

Hand Touching Hand: Referential Practice at a Japanese Midwife House

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Abstract This article focuses on referential practices at a Japanese midwife house, where at prenatal examinations, a midwife palpates a pregnant woman's abdomen with her hands, without any assistance from an ultrasound scanner. The midwife often refers to spots on the abdomen in palpation with locative demonstrative expressions. I demonstrate that ways in which references to spots on the pregnant woman's abdomen are accomplished are subtly different, depending on the action sequence in which they are embedded. The description of referential practices in which the touching plays an important role has consequences for the re-conceptualization of human interaction in general, and interaction between medical professionals and their clients in modern medical settings in particular.

Keywords Action sequencing · Conversation analysis · Midwife house · Multi-sensory accomplishment of reference · Normative structure of the body · Palpation · Referential practice

Introduction

The success in reference to objects, locations, actions and the like is crucial for human beings to live with their fellow humans in the material, sensible world. They need to grasp what each other talks about, sees, hears, and the like to do something together. In this article, I elucidate some ways in which reference to objects or

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locations is achieved on a specific occasion, namely, at a midwife's palpation of a pregnant woman's abdomen. During the course of palpation, in order to show the current condition of the "baby"¹ to a pregnant women, midwives refer to body parts of the baby inside the pregnant woman. In what follows, I focus on referential practice by a midwife at a Japanese midwife house.² Referential *practice* is what parties actually do in order to refer to a certain object in the actual situation, employing an indefinite set of resources for the accomplishment of reference, such as postures they assume, hand gestures and verbal expressions they use, and the timing of producing these postures, gestures and expressions.

Midwives in Japan are legally entitled to practice independently of hospitals and clinics, if affiliated with an obstetrician, who conducts special examinations and tests occasionally for their clients and also intervenes when pregnancy turns out not to be normal. Midwife houses differ from clinics institutionally, in that midwives can only deal with normal pregnancies and are prohibited from "medical" treatments such as an episiotomy without supervision by an obstetrician. Though midwife houses are equipped with various medical devices such as an ultrasound scanner, on the whole they look like ordinary houses, namely it rather looks as if such devices has been installed in an ordinary house. The number of deliveries at midwife houses is estimated to be about one percent of all deliveries in Japan, while the vast majority of deliveries are performed at a hospital or clinic (Ministry of Health, Labor and Welfare 2004). Midwife houses may be a place where traditional and medical approaches to delivery intersect, such that they occupy a marginal and unique position in the contemporary Japanese medical system. We videotaped six examinations performed by the same midwife. She never used a fancy device such as an ultrasound diagnostic scanner (she used a small ultrasound device only when she listens to fetal heartbeats). She used the most ancient of human "tools" for various examinations, namely, her own hands palpating, externally and internally.

¹ All the parties to the interaction to be analyzed in what follows use the term "baby" ("akachan") consistently. Accordingly, I will use the term throughout this article to refer to the fetus.

² This study is part of a larger body of research currently underway, concerning ways in which women experience the encounter with medical professionals, their own bodies, fetuses, and the like, in Japanese obstetric and gynecological (OB/GYN) settings, clinics or midwife houses. My colleagues and I have videotaped about 60 visits at four OB/GYN clinics, at the OB/GYN division at four hospitals and three midwife houses (including about 35 clients, pregnant women or other types of "patients"). OB/GYN occupies a central position in our society in the sense that not only do most people have to be involved with it at least once at the very beginning of their lifetime but also it is the field which has been providing highly advanced medical technologies, such as genetic engineering, with crucial resources and, in turn, advanced technologies of various kinds have been applied intently to OB/GYN, to treat infertility, to practice prenatal examinations, and the like. We thought that it is very important to register what both medical professionals (doctors, midwives, nurses, and the like) and their clients (pregnant women, women with gynecological complaints, and the like) experience and perceive actually in the technological environment of OB/GYN settings, precisely because various aspects of women's lives are involved (for empirical researches that aim at it, for example, see Banks 1999, for the history of birth chairs; Franklin 1997, for assisted conception; Jordan 1993, for midwifery; Lock 1993, for menopause; Rapp 1999, for amniocentesis; and Tsuge 1999, for infertility; see also Martin 1989, for a general discussion based on analyses of various texts and discourses related to childbirth). One of the purposes of the entire research project is to pursue the detailed description of experience and perception by parties to OB/GYN settings through the analysis of videotaped actual encounters between them.

I do not claim that referential practices that I elucidate are unique to Japanese midwife houses, or to any medical settings. What the midwife does actually in examining the fetal presentation, for example, provides us with a clear sense of how reference is interactionally accomplished in the coordination of vision, touch and talk within a distinct activity. I believe that this accomplishment of reference indicates an important way in which we experience the world that we live in.

Particularly, I explore a way in which a professional midwife refers to an object when she instructs a student midwife how to complete the standard abdominal palpation, called Leopold's Maneuvers.³ In an instructional context, parties accomplish reference in a way markedly different from the straightforward way of reference, namely, in a more complex way, which the parties themselves appear to be oriented to as complex, deviant from the simple and straightforward way of reference. This study follows the conversation analytic tradition in the detailed analysis of naturally occurring interaction. Conversation analytically oriented research has been demonstrating that referential practices are organized in the actual context of the current activity, sensitively to their sequential position in the actual development of interaction (Goodwin 2003; Hindmarsh and Heath 2000a, b among others). Following this tradition, I also take as an analytical unit a distinct activity that is sequentially organized, rather than a linguistic form, a single hand gesture or the like. On the other hand, however, I aim at subtle distinctions in how reference is accomplished, which are oriented to by all the parties to the current activity.

