Achieving Activity Transitions in Physician-Patient Encounters
From History Taking to Physical Examination

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This article examines how physicians and patients interactionally accomplish the transition from the activity of history taking to that of physical examination. Prior research focuses on participants' reliance on overt verbal resources (e.g., physicians' requests for permission to examine patients or explanations that foreshadow examination). Using the methodology of conversation analysis, this article draws on a corpus of 40 primary-care encounters to demonstrate that: (a) In addition to verbal behavior, nonverbal behavior is integral to the accomplishment of transitions; and (b) patients' understandings of physicians' verbal and nonverbal behavior as communicating transitions are achieved through situating those behaviors in other contexts of embodied action, talk, activity, and social structure (i.e., the phase structure of encounters). Findings have implications for: (a) the theoretic relationship between verbal and nonverbal behavior in terms of social meaning, (b) what it means to explain transitions and reduce patients' uncertainty, (c) the organization of physician-patient interaction, and (d) the relationship and interface between macro- and microconceptualizations of context.

In physician-patient encounters, research on nonverbal communication has primarily focused on behavioral components of larger-order relational variables, such as affect, affiliation, and power/dominance, and their relationship to medical outcomes, such as satisfaction, adherence, and information recall/understanding (for review, see Buller & Street, 1992; Lepper, Martin, & DiMatteo, 1995). When there are relationships between nonverbal behavior and outcomes, they tend to be weak,

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Human Communication Research, Vol. 27 No. 2, April 2001 253–298

and one primary reason is because "nonverbal behavior measures . . . do not account for how communicators *qualitatively* interpret the behaviors being *quantified*" (Buller & Street, 1992, p. 135, emphasis in original; see also Stiles, 1989). As Robinson (1998) argued, understanding the relationship between physicians' and patients' nonverbal behavior and communication outcomes depends on understanding how nonverbal behavior operates, and is interpreted, as it is simultaneously situated within multiple levels of context. Toward this end, this article investigates how physicians and patients interactionally accomplish the transition from the activity of history taking to that of physical examination. It argues that this accomplishment necessarily involves participants relying on a variety of types of communicative resources (verbal, nonverbal, and social-structural) working in concert and in context. The article's findings improve our understanding of: (a) the theoretic relationship between verbal and nonverbal behavior in terms of social meaning, (b) how physicians' communication (during activity transitions) might influence medical outcomes, in this case reducing patients' uncertainty, and (c) the organization of physician-patient interaction. Each of these topics will be briefly reviewed before presenting and analyzing the data.

THE RELATIONSHIP BETWEEN VERBAL AND NONVERBAL COMMUNICATION AND SOCIAL MEANING

There are at least two theoretic conceptualizations of the relationship between verbal and nonverbal behavior in terms of their social meaning. Both of these conceptualizations appear to have their roots in early distinctions between the "content" and "relational" dimensions of messages (Goffman, 1959; Watzlawick, Bavelas, & Jackson, 1967). First, some researchers have implicitly conceptualized verbal and nonverbal behavior as constituting two distinct channels of communication that are attended to and processed separately by receivers (Ekman & Friesen, 1969; Mehrabian, 1972). This position has been tacitly adopted by researchers who have studied phenomena whose function entails both verbal and nonverbal communication (e.g., relational control) yet who have exclusively analyzed one channel (for review and critique, see Burgoon, 1994; Sanders, 1987a). Second, drawing on Wittgenstein (1958) and foregrounding early concerns with "context" shared by members of the Palo Alto Group (for review, see Leeds-Hurwitz, 1987), other researchers have explicitly argued that the social meaning of communicative events generally, and nonverbal behavior specifically, is shaped by, and thus dependent on, the context in which it is situated (Goodwin, 1979, 1994, 1995, 1996, 2000, in press; Kendon, 1977, 1994; Patterson, 1983; Poyatos, 1983;

Sanders, 1987a, 1987b, 1989). This context not only includes prior verbal and nonverbal behavior, but a variety of social structures in which nonverbal behavior is situated, such as social institutions, the social meaning of artifacts, participants' social and institutional roles, participants' social identities, the social actions and activities in which participants are engaged, and a multitude of social rules and norms (e.g., reciprocity, politeness, and turn-taking; re. social structure, see Alexander, Giesen, Munch, & Smelser, 1987). From this perspective, the relationship between verbal and nonverbal behavior is neither additive nor multiplicative, in the sense that each constitutes a separate yet combinable factor of meaning. Rather, the relationship is holistic and metamorphic. That is, phenomenologically, verbal and nonverbal behavior work together to convey a single meaning (Higginbotham & Yoder, 1982; McNeil, Cassell, & McCullough, 1994; Poyatos, 1983), where each next behavior: (a) is completely understood by virtue of its position in context, (b) retrospectively reconfigures meaning-so-far, and (c) establishes a new frame through which prospective behaviors will be interpreted. This second perspective shifts analytic attention away from providing accounts of different types of nonverbal behaviors and their communicative functions to providing accounts of how nonverbal behaviors achieve their social meanings in and through interaction—that is, accounts of the communication practices, as well as the multitude of social structures in which they are situated, that senders rely upon and receivers understand as being relied upon to accomplish certain meanings (Sanders, 1987a; Schegloff, 1987). This analytic shift is in line with that implicated by Burgoon's (1980, 1994) message (vs. sender or receiver) perspective and Stamp and Knapp's (1990) interaction perspective on studying nonverbal behavior (see also Bavelas, 1994). Importantly, this second perspective does not necessarily lead to an infinite regress to relativism. This article demonstrates that it is possible to identify and describe a members'-view-based (or emic) vocabulary of nonverbal communication that is context dependent yet demonstrably socially shared and relied upon.

ACTIVITY TRANSITIONS IN PHYSICIAN-PATIENT INTERACTION

Due to the goal orientations of physicians and patients, primary-care encounters tend to be organized into standard sets and orders of task-oriented phases or activities (Drew & Heritage, 1992; Robinson, 1999). One common activity structure is: (a) opening, (b) history taking, (c) physical examination, (d) diagnosis, (e) treatment, and (f) closing (Byrne & Long, 1976; Waitzkin, 1991).[1] Two streams of research have examined physicians' and patients' transitions between activities. However, each stream

has been motivated by different theoretic interests and they have not yet informed one another. The first stream has examined physicians' verbal explanations to patients regarding the activity-flow of encounters and their effects on patients' uncertainty. The second stream has investigated how physicians and patients accomplish—that is, communicate, understand, and negotiate—activity transitions in order to expose the organization of medical interaction itself. These two streams are potentially complementary. Physicians' explanations are one verbal resource for accomplishing activity transitions. However, an investigation of how these explanations operate in interaction, as well as of other types of interactional resources that participants use to "understand" transitions (e.g., nonverbal behavior and social structure), can help us to better understand their effects on previously examined outcomes, such as patients' uncertainty, sense of control over their situations, and perceptions of physicians' competence.

Physicians' Explanations and Patients' Uncertainty

In physician-patient encounters, one source of patients' uncertainty can be the activity flow of encounters generally, and the transition from the activity of history taking to that of physical examination specifically (Sheer & Cline, 1995). Physical examinations can be unfamiliar, threatening, embarrassing, and sometimes painful. One way in which uncertainty can be reduced is by giving people more information about the unfamiliar events (Berger, 1986; Berger & Calabrese, 1975; Shannon & Weaver, 1949). This has been investigated with respect to examination-like activities, such as diagnostic procedures (e.g., allergy tests) that are conducted while patients are conscious (Hjelm-Karlsson, 1989; MacPherson & Gormlie, 1995; Meyers, 1965). Research has shown that: (a) Patients desire more information about these activities (Alexy, 1981-1982; Libman, Creti, & Fichten, 1987); (b) their explanation reduces patients' uncertainty (Meyers, 1965; Solomon & Schwegman-Melton, 1987); and (c) this uncertainty reduction is associated with decreases in patients' pain and tension (e.g., patients report being more calm, safe, and relaxed) and increases in patients' sense of control over their situation (Hjelm-Karlsson, 1989; Meyers, 1965).

