

The sustained orientation to one activity in the multiactivity situation during prenatal ultrasound examinations

Running header: Sustained orientation in ultrasound examinations

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Introduction

[79]

The aim of this study is to elucidate the organisation of multiple activities performed more or less concurrently. The interactional occasions on which I will focus can be naturally described as "prenatal ultrasound examinations" although the participants engage in certain additional activities during them.

In what follows, I draw on 32 video-recordings of prenatal ultrasound examinations collected in urban areas of Japan from 2002 through 2008. All of the examinations were performed as part of regular prenatal checkups. Ultrasound examinations are temporally bounded within the checkups: an ultrasound scanner must be switched on, the pregnant woman's abdomen must be prepared, and so forth. In other words, between the recognisable start and end of each ultrasound examination, the participants are, as it were, in a "continuing state of incipient examination" (see Schegloff & Sacks, 1973, p. 325).

A ultrasound scanner is a device for visualizing the interior of a human body; [80] ultrasound waveforms sent off and received at the transducer that the examiner holds against the pregnant woman's abdomen are transformed into graytone images on the monitor screen. The official ("textbook") purpose of prenatal ultrasound examinations is to check the foetal and uterine condition through the visualisation of the interior of a pregnant woman's body. However, my repeated examination of these video-recordings indicates that healthcare providers demonstrate to pregnant women the normal development of the foetal and uterine condition rather than viewing the screen silently. Therefore, talk is an integral resource for performing the activity of ultrasound examination. During ultrasound examinations, healthcare providers also

perform various activities implemented through talk that are not directly related to the examination of the pregnant women's internal condition but are nevertheless relevant to their health care, such as asking questions about diet and sleep and giving advice, if necessary.

In this study, I address the following question: How are activities other than capturing and examining ultrasound images organised in and through the actual course of interaction while the participants sustain their orientation to the ultrasound examination in progress? I extracted 10 segments of interaction in which distinct, organisationally "additional" activities are performed. I analysed these interactional fragments by employing conversation analysis to elucidate the participants' practices for the organisation of these activities and to investigate how the participants implement the asymmetry between the ultrasound examination and other activities depending on every emerging interactional contingency (see also Garfinkel, 1967, 2002). The practices include bodily arrangements in relation to talk and the environment of interaction (such as those explicated by Goodwin, 2000, 2003ab; Heath & Luff, 2000; Kendon, 1990; Mondada, 2009a, Nishizaka, 2003, 2006, and others).

Conversation analytic studies have explored diverse situations that involve multiple activities. Although I do not intend to be systematic, there are at least three types of "multiactivity" interactions: (1) an interaction in which different co-present individuals or groups engage in separate activities using the same or different modalities of resources, such as a "schisming" (Egbert, 1997) or a "by-play" (M.-H. Goodwin, 1997), (2) an interaction in which different individuals or groups engage in

one distinct, encompassing activity by performing different sub-activities with the same or different modalities of resources, such as airplane navigation (Nevile, 2004ab) or some institutional phone calls (Mondada, 2008), and (3) an interaction in which the same individual engages in multiple distinct activities using the same or different modalities of resources, such as conversing and eating (Goodwin, 1984; Mondada, 2009b) and conversing and driving or navigating (Mondada, 2012; Nevile, 2010, 2012). Furthermore, relations between | multiple activities in the last case vary: [81]

(a) one may be referentially embedded within another, such as surgery and *its* demonstration (Mondada, 2011) or a physical examination and *its* "online commentary" (Heritage & Stivers, 1999), (b) one may be temporally interrupted by another and resumed later or temporally "embedded" within another (Mondada, this volume), such as answering a phone call while conversing, or (c) they may be more or less concurrent or simultaneous without one being referentially embedded in another. This study aims at type 3c.

Participation frameworks and multimodal resources for activities

Bodily arrangements in relation to talk and the environment in interaction have been studied as organisations of participation in interaction. Departing from Goffman's (1981) initial work on the subject (and from its systematic exposition by Levinson, 1988), C. Goodwin and M.-H. Goodwin, among others, have developed the notion of a "participation framework", which is "constituted through the mutual alignment of the participants' bodies [and] creates a dynamic frame that indexically grounds the talk and embodied action occurring within it" (C. Goodwin, 2007, p. 57; see also C.

Goodwin, 1981, 1984, 2000; C. Goodwin & M.-H. Goodwin, 2004; M.-H. Goodwin, 1990; M.-H. Goodwin & C. Goodwin, 2000; see also Erickson & Shultz, 1981, 1982; Heath, 1986). The distribution of embodied orientations (i.e., orientations embodied by different body parts, including vocal/auditory orientation) is constitutive of the activity that the participants are performing. Extract 1 is one of the simplest examples. An obstetric doctor indicates the foetal kidneys on the ultrasound monitor. (All of the extracts cited in this article are composed of three tiers. At each numbered line, there is first a romanised version of the original Japanese. Below this is a phrase-by-phrase gloss. Finally, the third tier presents a rough English translation. The first tier of the transcript utilizes a transcription system developed by Gail Jefferson [see Jefferson, 2004, for the most recent version]. In the second tier glosses, the following abbreviations are used: IMP for "Imperative"; ITRG for "Interrogative"; JDG for "Judgmental"; PART for "Particle"; and POL for "Polite". The letters and Roman numerals in brackets next to the extract number indicate the identity of the pregnant woman in each extract. All of the extracts include the annotation of gaze directions under the third tier: M for "Monitor"; X for the co-participant; and A for "Abdomen". The starting and ending points of other occasionally annotated occurrences are indicated by the sign "|", or by "┌┐" when drawings created from video clips are included. In some transcripts, the timings of drawings and annotated occurrences are indicated by arrows.)