An Example: Hand Touching Abdomen

I begin with one of the simplest cases in which references are achieved. A midwife, while palpating a pregnant woman's abdomen, said, "The baby has come down to a good position." The woman, who was pregnant for 37 or 38 weeks at the time, visited the midwife house to have a periodical examination. Excerpt 1 follows this explicit positive assessment of the client's (or clients', namely, the mother's and the baby's) condition. The midwife shows the locations of the baby's body parts to the client, the pregnant woman.

Excerpt 1 (MF1 #1 01:02:05-12)⁴

³ Leopold's maneuvers are employed to determine the lie of an unborn baby, consisting of four maneuvers: (1) determination of what fetal part is at the uterine fundus (see Fig. 1), (2) evaluation of the fetal back and extremities, (3) determination of what fetal part is above the pubic symphysis, and (4) evaluation of the fetal presentation.

⁴ All the excerpts cited in this article are composed of three parts: At each numbered line, there is a romanized original Japanese transcript, and below this are phrase-by-phrase glosses. Finally a rough English translation is added after each turn. Those Japanese words, which are focused on in the discussion in the text are made **bold**. In the original transcript a transcription system developed by Gail Jefferson is used (see Jefferson 2004, for its most recent version). In phrase-by-phrase glosses the following abbreviations are used:

JD Judgmental
P Particle

01 MDW: de akachan wa desu ne? (.) ee:: (.) >wakari masu?<
 and baby P JD P uhm see JD

02 --> **koko**: n- ga oshiri: [desu ne. nn:::n.]
 here P buttocks JD P yeah

“Then with respect to the baby, do you recognize? Here are the buttocks, yeah.”

03 CLN: [hai. (n:::n)]
 yes yeah

“Yes. (Yeah.)”

04 (MDW: .h)

05 (0.6)

06 MDW: --> **kocchi** ni senaka de:
 here P back and

“Here is the back, and”

07 CLN: hai.
 yes

“Yes.”

08 MDW: nn:::n. wakari yasui desu ne.
 yeah see easy JD P

“Yeah. ((They are)) simple to recognize, yeah.”

The midwife uses a demonstrative expression at lines 02 and 06 (“*koko*” and “*kocchi*,” both meaning “here”⁵), while touching the client’s abdomen with her hands (or fingers), and names things *there* as “the buttocks” and “the back,” respectively. The reference here is as straightforward as when one refers to a location of a photograph on a desk, by pointing there and saying, “Here is a picture of your uncle.” The midwife refers to the location of the baby’s main body parts, and the client claims to recognize the body parts at the location at lines 03 and 07, by saying “*hai* [yes].”

The Target Case: Hand Touching Hand

When the client, the pregnant woman, in Excerpt 1 visited the midwife, a student midwife happened to be taking “clinical” training there. Subsequent to the demonstration, reproduced as Excerpt 1 above, the midwife asked the client to allow the student midwife to touch the client’s abdomen. With the client’s permission, the student midwife positioned herself at the place a midwife is supposed to occupy during palpation.

Excerpt 2 (MF1 #2 02:01:11-25)

⁵ Expressions “*koko*” and “*kocchi*” are different subtly from each other, of course. “*koko*” means more straightforwardly “here,” a location in the speaker’s vicinity. “*kocchi*,” on the other hand, highlights a contrast of the designated location to another location or thing. In the case at hand, the location designated as “*koko*” at 02 has been established as a base, in contrast to which another location is designated with the expression “*kocchi*.” The use here of “*kocchi*” is orderly with respect to the current activity the parties engage in. The spatial relation of these two localities is crucial for an attempt to demonstrate the normal arrangement of the baby’s body parts. I will later return to the organization of this activity of theirs.

01 MDW: *shikyuu tee (o) n. sukoshi hatte masu ne:;*
uterus fundus P yeah a little stiff JD P

"And the uterine fundus, yeah, ((the stomach is)) a little bit stiff."

02 MDW: *n soo soo shikyuu tee [joo ni: te:];*
yeah right right uterus fundus on P hand

"Yeah, that's right. Hands on the uterine fundus."

03 STD: *[°shitsuree shimasu°]*
excuse me

"Excuse me."

04 (.h/(0.8))

05 STD: *°ha [chotto hatte:°]*
yes a little stiff

"Oh yes a little bit stiff"

06 MDW: *[nn. soo desu ne; 'nde] n n:n. (.) de:*
yeah that JD P and yeah right and

"Yeah. That's right. And then- Yeah yeah. And then"

07 MDW: --> *kono hidari te no koko ni;*
this left hand of here P

08 (0.2)

09 MDW: *kataku te marui no ga fureru des[ho.*
hard and round thing P feel right?

"At this place of this left hand, ((you)) feel a hard and round thing, right?"

10 STD: *[ha:i.*
yes

"Yes."

11 MDW: *kore <oshiri> des' ne:;*
this buttocks JD P

"This is the buttocks."

12 MDW: *(.) oshiri chan ne:;*
buttocks P P

"A cute little butt."

13 STD: *h[h uh[h uhh*

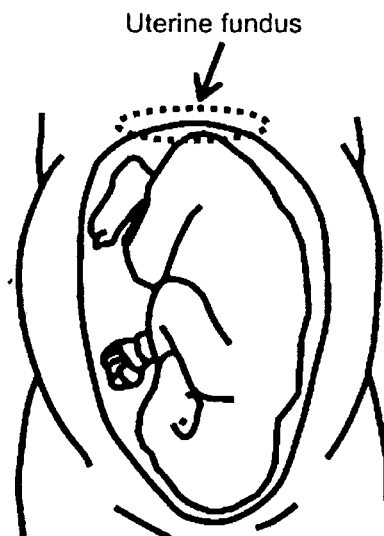
14 MDW: *[n. [>de moo chotto< ha[i dai- n dai] ni <dan> de:*
yeah and more a little yes yeah second step at

"Yeah. And a little more. Yeah. At the- Yeah. At the second step"