A similar line of reasoning has been applied specifically to physical examinations. Physicians are trained to preface and describe examinations verbally in order to inform patients about what is happening next and to reduce patients' uncertainty and secure their acceptance of the transition (e.g., "First I will examine you and then you will have some tests"; Levinson, Roter, Mullooly, Dull, & Frankel, 1997, p. 555; see also, Bates, Bickley, & Hoekelman, 1995; Billings & Stoeckle, 1989; Greenberger

& Hinthorn, 1993; Seidel, Ball, Dains, Joyce, & Benedict, 1995; Swartz, 1998; Zoppi, 1997). Physicians' statements that orient patients to the activity flow of medical encounters influence both communication process and health-related outcomes. For example, physicians' orientation statements are negatively associated with patients' initiations of new problems in the closing phase of encounters (White, Levinson, & Roter, 1993) and with patients' malpractice claims (Levinson, Roter, Mullooly, Dull, & Frankel, 1997). Despite these associations, this stream of research has not investigated the organization of orientation statements in interaction, what those statements are accomplishing in interaction, and whether their effectiveness and understanding is reliant on other interactional resources, such as nonverbal behaviors and social-structural contexts (e.g., stably patterned sets of social relations, such as the activity structure of encounters).

The Accomplishment of Activity Transitions

The second stream of research has focused on how participants accomplish activity transitions in and through interaction. This research has been largely conversation analytic in orientation.[2] In both ordinary and clinical contexts, Beach (1995a, 1995b) demonstrated that the acknowledgement tokens "okay" and "alright," when employed in "third-turn position," are frequently used to initiate the closure of a prior sequence of action (e.g., by displaying an orientation to the adequacy or sufficiency of a prior response; see also Schegloff, 1995). These tokens can also simultaneously project speakers' preparedness to shift to new matters (i.e., a new action, topic, or activity). Beach (1995b) argued that, in clinical contexts, these tokens typically project a shift to matters "deemed relevant for achieving 'official' clinical business" (p. 260). Beach (1995b) further suggested that, whereas third-turn "okays" are used to initiate the closure of immediately prior actions, similarly positioned "alrights" may function to initiate the closure of larger order activities, such as history taking, and in doing so, simultaneously project a movement to a new activity, such as physical examination.

There has also been a limited amount of research on interactional resources for accomplishing the transition to the activity of physical examination. Both Frankel (1983) and Heath (1986) argued that this transition can be accomplished with physicians' requests. For example, see Extract 1 (see Appendix for transcription conventions):