(1) [BB1: 03]

[82]



01 DOC: *jinzoo ga ko|kō ni utsutte 'ru:: node ne::*
 kidney(s) PART here PART appear be so PART
 "The kidneys appear here, so."
 doc: MM
 pwm: MM

The doctor's pointing gesture (with her left hand and arm) and gaze direction exhibit her orientation to a location on the screen. The pregnant woman also directs her gaze to the screen. The locative deictic expression indicates that the doctor is mentioning something in the environment, and this "something" has been characterised as "the kidneys". Both participants' bodies are "torqued" (Schegloff, 1998) so that their lower body parts are mutually oriented to each other.

Furthermore, the pregnant woman's abdomen is perceivably oriented toward the doctor, and the transducer held by the doctor's hand against the abdomen embodies the doctor's orientation to the abdomen as the object of the examination in progress. Thus, the distinct activity of the doctor indicating on the screen the image of the foetal kidneys supposedly beneath the abdomen to the pregnant woman is constituted as such in the configuration of embodied orientations differentially distributed in the environment with multiple bodies and various tools.

The exploration of the relation between distributed embodied orientations and the constitution of a distinct activity has led to the elucidation of the multimodal

organisations of activities (C. Goodwin, 2000; Mondada, 2007, 2009a; Nishizaka, 2007). Some distinct activities cannot exist without different modalities of resources or different modes of orientations. The indicating activity in Extract 1 could not be well formed if the doctor's orientations toward a location on the screen were not visible; the pointing gesture and/or the gaze direction are more or less indispensable resources for the constitution of the activity.

However, this does not mean that these activities always require the full involvement of all relevant modes of orientations. In other words, some resources or some modes of orientations may be released from the current activity and available for another one. In the following sections, I focus on the phenomenon of talk | released from ultrasound examination and used for advice giving or explanation of [83] some kind.

The activity of ultrasound examination is the activity towards which a sustained orientation is displayed during additional activities. This can most simply be demonstrated by the fact that even when talk is used for another activity, the orientations embodied by gaze direction, posture, and the position of the transducer frequently remain in directions relevant to the ultrasound examination. For example, the doctor in the figure in Excerpt 2a below, who is engaging in explanation not related to the image on the screen, continues looking at the monitor screen and holding the transducer on the abdomen. In other words, the doctor's embodied orientations, with the exception of the vocal orientation, remain distributed toward the ultrasound examination. Of course, the degree of involvement in each activity varies from situation to situation. I will also consider a case of fuller involvement in an

additional activity to demonstrate that the participants continue to sustain their orientation to the ultrasound examination.¹

In what follows, I consider several fragments excerpted from two ultrasound examinations. In these examinations, the healthcare providers (one obstetrician and one midwife) extensively engage in various activities other than ultrasound examination. In fact, many ultrasound examinations proceed without including any other activities. I first examine how the participants initiate additional activities (Section 3), then how they move out of these additional activities (Section 4), and finally how they manage involvement in these additional activities (Section 5). In conclusion, I discuss a systematic feature of additional activities in the context of routine healthcare checkups.

Initiation of additional activities

Transitory phases

The following is a fragment in which an additional activity is initiated by a pregnant woman. At the beginning of Extract 2, the doctor announces what she has noticed through the examination of the image of the foetal head on the ultrasound | monitor: [84] the foetal presentation, which was oblique at the previous visit, has become completely breech (lines 01–02). In response to this announcement, the pregnant woman begins to sigh in line 03, at the precise moment when the news conveyed by the announcement can be recognised. Then, in lines 06 through 12 the pregnant woman enquires about the possibility of the foetus's change to cephalic presentation at the week of her pregnancy (approximately 30 weeks).

The pregnant woman's enquiry is not about the image on the monitor screen but about her (or the foetus's) prospective condition. Her enquiry initiates exchanges that are not part of the ultrasound examination *per se*. The pregnant woman designs the enquiry to connect to the doctor's announcement by using the demonstrative expression *koo (like this)*, which recognisably refers to the foetal condition (breech presentation) mentioned in the doctor's announcement.

The precise timing of the production of the enquiry is characteristic in that the enquiry is produced during a transitory phase of the ultrasound examination. It is not produced at the completion of the doctor's announcement, nor at the completion of the sequence initiated by the announcement, i.e., immediately after the pregnant woman's response (sigh) to it. While producing a long in-breath in line 05 following the pregnant woman's sigh, the doctor begins to move the transducer on the abdomen. As the result of the transducer movement, the image of the foetal head on the screen disappears. The enquiry is produced after the doctor utters *eeto (uhm)* in line 05 following the in-breath while continuing to move the transducer. The movement of the transducer and the production of *eeto (uhm)*, with a steady look at the monitor screen, can be perceived as beginning to search for the next item to be examined. The pregnant woman initiates an additional activity during a recognisable transitory or preparatory phase of the ultrasound examination in progress.

The same can be observed in the following fragment, which occurs some time after Extract 2. At the beginning of Extract 3, the doctor has been recommending that the pregnant woman get sufficient rest, which may result in a change in the foetal presentation. The doctor indicates the foetal face and then another (inaudible) thing

phases are systematic places for them to initiate additional activities. The clinic where the interaction in Extract 4 occurred has two ultrasound monitors, one for the examiner (usually a midwife) and the other for the pregnant woman. The arrangement of these monitors requires pregnant women to direct their gaze away from the examiner when they look at the monitor, and requires the examiner to use the cursor on the screen instead of a pointing gesture, to point to a particular location of the image on the screen. At the beginning of Extract 4, the midwife has resumed the ultrasound examination following an intermission, during which she had written some measurements obtained with the ultrasound while giving advice regarding walking to stimulate labour. Then, the midwife puts the document pad and the pen back in front of her and takes the transducer immediately before she produces the utterance in line 1 of Extract 4.