15 STD: *[kawairash-*]
cute

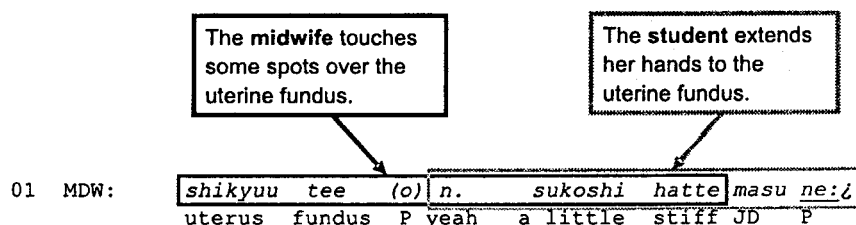
"That's cute-"

Fig. 1 The uterus and the fetal presentation



When the midwife mentions the uterine fundus (the upper end of the uterus; see Fig. 1) at line 01, she touches some abdominal spots over the uterine fundus. While doing this, she also makes a remark in passing about the abdomen's condition (“[the stomach is] a little bit stiff”), looking to the client, which means that the delivery time is near. During the midwife's remark, the student moves to put her hands on the abdominal part covering the uterine fundus, seemingly following the midwife's touching of the client's abdomen.

Excerpt 2a: 01

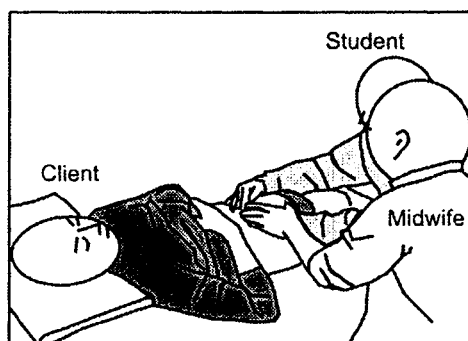


“And the uterine fundus, yeah, ((the stomach is)) a little bit stiff.”

The activity that the parties engage in here is instructional, and the midwife teaches the student how to perform a standard abdominal palpation in midwifery. Standardly, the palpation should begin with examining the position of the uterine fundus, which indicates the size of the uterus, and then examining the baby's body part which is supposed to be near the uterine fundus. In the case of a normal cephalic presentation, the buttocks can be felt near the fundus (see Fig. 1).

Notice that the student is supposed to have learned the basics about palpation before “clinical” training. Indeed, she demonstrates her knowledge by settling herself at the right position for the palpation and putting her hands on the right place of the client's abdomen in the right shape without instruction from the midwife. The midwife accepts this demonstration of the student's by saying “Yeah, that's right” at line 02 and then formulating, with a standard (text-like) expression, what the student is doing (“*shikyuu tee joo ni te:ɔ* [Hands on the uterine fundus]”). This is what happens at the beginning of Excerpt 2. What I want to focus on here is the

Fig. 2 The midwife puts her left hand on the student's left hand, while saying "Hands on the uterine fundus"



midwife's referential practice at line 07, but before going into it, a more detailed description of the context is in order.

When the midwife formulates what the student is doing at line 02, however, the midwife puts her left hand on the student's left hand, and moves it slightly upward (see Excerpt 2b & Fig. 2). This conduct by the midwife appears to rectify the place where the student put her hands on the client's abdomen, while partially accepting the correctness of the place by saying "that's right" at line 02. After a silence (which may be filled with in-breath) at line 04, the midwife positively evaluates the current position of the student's hands, saying "*nn. soo desu ne_j* [Yeah. That's right]" at line 06. Here, it should be noted, the parties' identities, "teacher" and "student," have been established by the organization of an instruction sequence, initiated with the guidance of the student's hand and closed with a positive evaluation by the midwife (a sequence of actions that Mehan 1979, describes; for action sequencing in general, see Schegloff 2007).

Excerpt 2b: 02

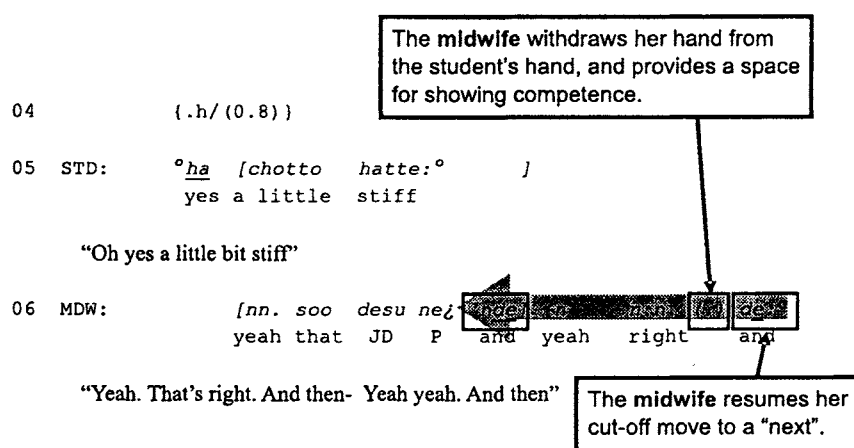
		The midwife puts her left hand on the student's left hand.	
02 MDW:	<i>n soo soo</i>	<i>shikyuu tee [joo ni: te:]_j</i>	
	yeah right right	uterus fundus on P hand	

"Yeah, that's right. Hands on the uterine fundus."