Extract 1: Heath (1986, p. 101, fragment 5:1)

```
1 a->  DOC:  We[ll er::er:::::: shall I have a listen
2      PAT:       [(      )
3 a->  DOC:  to your ches:t heh [heh
4 b->  PAT:                    [yes::
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According to Heath, these requests (a->) are designed to: (a) project a shift in involvement to the specific activity of physical examination; (b) seek patients' permission to conduct the exam (b->) and thereby secure, at least initially, patients' cooperation with its performance; and (c) enable patients' cooperation by projecting the nature of the forthcoming examination (e.g., a stethoscopic examination of the chest).

Although this stream of research has investigated the interactional placement and accomplishment of activity transitions, it has focused on verbal resources. What has not yet been investigated is their interface with nonverbal and social-structural resources.

THE PRESENT STUDY

This article uses conversation analysis to describe the interactional and social-structural resources that physicians and patients use to accomplish the transition from the activity of history taking to that of physical examination. It expands on prior research in three ways. First, it demonstrates that participants rely heavily, and sometimes primarily, on nonverbal resources, particularly object-adaptive behaviors,[3] such as physicians' manipulations of their bodies relative to medical-record charts, writing instruments, chairs, and examination tables. Second, it empirically documents how, in addition to verbal and nonverbal resources, participants rely on an orientation to the phase structure of encounters. Third, it argues that verbal, nonverbal, and phase-structural resources neither operate independently nor are substitutes for each other. Rather, the transition to physical examination is a multimodal accomplishment in which participants rely on a range of these resources, which work in concert and are mutually elaborative.

Data and Method

The data are 40 audio- and videotaped, primary-care encounters collected between 1995 and 1998. Encounters involved eight fluent-English speaking physicians, all of whom were trained in either the United States or England (three males, five females; five Caucasians, one Armenian, one East Indian, and one Hispanic). Two physicians worked in single-physician practices and six worked in multiphysician practices. All of the practices were located in suburban areas in Southern California, were part of either networks of physicians or health-maintenance organizations, and accepted a variety of types of insurance. The 40 patients (40% male, 60% female; 70% Caucasian, 10% African American, 10% Asian, 8% Hispanic, 2% Armenian) visited physicians for new (acute) problems, such as a variety of "pains" (abdominal, back, ear, foot, hand, neck, shoulder, and

leg), infections (e.g., flu, sinus), diarrhea, rashes, allergies, lumps, and injuries from a dog bite. The data are drawn from a larger corpus of 130 encounters. The 40 encounters devoted to dealing with new problems were selected because those organized around other types of medical business, such as following up on old problems or routine well visits, do not regularly include the activity of physical examination (Byrne & Long, 1976). These encounters lasted an average of 11.5 minutes (*SD* = 3.7). The method used is conversation analysis (for review, see Atkinson & Heritage, 1984), particularly as it is applied to the study of institutional interaction (for review, see Drew & Heritage, 1992). Due to space restrictions, this article only examines four encounters, which were nonrandomly selected on the basis of being cases in which participants gave permission to publish video recordings. All data collection was approved by a university human-subjects' protection committee. Participants provided informed consent to be recorded prior to the study and were aware of being recorded. All data were transcribed by the authors.

Analysis

Four transitions will be analyzed. The first two transitions differ markedly from those discussed in prior research in that the transition to physical examination is unproblematically accomplished primarily through a reliance on nonverbal and phase-structural resources. Physicians produced transition-relevant nonverbal behaviors in the accomplishment of 39 out of 40 transitions (98%). Furthermore, 24 out of 40 transitions (60%) were accomplished without physicians' overt verbal references to physical examination.

Transition 1. In Transition 1, a woman is visiting the physician because of a sore shoulder. After opening the encounter (data not shown), the physician solicits the patient's medical problem (line 18) and thereby initiates the activity of history taking. The transition to physical examination is initiated at line 66 (a->) and completed at line 70 (b->).

Transition 1: SHOULDER PAIN

18	DOC:	So what can I do for you today.
19	PAT:	W'll- (.) I have (.) som:e shoulder pa:in
20		a:nd (0.2) a:nd (.) (from) the top of my a:rm. a:nd (0.2)
21		the reason I'm here is because >a couple years
22		ago< I had frozen shoulder in the other a:rm, an'
23		I had to have surgery. and=( ) this is starting to
24		get stuck, and I want to stop it before it gets
25		stuck.
		((32 lines deleted—history taking))

58	DOC:	.h It uh it's difficult to put your: (.) bra: (.) back
59		on there,[you c'n get your arm] back there?
60	PAT:	[(Mm::/Uh::)]
61	PAT:	I c'n: (.) handle backward movement okay but it's
62		forward and up that's=
63	DOC:	=Mm h[m,]
64	PAT:	[h]urting me right now.
65		(2.2)
66 a->	DOC:	.hhhhhhhhhh Alright. hhh uh:m hhhhhh
67		(0.2)
68	PAT:	This is not_ (.) bursitis. no:w.=it doesn't feel like
69		a bursitis,=(an') it's not a real sharp pain.=it's
70 b->		just a ·hh an ache, (.) all thuh ti:me.
71	DOC:	Mm hm,
72	DOC:	It <might be.> Well let me show=ya what the
73		most co:mmon injury is.

The question-answer sequence at lines 58–64 is the final sequence in the activity of history taking. At line 66, the physician's "Alright." initiates closure of this sequence and projects a movement to a new activity (Beach, 1995b). This claim must be qualified, however, by the fact that, through the production of "Alright." as well as through the following "hhh uh:m," the physician's body and gaze orientation, as well as his embodied actions, show his continued engagement in the activity of history taking. That is, in the silence at line 65, and through the physicians "hhh uh:m" at line 66, the physician is engaged in the activity of writing in the records (Figure 1). At this point, the patient continues to gaze at, and thus monitor, the physician.

Upon completion of "uh:m" (line 66), the physician begins to lift the pen from the page. As he does this, he manipulates the pen in his hand from the position shown in Figure 1, where he is holding the pen in writing position (i.e., the tip of the pen is between his thumb and two forefingers, and the shaft of the pen is resting on the top of his hand), to that shown in Figure 2, where he has repositioned the shaft of the pen out of writing position (i.e., from the top of his hand to inside of his palm). We argue that the patient orients to this behavior as a resource for understanding that the physician is initiating the closure of history taking and enacting a transition to a new activity.

Several researchers have provided evidence that interactants monitor, analyze, and use gestural and kinesic behaviors occurring at one point in an encounter as grounds for inference and action at later points in the same encounter (Greatbatch, 1992; LeBaron & Streeck, 2000; Pollner, 1979; Woodall & Folger, 1985). For example, LeBaron and Streeck documented how a hand gesture made by an architect during a critique of a model building was observed and used by students in their own subsequent

66 DOC: Alright. h h h u h : m

Figure 1

66 DOC: uh:m h h h h h h

Figure 2

19-21 PAT: sh<u>o</u>ulder pa:in . . . a : n d (0.2)

Figure 3

critiques of the same model. LeBaron and Streeck demonstrated that embodied actions can be transformed into symbolic actions, or "converted into components of the shared communicative repertoire of a local 'community of practice'" (p. 19). Similarly, Greatbatch (1992) analyzed portions of physician-patient encounters where physicians used computers to issue prescriptions. Greatbatch argued that, through a process he termed *in situ socialization*, patients learned that certain patterns of physicians' keyboard usages (e.g., a series of soft alphanumeric keystrokes followed by a pronounced carriage-return) projected the end of a computer-related activity. Greatbatch supported this argument by demonstrating that patients oriented to these patterns and used them to coordinate the beginnings of their utterances.

Following the aforementioned research, we argue that the visible, embodied behaviors that the physician initially uses to construct the activity of history taking become a form of locally produced, common knowledge that the patient uses as a resource for understanding how certain behaviors, such as the physician's manipulation of the pen out of writing position, can project the deconstruction of history taking and thus a shift to a new activity. In order to make this argument, we need to return to this case and examine the series of behaviors that the physician uses to construct and sustain history taking.

As the physician verbally initiates history taking by soliciting the patient's problem (line 18), he moves toward a chair in preparation for sitting down. The physician sits down as the patient finishes the word "pa:in" (line 19; Figure 3). After sitting down, the physician crosses his legs, folds the records back upon themselves, rests the records on his leg, and begins to write (Figure 4). In sum, the activity of history taking is partially constituted by the physician and patient establishing a particular contextual configuration (Goodwin, in press). The physician establishes this configuration by engaging in a range of behaviors, many of them nonverbal: (a) talk that solicits the patient's problem; (b) establishing a participation framework with the patient (see Goodwin, 1981); (c) sitting down; (d) crossing his legs to provide a surface on which to place the records; (e) opening the records and preparing them for use; (f) picking up the pen; and (g) ultimately using the records (i.e., for both reading and documenting information). Insofar as the physician fluidly coordinates and integrates his nonverbal behaviors with his verbal initiation of history taking, he displays his orientation to them as relevant for, and constitutive of, the activity of history taking. Meanwhile, the patient sits on the edge of the examination table with her legs crossed, maintains a steady posture, and gazes at the physician (Figures 3–4). The physician and patient maintain this contextual configuration throughout the activity of history taking, with the physician periodically reading and writing in the records.