The midwife's question in line 01 ("Are you having prunes?") can be heard as the beginning of a new advice sequence. In fact, it can be heard as pre-advice; that is, the enquiry projects a particular piece of advice to follow if a "no"-answer is provided (see Schegloff, 2007 for "pre-sequences"). At the end of the question, the midwife looks at the pregnant woman's face to explicitly address the question to her. (187)

The question in line 01 is produced at the perceivable beginning of the preparatory or transitory phase for the next stage of the ultrasound examination. The midwife removes a cover from the pregnant woman's abdomen at the end of the question and places the transducer, which she took immediately before the question, onto the abdomen at the beginning of the pregnant woman's answer to the question while shifting her gaze between the pregnant woman's face, the monitor, the abdomen, and the ultrasound control panel. Thus, the initiation of a new advice sequence is finely coordinated with the beginning of the transitory phase.

In line 11 of Extract 4, the midwife initiates another advice sequence, advising the pregnant woman to take fresh water, while looking at the monitor screen and moving the transducer slightly on the abdomen. This is done during the continuing transitory phase. Given that it conceivably takes time to capture the target foetal or uterine part on the screen, transitory phases, during which this capturing work is performed, can be used for activities that can only be performed with vocal resources. Once the target appears on the screen, the demonstration of the foetal or uterine condition is in order, for which the vocal resources must be used.

Sustained orientation to the ongoing ultrasound examination

When the healthcare providers initiate additional activities, not only is the capturing work rarely interrupted. The participants also display their strong orientation to the ultrasound examination in progress.

It appears at times that healthcare providers adjust additional activities to the progress of the attempt to capture the target on the screen. One can observe an example of this at the beginning of the third piece of advice (next to the second one regarding fresh water) that the midwife gives the pregnant woman during the transitory phase continuing from Extract 4. In line 01 of Extract 5, the term *ato* (*and*) marks a "next-ness" in listing. The midwife is now giving advice on diet (i.e., how to ingest the mineral iron). Figure 1 represents the synopsis of the exchanges reproduced in Extracts 4–7, which comprise one interactional segment. In the exchange below, *hijiki* is a type of seaweed.

```
(5) [IK5: 11]
01 MDW:  ato tetsu|bun  nanka      mo  ne:: hijiki toka
        and  iron   thing.like also PART hijiki or
mdw:    MMMMMMMMMmaAAAAAAAAAAAAAAAAAAAAAAAAAAAAamMMMMMMMMM
pwm:    MMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMM

02      aa yuu no de  tabere ba.
        that thing with eat if
        "And as for iron, too, through a thing like hijiki,
        through that you can take it."
mdw:    MMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMM
pwm:    MMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMM

03 PWM:  nn n:n.
        "Mm mhm."
mdw:    MMMMMMM
pwm:    MMMMMMM
```


The midwife advises the pregnant woman to take iron through *hijiki* in lines 01– [90]
02. The midwife looks at the pregnant woman's abdomen and relocates the transducer on a particular part (lower right side) when uttering "*nanka mo ne:*" (*as*

tabere ba [through a thing like hijiki you can take it]) would be more natural. The insertion of a demonstrative term, which refers to the previously produced word, appears to mark the resumption of what had been started but was suspended (see Jefferson, 1972; Schegloff, 1980, for the use of a demonstrative after a "side sequence" or a preliminary sequence). The insertion of the | demonstrative may show [91] the midwife's orientation to the fact that involvement in advice giving was momentarily yielded to involvement in the attempt to capture the target and that the former has been recovered. Thus, the midwife's utterance construction appears to be sensitive to the ultrasound examination in progress. Note too that not only is the pregnant woman's response minimal, but she also (in lines 01–03) continues looking at the monitor screen, even when she acknowledges (and perhaps accepts) the advice in line 03. The strong orientation to the ultrasound examination is sustained through the participants' distribution of different (vocal/auditory, visual, etc.) modes of orientations to the tools and each other's body.

The display of a sustained orientation to the ultrasound examination can also be observed at the beginning of the doctor's response to the pregnant woman's enquiry in Extract 2, which consists of two parts. The first part ("If it has become like this, it is not so much that, right?" in lines 06–07) indicates that an enquiry is in progress without making explicit what is being asked. The demonstrative term *are (that)* is used as a "placeholder" for the content of the enquiry (see Hayashi, 2004). What this *are (that)* refers to is explicated in the second part ("It will not <turn> any more, right?" in lines 10 and 12). However, the doctor begins to answer the enquiry immediately after the first part, without waiting for the projected second part, by

saying "*so#o ne::#*" (*let #me see::#*) in line 09. This recognisable beginning of the answer is extremely (or even unnaturally) stretched such that it outlasts the second part of the pregnant woman's enquiry. During this stretch, the doctor moves the transducer on the abdomen very slowly, looking at the monitor screen.

(2a)



((DOC moves the transducer very slowly on the abdomen.))

09 DOC: ↓ <so#o ne::#>.....:~="

10 PFM: " <let #me see::#>.....:~="

10 PFM: ↓ <kaiten> shi naku naru n'desu|=

turn do not become JDG

"It will not <turn> any more, right?"

[Including line 12]

((DOC stops the transducer momentarily.))

11 DOC: =~:.....:~:#>|

12 PFM: =yo |ne::.~]

Here, it appears that the doctor addresses two interactional requisites simultaneously: [92] on one hand, she must pay adequate attention to the pregnant woman's enquiry; on the other hand, she must maintain an orientation to the ultrasound examination in progress. If she operated the transducer without the stretch, looking at the screen silently, it would not be clear to the pregnant woman whether the doctor's answering was still in progress. Beginning to answer so early may also demonstrate attention to the pregnant woman's enquiry. If the doctor abandoned the operation of the transducer, her orientation to the ultrasound examination in progress would not be publicly sustained.