Indeed, the midwife immediately moves on to instruct the student which place on the abdomen is to be examined "next," by moving the student's left hand to that place, while saying "'*nde*[and then]" at line 06, a token marking what follows as "next." However, at line 05, at almost the same time that the midwife begins to accept the current position of the student's hands, the student begins to express what she notices, namely, the stiffness of the abdomen, as an agreement to the midwife's remark at line 01 ("Oh yes a little bit stiff"). In doing "noticing" something that should be noticed, certainly, the student displays a competence, though she does not demonstrate the competence for performing the palpation in the standard way. Indeed, the midwife, immediately after the student expresses what she has just noticed, accepts the student's remark by self-interrupting her (the midwife's) incipient next move marked as "next" and producing an acknowledgment of the student's "noticing," with "*n n:n* [Yeah yeah]" at 06 (see Excerpt 2c). Moreover,

after this, during the micro-pause at 06, the midwife withdraws her left hand from the student's left hand momentarily, and appears to provide an opportunity space which the student may utilize to further demonstrate her competence for the palpation by independently moving on to what to do next, namely, to the examination of the baby's body part near the uterine fundus. Just after, however, the student does not take advantage of the opportunity space provided here, the midwife moves the student's left hand with her left hand, again, and goes on to instruct the student where and what to feel, marking what follows as a "next" step and also a "resumption" of what was self-interrupted, with "*de* [and then]," namely, the same word as was uttered previously.⁶

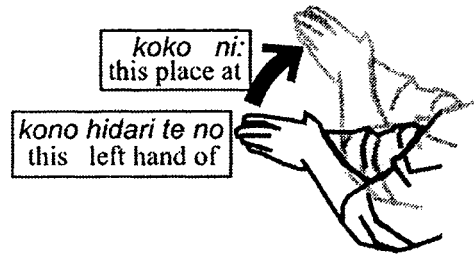
Excerpt 2c: 04-06



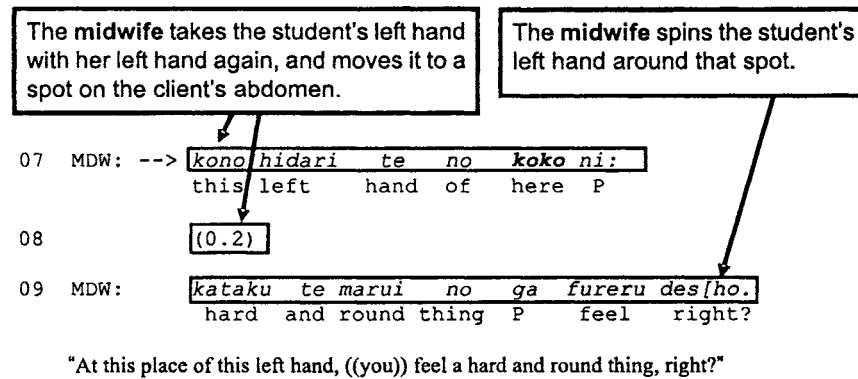
The midwife's referential practice at line 07 ("*kono hidari te no koko ni*: [at this place of this left hand]") is initiated in this *very* instructional context, in which the student did not show a full competence for performing the palpation independently and the parties' identities, "teacher" and "student," have been established. The question is: What does the demonstrative expression "*koko* [this place]" at 07 refer to? (I will later return to another demonstrative expression, "*kono* [this]" at the beginning of the line. It suffices here to mention that "*kono hidari te* [this left hand]" refers to the student's left hand, which is now taken by the midwife's left hand.) Without consulting the video, one may think that the phrase "*hidari te no koko* [this place of the left hand]" refers to a specific spot of the student's left hand. However, it should be noted that the midwife moves the student's left hand with her left hand towards a specific spot of the client's abdomen precisely when she, the midwife, utters the demonstrative expression "*koko* [this place]," and stops it at that spot during the 0.2 s long pause (see Fig. 3). Then, she slightly rotates the student's hand around that spot with her left hand, while saying "*kataku te marui no ga fureru desho* [(you) feel a hard and round thing, right?]" (see Excerpt 2d). It is now evident that the demonstrative "*koko* [this place]" refers to that spot of the client's abdomen that the student's left hand was guided to.

⁶ We, native Japanese speakers, hear that both "*de*" and "*'nde*" are abbreviated forms of "*sorede* [and then]."

Fig. 3 The midwife moves the student's hand, while saying "koko ni: [at this place]"



Excerpt 2d: 07–09



However, this reference is distinct from the one in Excerpt 1 in two respects. First, it is still the case that the spot of the abdomen is prominently related to the student's left hand by the construction of "kono hidari te no koko ni: [at this place of this left hand]." As noted previously, this utterance includes two demonstrative expressions, "kono" and "koko." We have seen what the latter, "koko," referred to, but what did the former, "kono," or "kono hidari te [this left hand]," hearably refer to? Of course, it referred to the student's left hand, but moreover it refers to the student's left hand as is currently positioned, namely, the student's left hand as is positioned over the uterine fundus. One may paraphrase the expression "kono hidari te no koko ni: [at this place of this left hand]" into "your left hand positioned in *this* way now reaches *this* place on the abdomen" or the like. Important is the fact that in the ongoing referential practice the midwife exhibits her orientation not only to a particular spot of the abdomen to be touched but also to the movement of the (student's) hand that ought to touch that spot. The spot on the abdomen is now coordinated, not only with the object that the student can feel right there (see below), but also with the position that the student's left hand occupied immediately before. The coordination of these two localities, between which the student's left hand is moved, is very relevant to the current instructional context, because the palpation that the midwife teaches involves "maneuvers," namely, how to operate hands. The current position of the student's touching hand is thus ongoingly oriented to by the parties, the midwife and the student, together with the spot being touched. In contrast, it is not evident, either from the utterance design or other conduct, that the referential practice in Excerpt 1 includes any orientation to the touching hands as an integral part of the referential practice. In Excerpt 1, the midwife went for the objects, namely, the baby's buttocks and back, straightforwardly, by using the utterance format "here is X".

Second, the midwife's utterances at lines 09 and 11 are constructed such that the object being referred to is formulated in two stages, namely, first as "a hard and round thing" at 09, and then, after the student accepts the first formulation at 10, as "buttocks" at 11. I reproduce the segment as Excerpt 2e for the reader's convenience:

Excerpt 2e: 09-11

07 MDW: *kono hidari te no koko ni:*
 this left hand of here P

08 (0.2)

09 MDW: *kataku te marui no ga fureru des[ho.*
 hard and round thing P feel right?

"At this place of this left hand, ((you)) feel a hard and round thing, right?"