21 PAT: thuh reason . . .

Figure 4

67 (0.2)

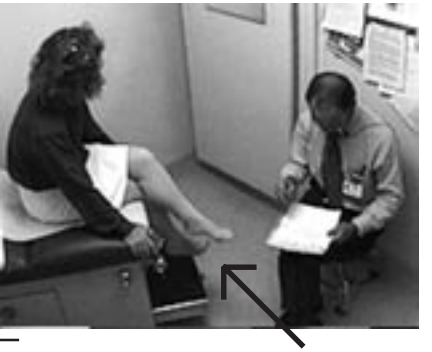

Figure 5

Figure 6 Just post physical examination

We can now return to the physician's manipulation of the pen out of writing position (Figure 2). If this nonverbal behavior is analyzed in isolation, it merely communicates that the physician is terminating the action of writing. However, the full interactional import of this behavior requires an analysis of how it is multiply situated within a range of contexts. First, it is situated within a context of embodied action. That is, prior to lifting the pen from the page, the physician was engaged in the action of writing in the records, very likely documenting the patient's response (lines 61–64) to the physician's prior question (lines 58–59; Frankel, 1996). This question-answer sequence is part of the larger activity of history taking. Thus, the physician's writing was part of the larger course of embodied action of documenting the patient's complaints in the records, which was constitutive of history taking. Second, the manipulation of the pen out of writing position is situated within a context of verbal action. That is, it follows the physician's "Alright." which initiates closure of the prior question-answer sequence, proposes closure of the larger activity of history taking, and projects a transition to a new activity (Beach, 1995b). Third, the manipulation of the pen out of writing position is situated within a context of the patient's understanding of phase structure. That is, given that the physician's verbal and nonverbal behaviors make relevant the closure of a current phase (i.e., history taking), phase structure becomes a relevant resource for understanding the physician's behavior as projecting a transition to a next phase (i.e., physical examination). In sum, the physician's manipulation of the pen out of writing position is not understood merely as projecting the termination of writing, but rather as deconstructing the larger order activity of history taking and projecting a transition to examination. This claim is supported by the patient's subsequent behavior.

In response to the physician manipulating the pen out of writing position, the patient begins to uncross her legs and reposition her body on the examination table. This can be seen in Figure 5, especially when compared to the earlier position of the patient's left ankle in Figure 2. We stated earlier that the physician's "Alright." (line 66) projected a movement to a new activity. However, we also noted that upon its completion, and through the subsequent "hhh uh:m," neither the physician nor the patient showed an orientation to such a shift. In fact, the physician continued to write in the records and thus nonverbally communicated his ongoing engagement with the activity of history taking. Similarly, the patient maintained her history-taking bodily configuration and continued to visually monitor the physician. It is only when the physician manipulates the pen out of writing position and nonverbally projects the closure of history taking that the patient begins to show her understanding that a transition to a new activity is in progress. She does this by uncrossing her legs.

There are several ways in which the patient's uncrossing of her legs shows her understanding that the physician is making a transition to the specific activity of physical examination. First, by uncrossing her legs, the patient allows the physician, who is positioned in front of her, to come into closer proximity with her body and thus facilitates his access to her shoulder for examination. Second, it is very likely that the physician's examination will (and ultimately does) include the palpation of her shoulder and thus movement of her torso. With her legs crossed, her left leg cannot be used for balance and support. Thus, by uncrossing her legs, the patient moves into a more stable position. Third, the activity of physical examination is bounded on either side by the patient's legs being crossed. As we have seen, the patient's uncrossing of her legs is specifically coordinated with the transition into the examination. As seen in Figure 6, the patient coordinates the recrossing of her legs with the transition out of the examination (as the physician steps away from the patient and sits down). The patient displays that having her legs uncrossed is specifically relevant to the activity of physical examination. In sum, by uncrossing her legs as the physician manipulates the pen out of writing position, the patient displays her understanding of the transition as one to physical examination.

Additional evidence that the patient understands the physician's behaviors as projecting a transition to physical examination is found in her turn of talk, which she produces as she uncrosses her legs: "This is not_ (.) bursitis. no:w.=it doesn't feel like a bursitis,=(an') it's not a real sharp pain.=it's just a .hh an ache, (.) all thuh ti:me." (lines 68–70). The patient coordinates the beginning and end of her turn with the beginning and end of the transition into the examination, respectively. Thus, the patient's turn is literally produced "in the transition" between history taking and physical examination, and should be understood as relevant to this transition. With her turn, the patient provides additional information about her problem by first discounting bursitis as a diagnosis of her problem ("This is not_ (.) bursitis. no:w") and then providing evidence for her claim ("it doesn't feel like a bursitis,=(an') it's not a real sharp pain.=it's just a _hh an ache, (.) all thuh ti:me"). In offering evidence that her symptoms are inconsistent with a diagnosis of bursitis, the patient instructs the physician in what he should be looking for and, more specifically, what he should not expect to find. Thus, she displays her orientation to the imminence of the "looking" process—the physical examination. Similar to the uncrossing of her legs, the patient's turn displays her orientation both to an activity transition and to the relevance of physical examination as a next activity.

After manipulating the pen out of writing position, and as the patient both continues to uncross her legs and begins her turn of talk, the physi-

68 PAT: T h i s

Figure 7

68 PAT: i s not . . .

Figure 8

68 PAT: This is not_ (.) b u r s i t i s.

Figure 9

cian secures the pen into the binding of the records (Figures 7–8). This behavior obscures part of the page, makes it awkward to turn pages, and projects that the physician will no longer use (i.e., read or write in) the records. Insofar as using the records was constitutive of the activity of history taking, the physician's termination of this action reinforces his earlier projection that he is closing down history taking.

After the physician secures the pen, he releases it (Figure 9) and sets down the records (Figure 10). As he does this, the patient begins two actions, both of which can be seen in Figures 9–10 (compare the patient's position to that in Figure 8). First, she begins to shift her torso forward in preparation for adjusting her lower torso and buttocks on the examination table. She reaches the acme of her forward torso shift in Figure 10. Second, she shifts her head to the left into a forward facing position. In Figure 10, both the physician and the patient nonverbally communicate partial disengagement with the other and engagement in noncollaborative actions—the physician is setting the chart down and the patient is readjusting herself on the table.

In Figure 11, the patient completes the readjustment of her lower torso and buttocks, and in Figure 12 she begins to straighten her torso. This action completes a fluid progression of bodily movement that began with the uncrossing of her legs (Figure 5). In sum, by repositioning her body, the patient shifts from a more casual, conversational posture into a more formal, examination posture.

Returning to Figure 12, the physician, who is gazing at the patient, begins to stand up. After the physician stands up (Figure 13), he continues gazing at the patient and begins to move toward her. The physician's standing up is the final component in his nonverbal dissolution of history taking. As stated earlier, as the physician initiated history taking, he sat down, prepared the records for use, and began to write. In this transition out of history taking, we have seen the physician terminate the action of writing, put the records out of use, and stand up. The physician communicates a termination of history taking precisely by deconstructing the nonverbal behaviors that he originally used in its construction. The physician completes the transition from history taking to examination in Figure 14, where he approaches the patient and begins to palpate her shoulder. The physician's laying on of hands officially begins the activity of physical examination (Frankel, 1983).

As the physician moves in for physical contact (Figures 13–14), the patient continues to straighten her torso and shifts her gaze into what Heath (1986) described as a "middle distance" position, where "the patient is looking into the middle distance, away from the other, yet at no particular object in the local environment" (p. 108). Heath observed that patients frequently adopt middle-distance positions during periods of

68 PAT: no:w. . .

Figure 10

68 PAT: This is not_ (.) bursitis. no:w.=it
68-9 doesn't feel like a

Figure 11

68 PAT: bursitis, . . .

Figure 12

physical contact with physicians. The patient's middle distance position is especially clear in Figure 14, as the patient maintains a forward-facing gaze orientation while the physician circles around to her right in preparation for the examination. That the patient takes up the middle-distance position (begun in Figure 13) is further evidence that the patient understands that the physician is making a transition to the activity of physical examination.