Thus, in both extracts (5a and 2a) the healthcare providers' sustained orientation is displayed towards the ultrasound examination at the beginning of an additional activity implemented by talk, whether this activity may be initiated by a healthcare provider or a pregnant woman (see Mondada (2007) and Nevile (2004ab); they observe the same type of fine coordination between vocal and non-vocal behaviour).

Termination of additional activities

When an additional activity sequence is initiated by a pregnant woman, a healthcare provider's action may be sequence-completing. For example, in Extract 2, the doctor's explanation of the possibility of the foetal presentation change in the late weeks of pregnancy is the answer to the pregnant woman's enquiry and can complete the sequence initiated by the enquiry. Because demonstrations of foetal and uterine conditions are initiated by healthcare providers (Nishizaka, 2011a), healthcare providers who are completing a current sequence can re-initiate a demonstration after the completion of the sequence. The doctor in Extract 3 does this.

```
(3a)
04 DOC:   = taijuu ga   °sore nari ni      fuete   kure
           weight PART to.a.certain.degree increase give

05        reba° ii   naa to   °omoi |mas'°=
           if good wish PART think POL
           "if your weight gains to a certain degree, that
           will be good, I think.="

06 DOC:   =kore okao desu yo ne::
           this face JDG PART PART
           "This is the face."
```

The doctor initiates a new demonstration in line 06 immediately after her answer to

the pregnant woman's enquiry comes to a completion in line 05.

However, the situation may be entirely different when the current additional [93] activity has been initiated by the healthcare provider and is supposed to be completed by the pregnant woman. The following is the continuation of Extract 5, in which the midwife initiates an additional activity, giving a piece of advice. In lines 04 through 08, the midwife, after acknowledging the pregnant woman's acknowledgement, goes on providing advice on how to take iron and reminds the pregnant woman that she can do so by eating beans.

```
(6) [IK5: 11: the continuation of 5]
04 MDW:      n:n. gohan taku toki nanka ni mo (.)
             yeah rice boil when like PART also
             "Yeah. When you boil rice, or something, (.)"
mdw:      MMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMM
pwm:      MMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMM
mdw:      (moves the transducer slightly)----->

05          |>mae ni mo yutta kana:<|
             before PART also say.PST I.wonder
             >Did I mention it before?<
mdw:      MMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMM
pwm:      MMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMM
mdw:      |relocates the transducer----->|

06          |daizu ire tari azuki ire tari
             soybeans put or small.beans put or
             "(You should) put in soybeans or small beans"
mdw:      MMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMM
pwm:      MMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMM
mdw:      |moves the transducer slightly ----->

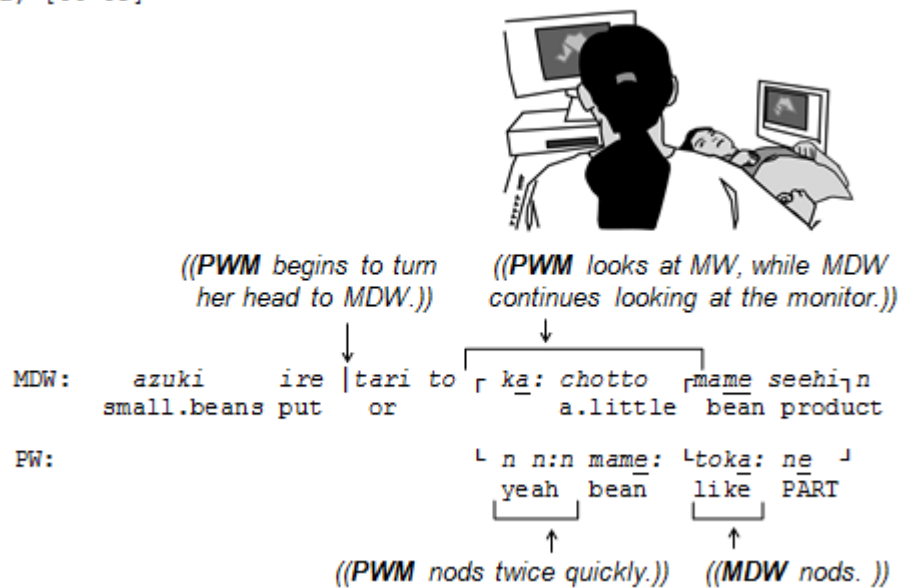
07          to_ka: chotto _mame seehi_n (.)=
             or a.little bean product
             "or some bean products like that (.)"
08 PWM:      ^n n:n mame: ^toka: ne ^
             yeah bean like PART
             "Yeah, beans, right?"
mdw:      MMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMM
pwm:      xxxXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
mdw:      (moves the transducer slightly)-->

09 MDW:      = tori irete mite?
             take in try
             "try to take?"
mdw:      MMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMM
pwm:      MMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMM
mdw:      (moves the transducer slightly)
```


of a response caused by the instructive format. In the course of giving advice, after saying, "*gohan taku toki nanka ni mo*" (*when you boil rice, or something*), the midwife inserts an interrogative phrase, ">*mae ni mo yutta kana*:<" (*Did I mention it before?*). This phrase is uttered relatively quickly, which marks it as "inserted". This insertion is plausibly motivated by the sensitivity to the conversational rule "don't tell someone what you've already told them" (Sacks, 1992, vol. 2, p. 441). In fact, in line 08, the pregnant woman responds to the interrogative phrase at the moment when the complement of the interrogative becomes adequately clear but the midwife's current turn-at-talk is not yet completed. The first part of the response, "*n n:n*" (*yeah*) (with two quick nods; see Extract 6a), is hearably an affirmative answer to the interrogative. The pregnant woman adds | a generic term *mame* (*beans*) for the preceding two items [95] (*daizu* and *azuki*) and, in doing so, claims knowledge independent of the midwife's current advice, implying that she had heard the same thing previously (see Heritage & Raymond, 2005; Raymond & Heritage, 2006 for this type of knowledge claim). The pregnant woman's response here is far from minimal.