10 STD: *[ha:i.*
 yes

"Yes."

11 MDW: *kore <oshiri> des' ne:,*
 this buttocks JD P

"This is the buttocks."

Note also that the midwife uses the word "*fureru* [(tactically) feel]" or the "you (tactically) feel X" formulation here, in contrast to the straightforward assertive expression "here is X" in Excerpt 1. When the midwife utters the demonstrative expression "*koko* [this place]" at line 07 in Excerpt 2, she therefore refers to the spot of the abdomen, the touching of which causes a specific tactile sensation ("feeling") on the touching hand. A tactile structure, formulated as "hard and round," is first identified at the location of the abdomen being referred to (at 09), and then this tactile structure is named as the baby's body part, "buttocks" (at 11). In other words, here again, the parties' orientation to the touching hand at which that sensation is being caused is made salient, together with the touched object, a particular spot of the abdomen.

In sum, the referential practice at line 07 in Excerpt 2 is prominent in two respects, compared with Excerpt 1. First, though the midwife refers to a spot of the touched abdomen with the demonstrative expression "*koko* [this place]," her referential practice evidently involves the parties' orientation to the touching hand as well. The referential practice appears to be related to the current interactional context, in which one gives instruction on how to use one's hands to examine the conditions of the client's uterus and the baby. Moreover, when one attempts to ostensibly define an object to be examined for a student who is not fully competent, first highlighting the sensory structure caused immediately on the student's hand, and then naming what the sensory structure *represents*, must be an appropriate procedure. Second, related to this point, the referential practice is prominent also in the sense that reference is made to the representational structure yet to be named. The sensory structure is, as it were, torn off the object and referred to as an indicator

of the latter. The prominence of referential practice in which the representational relationship between the sensory structure and the object being sensed is established is also an organizational feature of a distinct activity, namely, an instructional activity.⁷

The Normative Structure of the Hand

The mention of the parties' orientation to both the touched object and the touching hand may remind one of Merleau-Ponty's (1964/1968) notion of "intercorporeity":

If my left hand can touch my right hand while it palpates the tangibles, can touch it touching, can turn its palpation back upon it, why, when touching the hand of another, would I not touch in it the same power to espouse the things that I have touched in my own? (p. 141)

When one of my hands touches the other, the world of each is open to the world of the other, and similarly, "since other bodies would be known by me in the same way as would be my own, they and I would still be dealing with the same world" (p. 141). Merleau-Ponty further argues that touching and being touched are reversible both within one's body, and between one and another person, and that this reversibility indicates the "synergy" among different organisms as well as within each organism.

In the preceding section, I did not describe how the parties are oriented to *the midwife's* hand that touches the student's hand, though the reversibility of the subject and the object, touching and being touched, seems to be more straightforwardly involved in the midwife's hand touching/being touched by the student's hand that touches an object. Indeed, in Excerpt 2 several things are evident: (1) the midwife feels the student's hand, when she refers to the student's hand by taking it and saying "*kono hidari te* [this left hand]" (at 07); (2) the midwife feels a "hard and round thing" through the student's hand (she claims that she feels it for herself when she says "*koko ni: kataku te marui no ga fureru desho* [at this place ((you)) feel a hard and round thing, right?]" at 07–09); and (3) the midwife feels (or knows from tactile sensation) that the student feels a "hard and round thing" (because the midwife requests confirmation that the student does, by saying "*fureru desho* [(you) feel, right?]," claiming that she knows it). The midwife's tactile perception is, as it were, multilayered because of the midwife's hand touching the student's hand, in turn, touching an object. However, there was *no* evidence that they, the midwife and

⁷ The relationship in which visual impressions, visual images, electric pulses in the nervous systems and so on, represent the object being seen *must not always* be relevant, contrary to the cognitivist assumption about vision and other mental phenomena. I do not deny that some visual images, electric pulses, or the like, may represent something on some occasions. However, the representational relationship between those images, electric pulses, etc. and the objects represented by them makes sense only on specific occasions, such as the one that we examined in the text (another occasion may be a psychological experiment; see Nishizaka 2000). Moreover, when the representational relationship between two things is relevant, one directly (without any intermediate representations) perceives or experiences the representational structures in the same way in which one directly perceives a book, a computer, etc., on my desk.

the student, were *specifically* oriented to the midwife's touching hand on that occasion in the same way that they were oriented to the student's touching hand.⁸

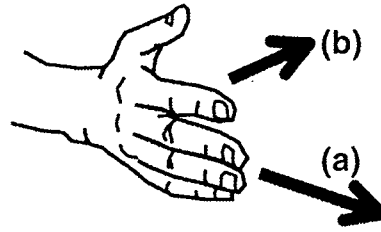
I consider this phenomenon, the multilayered character of touching a touching hand, in relation to the normative structure of the hand, rather than in reference to Merleau-Ponty's notion of the reversibility, to keep it subject to empirical investigations. By the normative structure of the hand I mean as follows: The hand is asymmetrically orientationally structured, in the same way as the entire body. Remember that the entire body is hierarchically orientationally structured, as Schefflen (1973) and Kendon (1990), among others, explicated. For example, the front of the lower body exhibits one's basic involvement, while the facial orientation exhibits one's current commitment. The gaze displays one's acutest orientation, and so on. This orientational structure of the body is normative, rather than physiological or biological. One can show that one is now oriented to the music coming from behind one's back, for example, by closing one's eyes and folding one's arms. That is to say, against the normative structure, one can display one's current acute orientation to the rear, rather than to the front. Note, however, that then one would need to foreclose the body parts expected to exhibit the current orientation from doing so, by closing one's eyes, and so on.⁹ The hand as such is also normatively structured. If one opens and extends one's hand forward, the strongest orientation is exhibited at the fingertips, for example (see Fig. 4). Similarly, the palm exhibits stronger orientation than the back of the hand, such that we usually perceive the orientation of the hand *per se* in accordance with the orientation of the palm, rather than the back of the hand. Of course, this is not always true. One may point to something with the back of one's hand touching it, against its orientational structure. However, the hand is still *normatively* structured such that each part of the hand is generally expected to display stronger or less strong orientation than the others.