We have observed that, despite the absence of an overt verbal reference to the physical examination by the physician, such as a request to examine the patient, the transition to examination is nonetheless accomplished unproblematically through the participants' primary reliance on nonverbal and phase-structural resources. We argued that the physician first displayed his orientation to the closure of the activity of history taking and a transition into a new activity when he began to manipulate the pen out of writing position (Figure 2). The patient showed her understanding of this behavior as closing down history taking and initiating a transition into the specific activity of physical examination by beginning to uncross her legs (Figure 5), readjusting her lower body (Figures 9–11), straightening her torso (Figures 12–13), and finally taking up a middle distance position (Figures 13–14). The physician also displayed his orientation to examination as the next relevant activity by freeing his hands (e.g., putting away the pen and records), standing up, approaching the patient, and ultimately examining her.

Although the physician's transitional behaviors displayed his orientation to the closure of history taking, there was nothing about his initial behaviors (e.g., putting away the pen) or their situation within verbal or nonverbal contexts that displayed his orientation to physical examination specifically. The fact that both the physician and the patient displayed their understanding of examination as being the next relevant activity following history taking provides evidence that they were oriented to phase structure for achieving that understanding and that that understanding was procedurally consequential for their behavior (see Schegloff, 1992). This reliance on phase structure is highlighted when we consider: (a) Medical diagnoses and treatment decisions sometimes can be made on the basis of history taking alone, and thus physical examination is not necessarily functionally required; and (b) there are other phase transitions, such as that from treatment to closing, in which physicians frequently move from being seated and engaged with the records (e.g., when documenting treatment recommendations) to putting the records out of use and standing (e.g., in preparation for leaving the room). In order for the patient to understand this particular transition as one to examination, it is likely that she oriented to the normative ordering of phases, which was perhaps only made relevant by the physician's locally situated, activity-transition-relevant behaviors.

69-70 PAT: (an') it's not a real sharp pain . . .

Figure 13

70 PAT: all thuh ti:me.

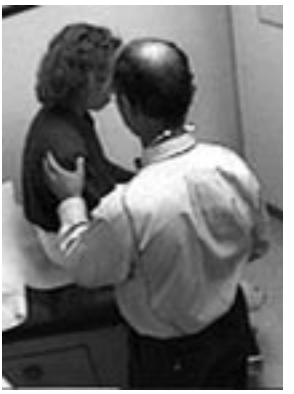

Figure 14

Transition 2. A similar use of, and primary reliance on, nonverbal and phase-structural resources can be seen in Transition 2. Here a man is visiting the physician because of ear pain. The opening occurs at lines 1–13, history taking occurs at lines 14–73, the transition to physical examination is initiated at line 74 (a->), and it is completed at line 85 (b->).

Transition 2: EAR PAIN

1	DOC:	↑How↓dy.=h
2		(0.2)
3	PAT:	He:y.
4		(1.0)
5	DOC:	How ya comin' along.
6	PAT:	.hh Okay,=an' yourself,
7		(0.2)

8 DOC: Goo:d,
9 (.)
10 DOC: So whatcha been do:in'?
11 (0.7)
12 PAT: Workin'.
13 (0.2)
14 DOC: Your ear's 're [pop]pin'. huh,
15 PAT: [(I)]
16 (0.7)
17 PAT: Yeah it's like- (.) (either)/(maybe) there's f:luid
18 er wax build up.
19 (0.2)
20 PAT: °But° (.) tuhday's not as ba:d.
21 (1.5)

((35 lines deleted - history taking))

53 DOC: D'=you ever go for your blood test at a:ll?
54 (0.2)
55 PAT: No.
56 (.)
57 DOC: What happened.
58 (3.4)
59 PAT: Some'in' happened I had to reschedule it_
60 (0.3)
61 PAT: >'Cause I wen'< over there,
62 (0.7)
63 PAT: They said to come ba:ck.
64 (0.4)
65 PAT: (nex)
66 (0.8)
67 PAT: .hh With wo:rk=h (0.7) then I told Gloria I (said)
68 well maybe I need tuh_ .hh (0.5) see you again.
69 (.)
70 PAT: .h An' then (now that) all thee other stuff
71 started happening(_)/(,)
72 PAT: ((Tap Tap on chair arm))
73 (1.0)
74 a-> DOC: (°Okay.°)
75 PAT: #Hmh#=h[h ((thr oat clear))
76 DOC: [Alright. ( ) >So I< wantchu_ (.)
77 I'm gonna send you out for thuh bloodwork again:?
78 PAT: Nkay.
79 DOC: An' then we'll:=uh (0.5) I wantcha come back for
80 uh physical'cause we haven' done that yet.
81 (3.0)
82 PAT: #hmh# ((thr oat clear))
83 DOC: So work is tough:? (.) now er_
84 (0.7)
85 b-> PAT: We're mo:ving.

Just as with Transition 1, it is necessary to analyze how the physician and patient construct the activity of history taking in order to understand how subsequent behaviors communicate its deconstruction and thus project a transition to a new activity. Parallel to Transition 1, as the physician prepares for history taking, he sits down (Figure 15), prepares a surface for writing (by pulling out the table extension; Figure 16), orients to the records and begins to write (Figure 17). These behaviors collectively work to constitute and sustain the activity of history taking nonverbally.

Turning to the transition, prior to the silence at line 73, the patient is resting in the chair and the physician is writing in the records (Figure 18). During the silence at line 73, the patient begins to readjust himself in the chair (Figure 19). This readjustment does not appear to be responsive to any verbal or nonverbal behavior of the physician. As the patient leans forward, he shifts his gaze from the physician to the floor (Figures 19–20).

The physician's "(°Okay.°)" (line 74) initiates closure of the question-answer sequence that began with "What happened." (line 57) and projects a shift to a new matter (Beach, 1995b). The fact that the physician is making such a shift is partially supported by the fact that, following the "(°Okay.°)," the physician stops writing and begins to pick up the medical records (Figure 20). Similar to Transition 1, insofar as the actions of preparing and using (i.e., reading and writing in) the records were employed to constitute and sustain the activity of history taking, their termination projects the possible closure of history taking. At this point, however, the patient is not visually attending to the physician (Figure 20) and thus very likely does not yet have access to the physician's nonverbal behaviors.[4]

The physician's "Alright." (line 76) re-initiates closure of the prior question-answer sequence and again projects a shift to a new activity, thus reinforcing his prior "(°Okay.°)" (Beach, 1995b). In response to the "Alright," the patient, who is in the process of leaning back into the chair, shifts his gaze to the physician. Upon seeing the physician, who is in the process of removing the records and pushing in the table extension, the patient halts his backward movement (Figure 21). That is, rather than continuing and completing his trajectory of leaning back fully into the chair (Figures 20–21), the patient stops in mid-lean.

The physician's actions of removing the records from the table extension on which he had been writing and pushing in the table extension further project the closure of history taking. Additionally, the action of pushing the extension into the examination table projects a transition into the activity of physical examination by preparing the table for use. That is, when the table is extended, it simultaneously obstructs the patient's ability to use the step to climb onto the table (which he eventually does; Figure 26) and his ability to sit on the table (i.e., with his legs hanging

7 (0.2) . . .

Figure 15

10 DOC: So whatcha been do:in'?

Figure 16

20 °But° (.) tuhday's not as ba:d.
21 (1.5)

Figure 17

over the edge; Figure 27). We argue that the patient shifts his gaze to the physician in response to the "Alright." and stops leaning back (Figure 21) in response to witnessing the physician simultaneously removing the records and pushing in the table extension.

When the patient halts his movement, he is not in a complete rest position (as he was in Figure 18). That is, as seen in Figures 19–20, the patient is using both arms and hands to reposition his body. In Figure 21, although he has relaxed his right forearm onto the armrest, his left hand and arm remain in a repositioning posture. Thus, the patient not only halts his course of leaning back into the chair but additionally shows that he is prepared to alter his position once again. The patient holds this position momentarily (through ">So I< want"; line 76) as he gazes at the physician. In this way, the patient shows that any further repositioning of his body is contingent upon the physician's next action(s).

Similar to Transition 1, talk inhabits the transition to physical examination. As the physician removes the records and begins to push in the table extension (Figure 21), he begins to make arrangements for the patient to engage in two courses of future action, obtaining a blood test (lines 76–77) and returning for a physical (lines 79–80). In two ways the physician's talk projects that he is closing down history taking. First, the physician ties his talk to the activity of history taking by reinvoking and resuming the question-answer sequence initiated at line 53. He begins his turn with "So" (line 76), which Raymond (2000) argued can be a practice for resuming an earlier, and often unfinished, action or piece of business. Here, the unfinished business is getting the blood test, which the patient did not do prior to this visit (lines 53–55). Additionally, the physician reinvokes the question at line 53 by using a parallel grammatical structure at line 77. The physician's "D'=you ever go" (line 53) becomes "I'm gonna send you" (line 77); "for your" becomes "for thuh"; and "blood test" becomes "blood work." Finally, the physician's "ag<u>ai</u>:n" (line 77) constructs the proposal as a second to that referred to in line 53. Second, several researchers have argued that the action of arrangement making projects closure of a prior sequence, topic, or activity (Button, 1985; Heath, 1986; Schegloff & Sacks, 1973). Here, the physician simultaneously reinvokes the activity of history taking and projects its closure.

Figure 22 depicts two events. First, the physician finishes pushing in the table extension and begins to set the medical records down. Second, in response, the patient, who has been monitoring the physician, begins to reposition his body for a second time: He places his right hand back onto the arm rest and leans forward. In contrast to the patient's original repositioning (Figures 19–20), this one appears to be interactionally motivated by the physician's behaviors. The patient's leaning forward projects a move to stand up and inferably a move to get onto the examination