In addition, the pregnant woman begins to turn her head toward the midwife in line 06 after the midwife pronounces the second item (*azuki*) and she looks at the midwife until she retracts her gaze to the screen when she pronounces *to* of *toka* in line 08.

(6a) [06-08]



Depending on an interactional contingency (i.e., the insertion of the interrogative phrase), the pregnant woman's visual orientation is redirected. In this way, the pregnant woman may be said to preemptively accept the advice being given. In fact, the midwife picks up the word *mame* (*beans*) from the pregnant woman's response, with a prominent stress on the term and a salient head nod,³ thereby acknowledging and accepting the pregnant woman's term.

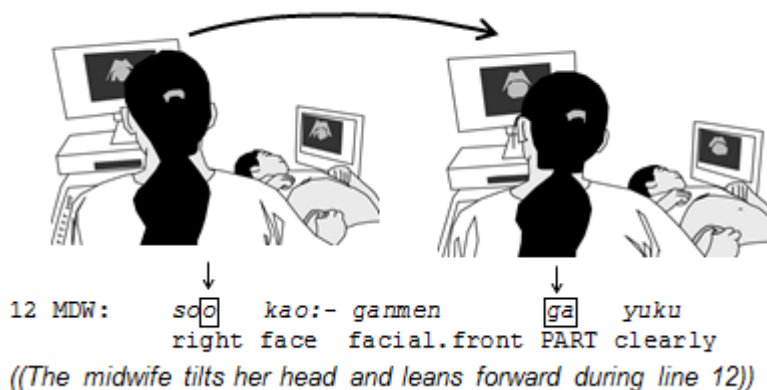
However, when the midwife moves on to complete her advice in an instructive format ("tori *irete mite*?" [*try to take* (imperative)]) with the action-defining term *mite* (*try* [imperative]) at its end in line 09⁴ her advice giving outlasts the pregnant woman's response to constitute a complete instructive action. In other words, the [96] interrogative-response sequence is only organised as incidental to the midwife's advice giving in progress.

Therefore, the absence of a response from the pregnant woman to the advice is

still perceivable, but it appears that the relevancy of the response is overridden by the orientation to the ultrasound examination in progress that the participants sustain at the end of the advice giving; both participants look steadily at the monitor screen. In fact, their behaviour following the substantial silence in line 10, retrospectively constructs the entire advice-giving activity as additional to the ultrasound examination in progress. In line 11 the pregnant woman provides a possible account for the supposed difficulty by saying, "It looks like it has completely fallen asleep". Then the midwife agrees with her ("*soo*" [*right*] in line 12) and goes on to make it explicit that it is difficult to see the face (lines 12 and 15). This exchange, together with their continuous look at the monitor screen during the silence in line 10, accomplishes the following things. Firstly, it establishes their common understanding that the attempt to capture the target, which is revealed as the foetal face in line 12, cannot be successful in terms of the current apparent foetal condition. Secondly, the extreme case formulation "*mattaku*" (*completely*) in the pregnant woman's account indicates that the account reflects the midwife's long-term unsuccessful attempt rather than the immediate observation of the image on the screen (see Pomerantz, 1986 for "extreme case formulations"). Thus, their orientation to the activity of attempting to capture the target is accomplished as having been sustained throughout the advice-giving activity.

Furthermore, the midwife tilts her head slightly when she self-interrupts her utterance after the word *kao* (*face*) in line 12 and leans toward the screen when uttering "*ganmen ga yoku*" (*the front of the face ... clearly*), thus doing *inspecting* the screen (Extract 6b).

(6b) [12]



After the midwife begins the inspection, the pregnant woman mentions the contour of the foetal head ("I can see clearly only a perfect circle" in line 14), using the contrast marker *wa*, which indicates that what is "clearly" visible is *only* the contour of the foetal head and that the facial parts, such as eyes, nose, etc., are *not* visible. In this way, the common understanding is established that they should be content with what appears currently on the screen, after a long and intensive unsuccessful attempt. In fact, the midwife marks that the target has appeared in one way or another, by saying that she is going to video the image on the screen (line 17). [97]

In sum, the advice-giving activity is oriented to as additional to the searching-for-the-target activity. In fact, the relevance of the response made by an explicit instructive action is overridden by the participants' embodied orientations (displayed by gaze and posture as well as talk) toward the ultrasound examination. Thus, the participants' strong orientation to the ultrasound examination is also exhibited by the sequence-organisational aspect of the interactional organisation.

Interruption of the ultrasound examination

The temporary nature of the interruption

As indicated, the midwife was giving another piece of advice prior to the interactional segment reproduced as Extract 6 (see Figure 1). During the advice giving, the participants showed fuller involvement with the supposedly additional activity for a moment. However, they continue to sustain their orientation to the activity of ultrasound examination. In line 01 of Extract 7, which is line 11 of Extract 4, the midwife begins to advise the pregnant woman to take *mamizu* (*fresh water*), marking this item as the next item on a list with the term *ato* (*then*). This utterance is constructed as an "add on" to the just attempted one, to have prunes, such that the mere mention of "fresh water" can be heard as advice to have it, although the repeat of *mamizu* (*fresh water*) in line 03 exhibits the pregnant woman's possible trouble in understanding the midwife's utterance of the word.