Now, the midwife lays her left hand on the student's left hand. Two things should be noted. First, the palm of the midwife's hand touches the back of the student's hand. This asymmetrical positioning of two hands qualifies the midwife's hand as the operator and the student's hand as the operand. The midwife's hand *touches* the student's (i.e., the student's hand *is touched* by the midwife's), and not the other way around. The midwife's hand is organized such that she, the midwife, is normatively qualified to feel (or tactilely perceive) the student's hand and, through the student's hand, the object touched by it. This asymmetrical relation of two hands constitutes an integral part of the instructional context. Second, the midwife's palm is laid on the back of the student's hand such that their fingertips overlap

⁸ Note that they appear to be oriented to the student's *touching* hand as well as the touched object, not to the student's *touched* hand, namely, her hand as touched by the midwife's hand.

⁹ Schegloff (1998) describes the consequences of the distribution of orientations exhibited by distinct body parts, particularly, what he calls "body torque," to the actual development of interaction. For the normative structure of the body, see also Goffman's (1971) discussion on "the territories of the self." Particularly, his observations about what he calls "personal space," namely, the surrounding space of an individual within which "an entering other causes the individual to feel encroached upon" (p. 29), are relevant here. He observes, for example, that the spatial demands directly in front of the face are larger than at back. My argument is that this difference in the spatial demands is related to the normative expectation as to how differently an individual's distinct body parts exhibit his or her orientations.

Fig. 4 (a) The strongest orientation is exhibited by the fingertips. (b) The palm shows stronger orientation than the back



(Figs. 2, 3). This makes it possible for the parties to orient themselves in the same way in the relative position to the client's abdomen. Their palms are equidirectionally positioned to the abdomen and their fingertips are equidirectionally positioned towards a particular spot on the abdomen. The midwife's hand is evidently oriented to the same thing as the student's hand is oriented to, and thus the midwife is visibly and normatively qualified to tactilely perceive the very object that the student tactilely perceives.

Merleau-Ponty (1964/1968) speaks as if reversibility is an important aspect of the basic nature of human beings, diffused everywhere both between one's own body and another's body, as well as between one part and another part of one's body.

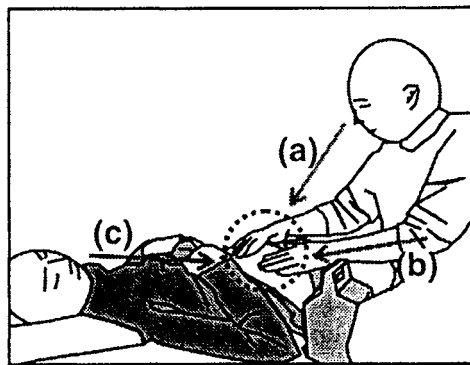
[W]hile each monocular vision, each touching with one sole hand has its own visible, its own tactile, each is bound to every other vision, to every other touch; it is bound in such a way as to make up with them the experience of one sole body before one sole world, through a possibility for reversion and reconversion of its language into theirs, [a possibility for] transfer, and reversal, according to which the little private world of each is not juxtaposed to the world of all the others, but surrounded by it, levied off from it, and all together are a Sentient in general in front of a Sensible in general. (p. 142)

Interestingly, we may encounter Merleau-Ponty's phenomenon more straightforwardly in the referential practice in Excerpt 1, namely, the reversibility and reconvertibility of modes of perception. The touch is seen, and the look is felt, as it were.

Reference as Multi-sensory Accomplishment

We have so far seen a prominent way in which reference is accomplished. The reference is *contingently* accomplished, accomplished depending on various interactional contingencies. Though the referential practice in Excerpt 1 is straightforward, nevertheless, the references in Excerpt 1, in the exchange between the midwife and the client before the student came in, are also contingently accomplished within a distinct interactional context. First of all, as is also true of the reference in Excerpt 2, the references in Excerpt 1 are accomplished through an appropriate participation structure, namely, through parties' mutual management of their orientations exhibited and displayed by various body movements, postures, and talk. First, the midwife looks at those places that she touches on the client's abdomen with her hands, throughout her demonstration to the client of the locations of the baby's body parts. This posture of the midwife's shows that the referents are

Fig. 5 The referent is jointly oriented to by the midwife and the client, at the intersection of (a) midwife's line of the sight, (b) the line of the orientation exhibited at her fingertips, and (c) the client's line of sight



those very places, which are at the point of intersection of her line of sight and the line of the orientation exhibited at her fingertips (Fig. 5). Second, all this conduct by the midwife, touching the client's abdomen while looking at it, is produced in the client's visual field. The client, who holds up her clothes exposing her abdomen, also looks at those places that the midwife touches with her fingers. Incidentally, the midwife's body is twisted such that her upper body is oriented to the client's face rather than the client's abdomen (the midwife sits on the bed with her lower body oriented in opposite direction to the client; see Fig. 5). The twist of the midwife's body serves to the bodily arrangement in which the midwife visibly avoids a full involvement with the abdomen and shows some orientation to the client's (visual) orientation. Third, the deictic expressions that the midwife uses, namely, *ko*-prefixed locative terms,¹⁰ usually refer to the speaker's immediacies. Those *ko*-prefixed expressions serve to make salient the places in the intersection of both parties' orientations, which are supposed to be found in the speaker's (the midwife's) immediate environment (Fig. 5).¹¹

On the other hand, the parties currently engage in the activity of the demonstration that the client's condition is good or, more precisely, that the baby's presentation is normal. Note in this respect the midwife's remark at line 08 that the baby's buttocks and back are simple to recognize (see Excerpt 1a below). It suggests that the baby's presentation is normal in the sense that there are no complications about the arrangement of the baby's body parts, namely, that the baby's body parts are in such a normal arrangement that they are also simple to recognize. (As I noted earlier, the use of "*kocchi*" at 06, rather than "*koko*," is orderly in this respect, because one needs to grasp also spatial relation of the second location to the first location in order to recognize the arrangement of the baby's body parts; see Note 5.)