68 PAT: . . . maybe I need tuh_ .hh (0.5) see you again.
69 (.)

Figure 18

72 PAT: ((Tap tap on chair arm))
73 (1.0)

Figure 19

74 DOC: (°Okay.°)
75 PAT: #Hmh#=hh ((thr oat clear))

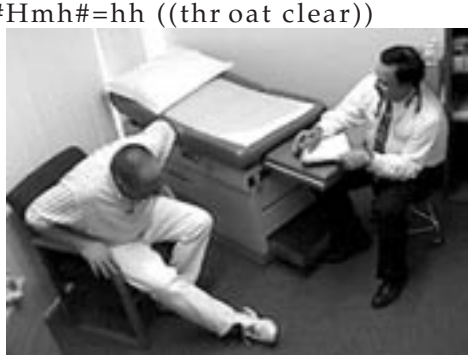

Figure 20

76 DOC: [ ) >So I< wantchu_ (.)

Figure 21

77 DOC: I'm gonna send you . . .

Figure 22

79 DOC: [An'

Figure 23

table (something he does two lines later; Figures 25–27). This action displays the patient's understanding of the physician's verbal and nonverbal behaviors as projecting a transition to examination. In this case, as in Transition 1, the patient relies on phase-structural resources in order to make sense of these verbal (e.g., "Alright." and wrapping up unfinished business) and nonverbal behaviors (putting the records away and pushing in the table extension) as projecting a transition to examination.

As the patient holds his position from Figure 22 and monitors the physician, the physician sets down the records and, remaining on his stool, begins to reach for a tongue depressor (Figure 23). In reaching for an examination-relevant tool, the physician more definitively projects that he is in the process of making a transition into the activity of examination. In Figure 24, the physician continues to retrieve the tongue depressor and begins to stand up, which further projects the closure of history taking. Additionally, insofar as the physician has already projected a transition to examination, his standing up projects that it will be conducted from a standing position. In response, and as was projected by the patient's body orientation throughout Figures 22–24, the patient also begins to stand (Figure 25). The patient stands in preparation for getting onto the table (Figures 26–27) and thus displays his understanding both that the physician is making a transition into the activity of examination and that this activity will be conducted on the table.

As the physician brings both the tongue depressor and the otoscope (retrieved in Figure 27) over to the patient, the patient straightens his torso and clasps his hands in his lap (into the position shown in Figure 28). The patient's bodily relocation and adjustment parallel that of the woman in Transition 1 (Figures 5 and 7–13) in that both occur in the transition from history taking to physical examination, the completion of both are coordinated with the approach of the physician, and both are performed to prepare for, and cooperate with, the projected examination. As the physician begins his turn at line 83, he moves the otoscope toward the patient's ear and initiates the activity of examination (Figure 29).

Transitions 1 and 2 provide evidence that physicians and patients can unproblematically accomplish transitions from history taking to physical examination by relying primarily on nonverbal and phase-structural resources; that is, without relying on overt explanations, instructions, or requests to accomplish the examination. Admittedly, participants did rely on some verbal resources for accomplishing the transition. For example, in both cases the physicians use "Alright" to initiate the closure of history taking and project a transition to a new activity (Beach, 1995b). Despite this, however, patients only displayed their orientations to the transition being in progress upon observing nonverbal behaviors that communicated that physicians were bodily initiating, in contrast to verbally pro-

79 DOC: then we'll:=uh . . .

Figure 24

79-80 DOC: we'll:=uh (0.5)

Figure 25

80 DOC: uh physical. . .

Figure 26

80 . . . ‘cause we haven’ done that yet.
81 (0.5) (0.5)

Figure 27

81 (1.0) (2.0)

Figure 28

85 PAT: We’re mo:ving.

Figure 29

jecting, a transition. For example, in Transition 1, the patient uncrosses her legs not in response to the physician's "Alright." but to the physician's manipulation of the pen out of writing position. Similarly, in Transition 2, although the patient shifts his gaze to the physician in response to the "Alright." he stops leaning back in response to witnessing the physician simultaneously removing the records and pushing in the table extension.

When compared to cases examined by prior research, such as Extract 1, Transitions 1 and 2 may initially appear anomalous, or at least to constitute a different type of transition from history taking to physical examination, one that relies on nonverbal, versus verbal, resources. However, this is not the case. The nonverbal behaviors that we have described appear to be standard components of the transition from history taking to examination regardless of the inclusion of overt verbal references to the transition, such as requests to examine patients or explanations that examinations are forthcoming. This observation makes sense because, regardless of what gets said, physicians must nonverbally ready themselves and the environment for examinations, which almost always includes preparing their hands (e.g., freeing them of pens and records), approaching patients (e.g., getting up from seated positions), and, if necessary, preparing examination tables (e.g., pushing in leg extensions) and retrieving and readying examination-relevant tools (e.g., tongue depressors).

Although physicians produced transition-relevant, nonverbal behaviors in the accomplishment of 39 out of 40 transitions (98%), there were 16 cases (40%) in which physicians additionally produced overt verbal resources. In Transition 3, although the physician verbally explains the transition to examination, the patient not only relies, but relies initially, on nonverbal resources to understand that the transition is in progress.

Transition 3. In Transition 3, a man is visiting the physician because of allergy problems. After the encounter is opened (data not shown), the physician solicits the patient's problem (line 26) and thus initiates history taking. Toward the end of history taking, the physician asks the patient about the type of allergic reaction he has had to penicillin (lines 88–89). The transition to physical examination is initiated at line 95 (a->) and completed at line 110 (b->). The physician's explanation (or request) is at line 100: "Let me examine you:?" (*->).

Transition 3: ALLERGY PROBLEMS

26	DOC:	'Ka::y, how I can help you today. Noel.
27	PAT:	Well, thuh: reason I'm here is because
28		of my allergy problems,

((59 lines deleted—history taking))

88 DOC: O:kay. .h and uh:: (.) #w:=y::=y-# you d on'
89 remember thuh reaction.
90 PAT: No. I-
91 DOC: I'll [jus' >write (down-)<]
92 PAT: [I don't. tuh be honest] with you.
93 DOC °Penicillin allergy.°
94 (1.8)
95 a-> DOC: £(But we) gotta stay away.£
96 (.)
97 PAT: £Okay,£
98 (.)
99 PAT: Huh ((laughter))
100 *-> DOC: Let me examine you:?
101 (0.2)
102 DOC: And then_
103 (0.5)
104 PAT: .hhh ((sniff))
105 DOC: I'll go over: what can you ta:ke.
106 (.)
107 DOC: To help you with this.
108 PAT: °Okay.°
109 (0.4)
110 b-> DOC: Any problems with your heari:ng? [(or)_]
111 PAT: [N o]:?,

Similar to Transitions 1 and 2, as the physician initiates history taking, she sits down, crosses her legs, opens the records, rests the records on her legs, and ultimately reads and writes in the records. Once again, the activity of history taking is constituted by, and sustained through, a particular contextual configuration composed of a range of verbal and embodied actions. This configuration also includes the patient, who sits on the table and gazes at the physician. As seen in Figure 30, the physician and the patient maintain this configuration throughout history taking (the patient's wife is also present).

At line 95, the physician begins to initiate the closure of history taking both verbally and nonverbally. Verbally, her turn "£(But we) gotta stay away£" is positioned after the completion of the topic dealing with whether or not the patient is allergic to medications and formulates an upshot of that topic (i.e., the patient must "stay away" from penicillin, to which he is allergic). Such formulations are recurrently used as practices for projecting a topic's closure and paving the way for the initiation of a new topic (Button, 1985; Davidson, 1975). Nonverbally, as the physician produces her turn, she removes the pen from the medical records and manipulates it out of writing position (Figure 31). She then closes the

records and begins to set them down, thereby placing them out of use (Figures 32–33). As she sets the records and the pen down, she uncrosses her legs and begins to stand (Figure 33). Insofar as the physician's nonverbal behaviors deconstruct those that had been used to construct history taking, they initiate the closure of history taking and project a transition to a new activity. By freeing her hands and standing, the physician begins to bring herself into a position from which she can perform the examination. The patient displays his orientation to these behaviors as projecting a transition to examination by beginning to reposition his lower body. As the physician sets the records down and prepares to stand, the patient begins to move his left leg slightly forward and up (Figure 33 can be contrasted with Figure 32). Similar to the patients in Transitions 1 and 2, the patient displays his orientation to an upcoming examination by beginning to reposition himself on the examination table. Again, it is arguable that the patient relies on phase-structural resources to make this determination.

The physician's "Let me examine you:?" (line 100) functions similarly to an "online explanation of a procedure" (Heritage & Stivers, 1999). In describing her forthcoming course of action (i.e., physical examination), the physician verbally projects a shift to examination. The patient responds nonverbally. Across the physician's turn, the patient upgrades his initial, minor repositioning of his left leg to a major readjustment of his lower body. This upgrade can be seen by comparing Figure 33, which occurs just prior to the word "examine," to Figure 34, which occurs upon completion of "examine."

Upon hearing "Let me examine" the patient has access to multiple modes of resources—both nonverbal and now verbal—for understanding that a transition to physical examination is in progress and this new information may account for his more dramatic bodily readjustment. As seen in Figure 35, the patient completes the readjustment of his lower body as the physician begins his examination. In addition to repositioning his lower body, he has moved his torso slightly forward, has adopted a middle-distance position, and is tilting his head to accommodate the forthcoming examination of his ear (see Heath, 1986).