06 and 09. During this explanation, the midwife begins to turn to the pregnant woman precisely at the moment when she utters the sound *sa* of *sayoo* (in line 06), and she continues looking at the pregnant woman's face until she produces the acknowledgement ("*n:n*") at the beginning of line 13.

There are special motivations for the midwife to look at the pregnant woman's face. Firstly, she begins to turn to the pregnant woman precisely during the utterance of a technical term (*rinyoo sayoo* [*diuretic effect*]). She may need to check the pregnant woman's understanding of the term before proceeding further with the explanation; she may expect an understanding claim from the pregnant woman (i.e., "mobilise response" [Stivers & Rossano, 2010]). Secondly, the explanation in lines 06 and 09 provides not only a reason for the advice in line 04 ("Drink fresh water."), but also a partial clarification of its meaning, at least. Hearing only "Drink fresh water", it may be difficult to grasp the point of the suggestion; should one drink enough water, should one drink especially "fresh" water, or something else? Indeed, the point turns out to be that one should not drink tea (line 06). The gaze to the pregnant woman may also exhibit the expectation for her claim to grasp this point.

Thirdly, one should also note that in line 01, the midwife only mentions the word *mamizu* (*fresh water*) without a predicate. Then, in line 03, as I mentioned above, the pregnant woman possibly requests clarification by repeating the word. This utterance by the pregnant woman is overlapped by the midwife's advisory action in line 04 ("Drink fresh water."), and the latter outlasts the overlap. However, the pregnant woman, who turns to the midwife with her utterance in line 03, continues looking at the midwife throughout the midwife's explanation. Thus, it appears that the midwife's

explanation from line 06 onward is produced within the framework formed by the pregnant woman's request for clarification. In the utterance thus framed, it is especially reasonable for the midwife to check whether her explanation adequately meets the request for clarification (see Nishizaka, 2013).

Because of these interactional contingencies the midwife visually reorients [100] towards the pregnant woman's face. Furthermore, she also exhibits less involvement in the ongoing ultrasound examination (or the attempt to capture the target) in other respects. Firstly, the midwife stops moving the transducer on the abdomen when she begins to look at the pregnant woman's face with *sayoo*; she continues holding it in her right hand against the abdomen without moving it until the end of line 11. In this way, the midwife observably temporarily interrupts the attempt to capture the target.

(7a) [06-09]

((MDW stops moving the transducer.))

06 MDW: *ano ocha toka wa ne rinyoo |sayoo*
 uh tea like.that PART PART diuretic effect
 "Uh tea and things like this is, due to its
 diuretic effect" [Including "de" in line 09]

07 *(.)*

08 PWM: *n n*
 "Yeah"

09 MDW: *de: suibun |dechau| kara: .h*
 due.to liquid go.out because
 "liquids go out ((of the body)), so"

((MDW makes a hand gesture with her left hand while MDW and PWM are looking at each other.))



Secondly, at the moments when the midwife utters "*dechau*" (*go out*) in line 09 and "*omizu o (.) hokyuu*" (*take water*) in line 11, she also makes hand gestures with her left hand representing the circumstance and the behaviour described in the talk, respectively (see figure in Extract 7a; one can see fingertips in a broken circle). Gesturing as such displays strong involvement in the activity of advice giving and lifting her left hand from the control panel of the ultrasound scanner clearly exhibits her temporary detachment from the operation on the ultrasound scanner (see Nevile, 2012, who observes how a car driver lifts his hand from the steering wheel in interaction with a passenger).

The participants' embodied orientations in lines 06–12 of Extract 7 are more [101] articulately redistributed for advice giving than in Extract 6; the participants establish a more explicit orientation to each other.

However, during the period when they orient to each other, they still sustain their orientation to the ongoing ultrasound examination in the following ways. Firstly, they maintain only their upper body or head "torqued" toward each other (Schegloff, 1998) and maintain other (lower) body parts as they have been for the ultrasound examination (see figure in Extract 7a).⁵ Secondly, the midwife, as noted earlier, continues holding the transducer onto the abdomen and, while gesturing with her left hand, maintains the hand right in front of the control panel. All of this behaviour exhibits the participants' sustained orientation to the ultrasound examination.

Thus, the participants' orientation to the ultrasound examination is sustained during the period when the activity of attempting to capture the target is interrupted. Moreover, the redistribution of orientations, in which the orientation to the ultrasound

examination is relaxed, had a *special* procedural reason originating from some interactional contingencies (i.e., the use of a technical term and the pregnant woman's possible confirmation request), and therefore is perceivable as marked and temporary.

Restoration through the optimised distribution of orientations

The restoration of the original distribution of orientations for the interrupted activity (i.e., the ultrasound examination) is also jointly achieved with the participants' sustained orientation to it. The midwife returns her gaze to the monitor screen during line 13, when she marks with the term *soshite* (*and* or *as a next thing to do*) that she is moving to a specific next item. However, although we cannot know what the midwife was going to say at this moment, she leaves this incipient track started with *soshite* and mentions barley tea (*mugicha*) as an exception (note the high-pitched *maa* [*well*] in line 13 preceded by in-breath, which marks a sequential disjunction from the incipient track). While doing so she returns her gaze to the pregnant woman. However, the pregnant woman begins to retract her gaze from the midwife to the monitor almost at the same time.

(7b) [13-16]

[102]

PWM looks at the MDW, when MDW turns to the monitor.

((MDW turns her gaze to the monitor.))

13 MDW: n:n (.) soshite: .h ;maa ocha demo
yeah and well tea in.spite.of

((MDW looks at PWM.))

14 mugicha wa i-ii n'da kedo rn
barley.tea PART good JDG though PART

15 PWM: Ln

((PWM looks midpoint.))