¹⁰ For example, *ko*-prefixed terms include "*kore*" (this) and "*kono X*" (this X), besides "*koko*" and "*koochi*" (this place). Japanese also has *a*-prefixed deictic terms, referring to things and places in the distance from both the speaker and the recipient, and *so*-prefixed deictic terms, referring to the recipient's vicinities. These terms include "*are*" (that), "*ano X*" (that X), "*asoko*" (that place) and the like, and "*sore*" (that), "*sono X*" (that X), "*soko*" (that place) and the like.

¹¹ In Excerpt 2 the parties, the midwife and the student, are jointly oriented to spots on the client's abdomen in a similar way to Excerpt 1, but it should be noted that the midwife positions herself diagonally behind the student such that she shows her orientation to the (operations of the) student as well as the client's abdomen (see Fig. 2). Moreover, when the midwife resettled herself to make room for the student who was going to occupy the right position for palpation, she sat with her entire body oriented to the client's abdomen, without any twist of her body. It should be easy to see that this rearrangement of the midwife's and the student's bodies is specifically relevant to the instructional context.

In light of this current activity, demonstrating the baby's normal presentation, only the specification of the locations on the abdomen for the baby's body parts is not adequately appropriate. It is also necessary for the client to *recognize those body parts* of the baby's at those locations being referred to. Indeed, we hear the client's response at line 03, "*hai* [yes]," as claiming, in responding to the midwife's question ("*wakarimasu?* [do you recognize?]") at 01, that she, the client, was able to *wakaru* [recognize] the baby's buttocks precisely there, namely, at the location being referred to with "*koko* [here]." Note also that the client claims this as early as immediately after the name of the part, "*oshiri* [buttocks]," is uttered. Exactly the same holds true of the client's utterance at 07 (another "*hai* [yes]").¹²

Excerpt 1a: Demonstration Sequence

- 01 MDW: *de akachan wa desu ne? (.) ee:: (.) >wakari masu?<*
 and baby P JD P uhm see JD
- 02 --> *koko: n- ga oshiri: [desu ne:. nn:::n.]*
 here P buttocks JD P yeah
- "Then with respect to the baby, do you recognize? Here are the buttocks, yeah."
- 03 CLN: *[hai. (n:::n)]*
 yes yeah
- [.....]
- 06 MDW: --> *kocchi ni senaka de:*
 here P back and
- "Here is the back, and"
- 07 CLN: *hai.*
 yes
- 08 MDW: *nn:::n. wakari yasui desu ne.*
 yeah see easy JD P
- "Yeah. ((They are)) simple to recognize, yeah."

At 03 and 07 the client claims that she was able to recognize the baby's buttocks or back precisely at the location being referred to, in responding to the midwife's question at 01.

That is to say, here we have a demonstration sequence which is organized in the following way: First, the midwife *initiates* it with the mention of where and what is to be recognized, embedded in a question format ("*wakari masu?* [do you recognize?]); second, the client *responds* with claiming to recognize the things to be recognized at the place where they are to be recognized; and third, the midwife, the initiator of the sequence, *closes* it with an acknowledgement of the client's response ("*nn:::n.[yeah]*") and a remark on the recognizability of the things there ("*wakari yasui desu ne.* [simple to recognize]"). The entire sequence achieved in this way forms a demonstration of the baby's normal presentation:

¹² The midwife's utterance at 06 is also hearable as embedded in a question initiated at 01. The client's response at 07 is, therefore, hearable as a response to the question "do you recognize (that) here is the back?" In this light, the midwife's remark at 08, the closing part of the demonstration sequence, can be said to terminate the government of the question context produced at 01.

(1) Midwife:	Initiation	Mention of where and what is to be recognized, embedded in a question format at 01–02 and 06
(2) Client:	Response	Claim to recognition at 03 and 07 in answering the midwife's question
(3) Midwife:	Closing	Remark on the recognizability at 08

However, how does the client recognize the baby's body parts being mentioned? It must be difficult for the client to see (visually) any differences in the surface of her abdomen, which indicate the baby's body parts, whereas one can visually recognize one's uncle in a picture when someone points to him.

The midwife's referential conduct is also produced within the client's tactile field as well as her visual field. Insofar as the midwife currently engages in the demonstration of the normality of the baby's presentation by showing the location of the baby's main body parts, such as the buttocks, the back and the head, the client must perceive an object under the skin *in* her abdomen as well as a specific spot *on* her abdomen. Insofar as the client cannot perceive the object visually, however, the client must be able to feel (tactilely) the object that the midwife refers to at the very place on her abdomen that the midwife touches. Probably she feels pressure on the skin of her abdomen both from the inside and the outside, both from the baby's buttocks or back and the midwife's fingers, a tactile sensation caused by the midwife's fingers pressing the abdomen's skin over the baby's buttocks or back. When the midwife utters a demonstrative expression, touching the client's abdomen, therefore, the client feels the baby's body part, by way of the sense of pressure on the skin, caused by the pressing of the midwife's fingers onto the body part under the skin. Furthermore, notice that the client's recognition of the baby's body parts is accomplished *multi-sensorially*, namely through the convergence of her visual perception of the location of the midwife's hands on her own abdomen *and* her own tactile feeling under the very place.¹³ In this sense, the reference accomplished here is, as it were, *distributed* between different perceptual modes. Notice also that the client feels the baby's body parts only through feeling the midwife's hand on the abdomen and that, if this is the case, the client should know that the midwife feels the same objects at the very place they look at together. The references in Excerpt 1 are thus accomplished in the parties' multi-sensory *common* field.