In contrast to Transitions 1 and 2, the physician and patient in Transition 3 rely more fully on verbal resources for accomplishing the transition to physical examination. Nonetheless, they simultaneously and initially rely upon the nonverbal resources identified in Transitions 1 and 2. Transition 3 demonstrates that a reliance on nonverbal resources for the accomplishment of the transition is not anomalous or unique. Rather, such a reliance is present both in cases where the transition is accomplished almost solely nonverbally and in cases where both verbal and nonverbal resources are at work. In Transition 3, both the nonverbal and the verbal

95 DOC: £ (But we) g<u>o</u>tta. . .

Figure 30

95 DOC: £ (But we) g<u>o</u>tta stay. . .

Figure 31

96 (.)

Figure 32

100 DOC: Let me ex<u>a</u>mine you:?

Figure 33

100 DOC: Let me ex<u>a</u>mine you:?

Figure 34

110 DOC: Any problems with your h<u>e</u>ari:ng?. . .

Figure 35

behaviors evidently furnish resources for the patient to grasp both that a transition is in progress and that the transition is one to the activity of physical examination. In this way, verbal and nonverbal resources for accomplishing activity transitions are not independent alternatives but rather different modalities that work in concert and mutually elaborate each other. Additionally, in all of the transitions examined so far, participants arguably rely on an orientation to phase structure to accomplish the transition. This orientation was particularly important for patients, since it provided an additional resource that we argue was necessary for them to understand physicians' verbal and nonverbal behaviors as being transition relevant and as specifically projecting a transition to physical examination.

Transition 4. In Transitions 1–3, patients showed that they understood physicians' contextualized, nonverbal behaviors as projecting a transition to physical examination by responding to those behaviors by beginning to bodily participate in the transition (e.g., getting onto the table and preparing their bodies for examination). However, there are cases in which patients do not collaborate with physicians' transition-relevant, nonverbal behaviors. In these cases, physicians use overt verbal references to the examination (e.g., requests, instructions, explanations) as final, or last-resort, practices for accomplishing the transition. One such case is shown in Transition 4, in which a woman is visiting the physician because of chest congestion and a cough. After soliciting the patient's problem, the physician takes an extensive history (data not shown). At lines 243–246, the patient is completing a telling about a recent visit to a specialist for an unrelated problem; this telling was prompted by a history-taking question from the physician. The transition to physical examination is initiated at line 246 (a->) and completed at line 250 (b->). The physician's transition-relevant instruction is at line 247: "lemme have you sit up here," (*->).

Transition 4: COUGH AND CONGESTION

243	PAT:	.hh So: uh:m: anyway he told me to continue doing thee
244		ex- .h=exercises an' doing theh: uh:m (.) uhm (1.0)
245		tlk soaking it, h=an' massaging thee area.=It's just
246 a->		on my arch. down towards my .hh uh:=hh fourth toe,
247 *->	DOC:	Okay lemme have you sit up here,
248	PAT:	#HUH .H HUH# #hmh# ((cough))
249		(8.0)
250 b->	PAT:	I haven't averaged (an' Trudy hasn't averaged we haven't)
251		averaged more than two=hh to three hours sleep.

As in Transitions 1–3, the configuration of the physician's body during history taking includes being seated, having the records open (in this case, on his lap), holding a pen, and writing in the records; the patient is sitting down, bodily oriented toward the physician, and gazing at him (Figure 36). At line 246, just as the patient produces "arch." which possibly completes her turn (Sacks, Schegloff, & Jefferson, 1974), the physician begins to deconstruct his history taking configuration and thus nonverbally initiates a transition out of this activity: He shifts his torso away from the patient, sets the records aside, and sets the pen on top of the records (Figure 37). The physician's behaviors can be understood as initiating a transition into the specific activity of physical examination by reference to their placement in the phase structure of the encounter. Unlike the patients in Transitions 1–3, this patient does not display an orientation to these behaviors as being transition relevant. Her posture, except for her hands (which are gesturing in relation to her talk), remains the same from Figure 36 to Figure 37.

After setting the pen down, the physician continues his nonverbal transition. He returns his torso toward the patient and places his hands on his legs for balance in preparation for standing. At this point, the patient still does not show any orientation to the transition. As the physician begins to stand up, he says "Okay" (line 247), which initiates closure of the patient's telling, proposes closure of the larger activity of history taking, and verbally projects a transition to a new activity (Beach, 1995b). Even at this point, the patient does not show an orientation to the transition (Figure 38). Arguably, it is in the face of the patient's lack of orientation to these nonverbal resources that the physician offers a verbal instruction in order to enlist the patient's collaboration in accomplishing the transition: "lemme have you sit up here," (line 247). In response, the patient moves onto the table and the physician begins the examination (Figure 39).

In contrast to the patients in Transitions 1–3, the patient in Transition 4 does not collaborate with the physician's nonverbal behaviors. However, these behaviors were nonetheless produced by the physician and were available for understanding by the patient as initiating a transition out of history taking and into physical examination. The physician's placement of a vocal instruction to the patient after the production of these nonverbal behaviors is some evidence of his orientation to nonverbal behaviors as being resources for projecting, and thus accomplishing, the transition.

243 PAT: . . . continue doing thee

244 ex- .h=exercises an' doing the:

Figure 36

246 PAT: towards my .hh uh: hh fourth toe,

Figure 37

247 DOC: Okay lemme have you sit up here,

igure 38

250 PAT: . . . Trudy hasn't averaged we haven't) averaged . . .

Figure 39

DISCUSSION

This article investigated how physicians and patients interactionally accomplish the transition from the activity of history taking to that of physical examination by relying on a range of verbal, nonverbal, and social-structural resources working in concert and in context. Prior research has highlighted participants' reliance on overt verbal references to the examination, such as physicians' requests, instructions, and explanations (Bates, Bickley, & Hoekelman, 1995; Billings & Stoeckle, 1989; Frankel, 1983; Greenberger & Hinthorn, 1993; Heath, 1986; Levinson, Roter, Mullooly, Dull, & Frankel, 1997; Seidel, Ball, Dains, Joyce, & Benedict, 1995; Swartz, 1998; Zoppi, 1997). Indeed, this article showed that these behaviors can be practices for accomplishing transitions; in a variety of ways, they project a shift in involvement to physical examination and prompt and enable patients' cooperation with the transition (e.g., Transition 4; see also, Frankel, 1983; Heath, 1986). However, this article demonstrated that, prior to overt verbal references, physicians typically initially engage in nonverbal behaviors that are functionally related to the transition to examination, such as freeing their hands of pens and medical records and standing up. It was argued that patients are only able to understand these behaviors as projecting a transition to examination by situating them within other contexts. In response to physicians' transition-relevant, nonverbal behaviors, patients frequently nonverbally participate in, and thus collaborate with, transitions (e.g., getting onto the examination table and preparing their bodies for examination). Because physicians can see patients' participation, they can refrain from overt verbal references to the examination and transitions can be accomplished unproblematically in a virtually wordless fashion (60% of the visits; e.g., Transitions 1 and 2). Thus, in at least some cases (e.g., Transition 4), although physicians' overt verbal references to physical examinations can be practices for accomplishing transitions, they are produced as last resorts in response to patients' lack of cooperation with nonverbal resources.

These findings contribute to three foci of prior research: (a) how physicians and patients accomplish transitions in and through interaction; (b) physicians' verbal explanations of examination-like procedures, their association with the reduction of patients' uncertainty, and its association with health-care outcomes; and (c) theories of the relationship between verbal and nonverbal communication in terms of social meaning. The bulk of this article, including the discovery and analysis of nonverbal and social-structural resources used to accomplish transitions, contributes to the first, conversation-analytic focus of research. This, in turn, contributes to the second focus because these resources also constitute types of "explanations," insofar as they project, and allow physicians and patients to accomplish the transition to, physical examination. The fact that

physicians and patients can accomplish transitions without overt verbal references to the examination throws into relief cases in which, despite the potential for a virtually wordless transition, physicians nonetheless use overt verbal references. For example, in Transition 3, not only was the patient already on the table prior to the transition (and thus virtually prepared for the examination), but the patient understood the physician's nonverbal behaviors as projecting a transition to physical examination and displayed his understanding by beginning to reposition himself on the table before the physician completed the explanation. Thus, it is likely that the physician's explanation, "Let me examine you:?" (line 100), was produced to achieve some communicative function in addition to facilitating the interactional accomplishment of the transition.

