination to respond to this observation, the mother repeats it: "That's the kind of noise I hear when she's asleep at night." At that point the doctor does interrupt her examination to reassure the mother again that there is nothing interfering with Jody's breathing.

The mother seems reassured in the context of the pediatric examination. However, examination of interaction across contexts makes clear that the mother is not deeply reassured. Her own assumptions about the significance of noisy breathing are too strong to be set aside by the doctor's explanation. (Hearing the

sound of Jody's breathing on the videotape at the point when the mother interrupts makes it easy for a lay observer to understand the mother's anxiety.) The same concern resurfaces during the parent interpretive – the session in which the staff members report and interpret their findings for the parents.

In the parent interpretive, the doctor summarizes for both parents her report of her examination: first, the presence of the arteriovenous malformation in Jody's brain; then, the mother's concern over Jody's noisy breathing; and finally, the presence of scoliosis, a curvature of the spine. In connection with the breathing, she stresses in her discussion of the report that there is no abnormal condition, no cause for concern.

*Doctor:* ... And I think what I tried to explain ...  
um to Mrs. Jones, ... Mr. Jones,  
[father turns to doctor]  
was that u:m ... thE ... muscles of the body  
when they're affected,  
they don't ... just affect the arm and leg.  
They affect the muscles ... u:m ... of the tongue,  
and the mouth, and the ... neck,  
and thE um vocal chords,  
... a:nd ... thE ... lungs,  
the tubes ... the tubes, ... that are in our lungs,  
also have muscle around them,  
... so all these muscles are affected.  
And the muscles, little muscles between our ribs,  
... and ... so ... there's a ... group.  
... And then even when I listen to Jody's chest,  
... her breath sounds ... are very coarse.  
... And sounds ... everything sounds kind of ... floppy  
... in there ... as ... thE ... lung expands ... and decreases.  
And so her noisy respirations ... u:m ... really ... are ...  
due to the same process.  
There's nothing ... separate that's going on.  
That I think you should worry about.

The pediatrician then moves on to talk about the scoliosis and ends by asking, "Did you have any questions?"

Rather than asking about the arteriovenous malformation, which is life-threatening, or the scoliosis, which is a new finding and one that requires a program of physical therapy which the mother will have to participate in, the mother asks about the breathing, a condition that the doctor has just said is not cause for concern.

*Mother:* No:, except ... that ... with this ... uh ...  
about the heavy ... wheezing sound,

*Doctor:* [mhm]  
would a doctor be able ... to tell ...  
if it's a congestion she's having →  
*Doctor:* [right

*or*  
*Doctor:* [Her lungs are very clear.  
... Although she sounds ... very raspy when she breathes.  
That's more the air going in and out.  
She has no wheezes.

The pediatrician then repeats her reassurance at some length, again emphasizing that "There is no wheezing."

The doctor's reassurance focused on the mother's misuse of the term "wheezing," which the mother used as a general term to describe noisy breathing but, for the doctor, is a technical term describing a constriction of the air passages. While crucial for the physician, this distinction is of no significance to the mother. Her experience of hearing noises that sound to her as if her child is gasping for air is far stronger and more enduring than the doctor's reassurances.

The difficult question, then, is how doctors' and patients' schemas may be made congruent. It is likely that much talk that is generated in medical settings represents schemas that are, from the point of view of medical science, erroneous and unfounded. The most frustrating aspect of this, which has just been demonstrated, is that they are also stubborn. After one lengthy explanation by the doctor in response to a question, the mother says, "Yes, that's what I was told." It seems obvious that much of doctor talk is told and told again, and yet patients are not deeply reassured.

## CONCLUSION

We have shown that considering discourse from a variety of contexts sheds light on the interaction in each. In particular, we have seen that the kinds of information that are exchanged differ with the contexts; that interaction in the medical setting is a series of elaborations and condensations, with information embodied in the elaborations frequently lost; that information is not so much elicited as it is negotiated in context; and that the information exchanged is often less resilient than the participants' schemas which preceded and outlive the interaction. We suggest, finally, that these dimensions account for the creation of context in interaction.

Theoretical and methodological implications of this study include a paradoxical aspect of interaction: On one hand, it is necessary to study closely what occurs, since meanings emerge that are not predictable from any standard determiners (for example, roles, status, tasks, or language systems). On the other hand, and simultaneously, meanings that do emerge may be evanescent, superseded by schemas that participants bring to the interaction. It is the analysis of communication across contexts that allows these phenomena to come to light, facilitating the integration of micro and macro levels of discourse – an issue of great concern to discourse analysis and interactional sociolinguistics.

## NOTES

1. The U.S. Department of Health and Human Services defines acute conditions as including infective and parasitic diseases, upper respiratory conditions, influenza, and digestive system conditions.
2. Transcription is laid out in line rather than paragraph form in accordance with conventions



developed by Tedlock, Hymes, and others for the transcription of narrative. This seems to facilitate comprehension, since the line breaks create in print the natural chunking that is accomplished in speech by a combination of intonation and prosody. Disruptions in this pattern, however, occur when brackets are used to show overlap (simultaneous talk) and latching (when a speaker begins to speak without leaving a perceptible pause following the previous speaker's talk). Other transcription conventions:

- two dots (..) indicate perceptible pause of less than .5 second.
- three dots (...) indicate pause of at least .5 second
- each extra dot indicates another half second of pause
- , indicates clause-final intonation
- . indicates sentence-final falling intonation
- thE indicates the article pronounced "thee" rather than "thuh"
- /words/ in slashes represent uncertain transcription
- [ brackets indicate simultaneous talk
- two lines spoken at once
- brackets with reversed flaps show latching ]

utterance begun with no perceptible pause

- arrow at right indicates utterance continues →
- on a succeeding line

3. The parents try to clarify their recollections by reference to sequences of past events, but their referents differ because their experience of events differed. We know furthermore that people's recollections are subject to alteration by frame - that is, they often recall what they would have expected to occur rather than what actually occurred.

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