Discussion

What I have attempted is to show that even when reference is made in a straightforward way, reference must still be contingently accomplished within a distinct activity in a complex way. Indeed, the references in Excerpt 1 are

¹³ Goodwin (2000) speaks of "different kinds of semiotic resources" simultaneously deployed for human actions to be built, focusing on the constitution of action through the juxtaposition of talk, gesture and structure in the environment. His demonstration is relevant here. My focus in this article has been on multi-sensory structuring of the environment, particularly, pregnant women's body, in conjunction with talk and hand movements.

multi-sensorially accomplished in a way appropriate to the current activity that the parties jointly engage in. Therefore, all the different characters of referential practices are each an organizational feature of a distinct activity, which must be contingently accomplished in and through the actual development of interaction.

William Hanks (1990) has already demonstrated the intersection of deictic linguistic forms and actual social life, focusing on referential practices rather than referential forms. People are not contained in such an abstract space as defined by three dimensions. They rather live a space experienced and perceived in the socio-cultural environment. "Lived space" shapes, and is reshaped by, locative referential practices in interaction. A simple fact is that the locative deictic expression "here" does not refer to a point in the Euclidean sense. What exactly it refers to depends on the speaker and the hearer's current situation. It may be the room in which they are talking to each other, the house, the city, the top of the table in front of them, or a slip of paper in the speaker's vicinity, depending on the socio-cultural, practical and biographical circumstances. On the other hand, the actual use of the deictic term, together with a designation, may in turn highlight or create a particular spatial configuration. It may, for example, create a relief of the room against the rest of the house and provides it with a special status (see Nishizaka 2006).

However, my focus has been on a subtle, but apparently significant difference in referential practice, a difference in how to refer, rather than what is referred to. I have shown how the different referential practices are embedded in different action sequencings, organized contingently in and through the actual development of interaction. It may be said that we happened to encounter what can be called a "naturally occurring experiment," with the same midwife using the same demonstrative expression, *ko*-prefixed locative term, to refer to the same spot, but performing different activities in different participation frameworks, namely different configurations of speakers, addressees, observers and so on. The difference in referential practice is the contingent and in situ, rather than historical, cultural, or biographical matter.

The contingent in situ accomplishment of reference employs various resources in the way appropriate to the current activity. In the interaction I have analyzed, reference was practiced by speaking, viewing and touching. Several further comments on the multi-sensory accomplishment of reference may be in order. First, of course, the touch is not unique to midwife houses. In obstetric and gynecological clinics, and also many midwife houses, an ultrasound scanner is used for periodic examinations for pregnant women, but the probe in the doctor's hand touches the client's abdomen, when the doctor looks at the ultrasound monitor, while examining the client's internal condition beneath the abdomen. Even in other medical settings, such as internal medicine and pediatrics, palpation is nowadays an important resource for examinations of patients' internal condition.¹⁴ However, in the midwife house we visited, the touch is the most basic resource for examining the client's internal condition. At this site, it may be said, the multi-sensory accomplishment is the most visible, not only in the demonstration sequence in Excerpt 1, but also in the

¹⁴ Palpation by physicians, particularly palpating a woman's body by a male physician, was very rare in the 18th century. I will return to this very shortly.

instruction sequence in Excerpt 2. The student had to *look* at her hand's movement guided by the midwife, the projected destination of the movement and the place where she *feels* a thing under the client's abdomen, the thing that the student knows (from what the midwife is saying and doing) the midwife also *feels*. Both in Excerpts 1 and 2, reference was, as it were, distributed between the visual and the tactile perceptions.

Second, rather than being framed and constrained by pre-existing activities, the features of referential practices that I have explicated, such as the distribution of orientations to the touched and the touching, the representational relationship between the tactility and the object, and the reference distributed between distinct perceptual modes, are the constitutive and organizing features of current activities. Barbara Duden (1987) observes, from her detailed examination of the published records of women's diseases by a physician in the 18th century Germany, that palpations and even visual examinations were not ordinary resources for treating his female patients. He, the physician, basically depended on patients' verbal reports, direct or indirect, for his diagnoses and decisions on how to treat them. In this view, this study, elucidating practices by which parties refer to, recognize, formulate, and so on, a thing in the environment in which direct palpations and visual examinations of the other's body are systematically (though, of course, not freely) available, also contributes to the exploration of a basic aspect of the modern medical, particularly OB/GYN activities, including practical trainings as well as physical examinations.

Generally, on the one hand, to perform a joint activity, one must refer to objects or places in the surroundings in such a way that others can recognize them. One must refer to objects or places in a way intelligible to all the parties, in order to complete any task at hand. On the other, in order for reference to be successful and intelligible, reference must be made in a way appropriate to the current status of the ongoing activity. I have demonstrated that this "reflexive" relationship (Garfinkel 1967; Garfinkel and Sacks 1970) between reference and activity is jointly managed and maintained, through the joint management and coordination of orientations to be allocated to things and each other's bodies according to the normative structure of the body. Interaction is, as it were, an orientationally structured space, organized through the arrangement of parties' bodies such that one's different body parts should exhibit different orientations toward things and others' bodies in a way appropriate to the currently ongoing activity. One party's body, and how one party orients his or her body parts to see and/or touch things, can be seen and/or touched by others. In other words, one perceiving party, who is a bodily being, is also perceivable by others. In the organization of interactional activity, parties' orientations are oriented to by others, moment by moment, contingently and appropriately in the course of interaction. Interaction is an embodied space. Now, we may be beginning to see what Merleau-Ponty (1964/1968) saw when he spoke of the "flesh" of the world.

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