Research has shown that, compared to a lack of explanations of examination-like procedures, the presence of such explanations is associated with the reduction of patients' uncertainty (Meyers, 1965; Solomon & Schwegman-Melton, 1987), which in turn is associated with positive health-care outcomes (Hjelm-Karlsson, 1989; Meyers, 1965). Similarly positive results have been found regarding physicians' statements that orient patients to the activity flow of encounters (Levinson et al., 1997; White, Levinson, & Roter, 1993). It is possible that at least one additional communicative function of physicians' overt verbal references to physical examinations is the reduction of patients' uncertainty. If so, then the explanation for patients' reduced uncertainty goes beyond the fact that such references inform patients about the imminence of examination, which is something that patients can garner from physician's transition-relevant, nonverbal behaviors. Another communicative function of such references might be the mitigation of the threats that physical examination, and other intrusive diagnostic procedures, pose to patients' concept of face (Brown & Levinson, 1978; Emerson, 1970; Ragen, 1990).

Despite the need for further research, these findings have implications for the application of health care. For instance, Heath (1986) demonstrated that, once physicians and patients have made the transition into physical examination, patients closely monitor physicians' nonverbal behaviors in order to "determine and respond to the forms of participation they require" (Heath, 1986, p. 118). For example, as we saw in Transition 2, the patient independently tilted his head to facilitate the physician's access to his ear (Figure 29). The present findings extend Heath's observations by demonstrating that patients' close monitoring of physicians' nonverbal behaviors occurs well before the completion of the transition. For example, in Transitions 1–3, patients understood physicians' nonverbal behaviors as projecting a transition to examination and demonstrated this understanding by beginning to reposition their bodies for examination. The fact that patients closely monitor, and understand the implications of, physicians' nonverbal behaviors throughout encounters has implica-

tions for how patients understand a variety of verbal actions that physicians produce. For example, patients are likely to understand physicians' requests to examine patients differently depending on whether or not they are produced when physicians are displaying that they are engaged with the activity of history taking or when physicians are displaying that they are making a transition into the activity of physical examination. If physicians request permission to perform an examination after they have already displayed a transition to examination, these requests might be understood as perfunctory, inauthentic, or lacking in genuineness, and this may shape patients' answers and affect patients' attitudes. This observation extends beyond transitions and applies to a range of verbal actions that have been identified as important to health care, such as physicians' solicitations of patients' additional problems (e.g., "What else is bothering you?") and questions (e.g., "Are there any questions you might like to ask?"; Cohen-Cole, 1991; Frankel, 1990; Lipkin, Frankel, Beckman, Charon, & Fein, 1995; Robinson, in press-a; Swartz, 1998).

This article also contributes to theoretic conceptualizations of the relationship between verbal and nonverbal communication in terms of social meaning. There has been relatively little research on object adapters (for review, see Ekman, 1999; Poyatos, 1983). Despite Poyatos's (1983) acknowledgement that object adapters "can perform interactive functions if intended that way" (p. 137), very little is known about such functions, except for perhaps their role in grooming or cleaning (Ekman, 1999). This article demonstrated that object-adaptive behaviors can accomplish at least the interactive function of projecting activity transitions. However, their production alone does not account for their social meaning. For instance, in Transitions 1 and 3, patients did not understand the physician's nonverbal behavior of manipulating a pen out of writing position as merely communicating the termination of writing. Rather, patients understood it as projecting a transition from history taking into the specific activity of physical examination. This understanding only emerged through patients' contextualization of the nonverbal behavior within: (a) immediately prior talk; (b) that talk's situation within an ongoing activity (i.e., history taking); (c) the verbal and nonverbal constitutive features of history taking; and (d) history taking's position in the phase structure of encounters (i.e., physical examination is the next relevant activity). Thus, the social meaning of communicative events generally, and nonverbal behaviors specifically, is shaped by, and thus dependent on, a variety of social contexts in which they are invariably situated.

Finally, this article contributes generally to research on the micro-macro link—that is, the interrelationship between talk and social structure (Alexander, Giesen, Munch, & Smelser, 1987; Giddens, 1979)—and specifically to the associated methodological concern with how that link can be validly demonstrated (Schegloff, 1987). This article demonstrated when

one particular aspect of social structure (i.e., phase structure) is relevant to participants, how it is made relevant, how it gets accomplished in and through interaction, and how it reflexively organizes social action.

Through a detailed examination of the interactional organization and accomplishment of activity transitions, this article begins to reveal types of physicians' behaviors that can affect patients' uncertainty, self-efficacy, and perceptions of physicians' competence. Future research needs to empirically test these associations, their variation according to a variety of variables (e.g., participants' demographics, practice type, etc.), and their effects on health-care outcomes, such as patients' health status and adherence to medical advice.

APPENDIX

The data have been transcribed according to conventions developed by Jefferson (1984).

DOC/PAT:	*Speaker identification*: Physician (DOC); patient (PAT)
[overlap]	*Brackets*: Onset and offset of overlapping talk.
=	*Equal Sign*: Utterances are latched or ran together, with no gap of silence.
–	*Hyphen*: Preceding sound is cut off/self-interrupted.
#word#	*Number sign*: Words/sounds are produced with a gravel voice.
£word£	*British pound sign*: Talk is produced while smiling.
↑word↓	*Up arrow/Down arrow*: Talk with increased pitch relative to surrounding talk.
↓word↑	*Down arrow/Up arrow*: Talk with decreased pitch relative to surrounding talk.
(0.0)	*Timed Pause*: Silence measured in seconds and tenths of seconds.
(.)	*Parentheses with a period*: A micropause of less than 0.2 seconds.
:	*Colon(s)*: Preceding sound is extended or stretched; the more the longer.
.	*Period*: Falling or terminal intonation.
,	*Comma*: Continuing or slightly rising intonation.
?	*Question mark*: Rising intonation.
word_	*Underline after word*: No intonation shift
underline	*Underlining*: Increased volume relative to surrounding talk.
°soft°	*Degree signs*: Talk with decreased volume relative to surrounding talk.
>fast<	*Greater-than/less-than signs*: Talk with increased pace relative to surrounding talk.
<slow>	*Less-than/Greater-than signs*: Talk with decreased pace relative to surrounding talk.
.h	*Periods preceding h's*: Inbreaths; the more the longer.
h	*Hs*: Outbreaths (sometimes indicating laughter); the more the longer.
hah/heh	*Laugh token*: Relative open or closed position of laughter
(that/hat)	*Filled single parentheses*: Transcriptionist doubt about talk.
((Cough))	*Filled double parentheses*: Scenic details, or an event/sound not easily transcribed.

NOTES

1. Phase structures are extremely common in institutional interactions, such as calls to 911 (Zimmerman, 1984, 1992), calls to the fire department (Bergmann, 1993), calls to poison-control centers (Frankel, 1989), student-counsellor interviews (Erickson & Schultz, 1982), classroom lessons (Mehan, 1979), courtroom plea-bargaining sessions (Maynard, 1984), truancy calls from schools to parents (Heritage, 1997), medical peer-review sessions (Boyd, 1998), and adjuvant therapy visits (Roberts, 1999).

2. Conversation analysis (CA) relies on naturally occurring conduct to describe the norms and rules of interaction inductively; this includes a description of the interactional practices through which people produce their own behavior and understand and deal with the behavior of others. For example, researchers have examined how people build and coordinate turns of talk (Sacks, Schegloff, & Jefferson, 1974); repair problems of speaking, hearing, and understanding (Schegloff, Jefferson, & Sacks, 1977); and build actions (e.g., offers, requests, assessments) and activities (e.g., opening and closing interactions; Schegloff, 1968, 1995, 1996). A large number of CA studies have described how participants verbally and nonverbally construct and organize medical activities such as openings (Coupland, Coupland, & Robinson, 1992; Coupland, Robinson, & Coupland, 1994; Heath, 1981; Robinson, 1998, 1999, in press-b), history taking (Beckman & Frankel, 1984; Beckman, Frankel, & Darnley, 1985; Boyd & Heritage, in press; Frankel, 1995, 1996; Gill, 1998; Gill & Maynard, in press; Halkowski, in press; Heritage, in press; Psathas, 1990), physical examination (Heath, 1986; Frankel, 1983), diagnosis (Heath, 1992; Maynard, 1989; Peräkylä, 1998), and closings (Heath, 1986; Robinson, in press-a).

3. Object adapters, or what Ekman (1999) now refers to as manipulators, are "all activities or positions in which parts of the body come into contact with other parts, with someone else, with certain animals, or with the objectual environment" (Poyatos, 1983, p. 137). Object adapters include resting the body on furniture (e.g., sitting down on a stool) and performing occupational, instrumental tasks (e.g., writing, manipulating medical records, etc.; Poyatos, 1983).

4. The patient does not appear to respond to the physician's *sotto voce* "(°Okay°)" and thus may not have heard it.

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