PWM looks midpoint, when MDW returns to PWM's face.

What is interesting here is the pregnant woman's conduct. When the pregnant woman sees, possibly in her peripheral vision, that the midwife returns to her face, she stops turning to the monitor, holds her gaze midway back to the monitor, and continues looking (at the ceiling) midpoint between the monitor and the midwife (see Figures in Extract 7b). If she returned her gaze to the midwife, the ongoing ultrasound examination (or the attempt to capture the target) would be interrupted for a longer time, which might compromise the orientation to the activity. If she went on to turn to the monitor, she might be considered inattentive to the incipient segment of the explanation, which was delivered with the participants' fuller mutual involvements. Note that the pregnant woman intensely nods several times with "n" in line 15, seemingly to indicate her adequate attentiveness to the preceding utterance by the

midwife. Thus, it appears that holding her gaze midpoint until the completion of the current added explanation results from two contradictory orientations: the conversational and ultrasound-examination orientations. This conduct, which optimises the | distribution of embodied orientations, exhibits a sustained orientation [103] to the ultrasound examination.⁶

Conclusion

In this study, I have explored the organisations of two distinct activities that are performed more or less concurrently. These organisations are enabled by the fact that the two activities are implemented by the participants' different body parts (i.e., the eyes and hands, on the one hand, and the mouth, on the other). Transitory phases within an ultrasound examination are exactly where the vocal/auditory mode of resource is released from the ultrasound examination and is usable for another activity, whereas the ultrasound examination can only be pursued with other (visual, tactile, kinesic, etc.) modes of resources.

In this exploration, I have demonstrated the participants' orientation to the asymmetry between these activities; whereas the orientation to the ultrasound examination is throughout sustained, advice-giving and other activities are oriented to as additional. Not only *is* an additional activity adjusted to the concurrent ultrasound examination, but also even when the participants are more fully involved in the additional activity, they continue to sustain their orientation to the ultrasound examination throughout as if it were the *basso continuo*.

A reflection on the significance of this oriented-to asymmetry may be interesting

in concluding this study. Why does the midwife engage in advice giving concurrently with the activity of attempting to capture the target on the screen rather than doing it after or before the ultrasound examination? Is it for an efficient use of scarce time? Yes, but this is not the entire story.

I have shown elsewhere (Nishizaka, 2010) that the phase in which healthcare providers engage in necessary preliminaries to an examination provides a systematic opportunity for pregnant women to raise their various concerns. If pregnant women have serious concerns after the previous visit, they are supposed to visit their healthcare providers for that reason only without waiting for the appointed date for a regular visit. This opportunity (a preliminary phase) is available to pregnant women to raise concerns that they think are not serious but that may be more or less important to them. Transitory phases within an examination | can be used for similar [104] purposes. In fact, the pregnant woman in Extract 2 raised an issue at such a transitory phase in response to the doctor's announcement (see also Nishizaka, 2011b for another systematic opportunity available for the pregnant women to raise their concerns). This study suggests that healthcare providers may also use transitory phases as opportunities to do various things related to the promotion of the pregnant woman's health. If healthcare providers raise an issue as such before or after an examination, pregnant women may take it too seriously. Transitory phases within an examination may be good opportunities to give a particular type of advice *in passing*, that is, advice about small things that may be of some help to pregnant women.

The *in-passing* nature of the advice giving can only be secured as far as the participants' orientation to the ultrasound examination in progress is sustained.

Although it may sound paradoxical, the asymmetry between activities enables the participants to engage in an activity that may not be necessarily supposed to be performed on an interactional occasion while maintaining the in-passing nature of the former. The multiactivity practices that this study has explored may be an optimal way of meeting various interactional requirements.

Notes

¹ One may be reminded of Goffman's (1963) notion of the distribution of involvements. Although his notion is overly psychological, the participants' involvements can be re-conceptualised as a function of the distribution of embodied orientations, displayed in the actual course of interaction.

² Because the midwife was videotaped from behind, the movement of her eyes is not visible on the video. During this time, her head does not make any lateral movements; one can tell, at least, that her facial orientation remains toward the screen.

³ With the nod, the midwife may look at the pregnant woman very slightly and quickly, although it is only after the pregnant woman has started to retract her gaze from the midwife.

⁴ Researchers have observed that in Japanese conversation the action-type implemented by each utterance is only revealed at its end (see Hayashi, 2003; Tanaka, 1999).

⁵ See also Goffman, 1971; Kendon, 1990; Scheflen, 1973. They are the first researchers who observed that the body is hierarchically structured such that its lower and front part displays the most basic orientation, whereas its presenting parts, such as eyes and fingers, display the most current (acute) orientations.

⁶ Nevile (2012) observes that a car driver adopts a similar bodily arrangement in which he holds his body posture "midpoint" to exhibit his simultaneous involvement in the driving activity (i.e., the "primary activity") and interaction with passengers.

References

- Egbert, M. M. (1997). Schisming: The collaborative transformation from a single conversation to multiple conversations. *Research on Language & Social Interaction*, 30(1), 1–51.
- Erickson, F. & Shultz, J. (1981). When is a context? Some issues and methods in the analysis of social competence. In Green, J.L. and Wallat, C. (Eds.), *Ethnography and language in educational settings* (pp. 147–160). Norwood, NJ: Ablex.
- Erickson, F. & Shultz, J. (1982). *The counselor as gatekeeper: Social interaction in interviews*. New York: Academic Press.
- Garfinkel, H. (1967). *Studies in ethnomethodology*. Englewood Cliffs, NJ: Prentice-Hall.
- Garfinkel, H. (2002). *Ethnomethodology's program*. Oxford: Rowman & Littlefield.
- Goffman, E. (1963). *Behavior in public places: Notes on the social organization of gatherings*. New York: Free Press.
- Goffman, E. (1971). *Relations in public*. New York: Harper & Row.
- Goffman, E. (1981). On footing. *Forms of talk* (pp. 124-159). Philadelphia: University of Pennsylvania Press.
- Goodwin, C. (1981). *Conversational organization: Interaction between speakers and hearers*. Academic Press, New York.
- Goodwin, C. (1984). Notes on story structure and the organization of participation. In

- Atkinson, M. & Heritage, J. (Eds.) *Structures of social action* (pp. 225–246).
Cambridge: Cambridge University Press.
- Goodwin, C. (2000). Action and embodiment within situated human interaction.
Journal of Pragmatics, 32, 1489–522.
- Goodwin, C. (2003a). Conversational frameworks for the accomplishment of meaning
in aphasia. In C. Goodwin (Ed.) *Conversation and brain damage* (pp. 90–116).
Oxford: Oxford University Press.
- Goodwin, C. (2003b). The body in action. In J. Coupland & R. Gwyn (Eds.)
Discourse, the body and identity (pp. 19-42). New York: Palgrave/Macmillan.
- Goodwin, C. (2007). Participation, stance, and affect in the organization of activities.
Discourse and Society, 18(1), pp. 53-73.
- Goodwin, C. & Goodwin, M.-H. (2004). Participation In A. Duranti (Ed.), *A
companion to linguistic anthropology* (pp. 222–244). Oxford: Basil Blackwell.
- Goodwin, M.-H. (1990). *He-said-she-said: Talk as social organization among black
children*. Bloomington: Indiana University Press.
- Goodwin, M.-H. (1997). By-play: Negotiating evaluation in story-telling. In G. R.
Guy, J. Baugh, D. Schiffrin, & C. Feagin (Eds.), *Towards a social science of
language: Papers in honor of William Labov* (pp. 77–102). Philadelphia: John
Benjamins.
- Goodwin M.-H. & Goodwin, (C. 2000). Emotion within situated activity. In A.
Duranti (Ed.), *Linguistic anthropology: A reader* (pp. 239–257). Malden, MA:
Blackwell.
- Hayashi, M. (2003). *Joint utterance construction in Japanese conversation*.

Amsterdam: John Benjamins.

Hayashi, M. (2004). Projection and grammar: Notes on the 'action-projecting' use of the distal demonstrative *are* in Japanese. *Journal of Pragmatics*, 36(8), 1337–1374.

Heath, C. (1986). *Body movement and speech in medical interaction*. Cambridge: Cambridge University Press.

Heath, C. & Luff, P. (2000). *Technology in action*. Cambridge: Polity Press.

Heritage, J. & Raymond, G. (2005). The terms of agreement: Indexing epistemic authority and subordination in assessment sequences. *Social Psychology Quarterly*, 68, 15–38.

Heritage, J. & Stivers, T. (1999). Online commentary in acute medical visits: A method of shaping patient expectations. *Social Science and Medicine*, 49, 1501-1517.

Jefferson, G. (1972). Side sequence. In D. N. Sudnow (Ed.) *Studies in social interaction* (pp.294–233). New York, NY: Free Press.

Jefferson, G. (2004). Glossary of transcript symbols with an introduction. In G. H. Lerner (Ed.), *Conversation analysis: Studies from the first generation* (pp. 13–23). Amsterdam: John Benjamins.

Kendon, A. (1990). Behavioral foundations for the process of frame-attunement in face-to-face interaction. *Conducting interaction* (pp 239-262). Cambridge, England: Cambridge University Press.

Levinson, S. C. (1988). Putting linguistics on a proper footing: explorations in Goffman's concepts of participation. In P. Drew & A. Wootton (Eds.), *Erving*

- Goffman: Exploring the interaction order* (pp.161–227). Cambridge, England: Cambridge University Press.
- Mondada, L. (2007). Multimodal resources for turn-taking: pointing and the emergence of possible next speakers. *Discourse Studies*, 9(2), 194–225.
- Mondada, L. (2008). Using video for a sequential and multimodal analysis of social interaction: Videotaping institutional telephone calls. *Forum: Qualitative Social Research* (www.qualitative-research.net/), 9(3)
- Mondada, L. (2009a). Emergent focused interactions in public places: A systematic analysis of the multimodal achievement of a common interactional space. *Journal of Pragmatics*, 41, 1977–1997.
- Mondada, L. (2009b). The methodical organization of talking and eating: Assessments in dinner conversations. *Food Quality and Preference*, 20, 558–571.
- Mondada, L. (2011). The organization of concurrent courses of action in surgical demonstrations. In J. Streek, C. Goodwin & C. LeBaron (Eds.), *Embodied interaction: Language and body in the material world* (pp. 207–227). Cambridge, England: Cambridge University Press.
- Nevile, M. (2004a). *Beyond the black box: Talk-in-interaction in the airline cockpit*. Aldershot, UK: Ashgate.
- Nevile, M. (2004b). Integrity in the airline cockpit: Embodying claims about progress for the conduct of an approach briefing. *Research on Language and Social Interaction*, 37(4), 447–480.
- Nevile, M. (2010). Looking for action: Talk and gaze home position in the airline

- cockpit. *Australian Review of Applied Linguistics*, 33(1), p.3.1–p.3.21.
- Nevile, M. (2012). Interaction as distraction in driving: A body of evidence. *Semiotica*, 191-1/4, 169–196.
- Nishizaka, A. (2003). Imagination in action. *Theory & Psychology*, 13, 177–207
- Nishizaka, A. (2006). What to learn: The embodied structure of the environment. *Research on Language and Social Interaction*, 39(2), 119–154.
- Nishizaka, A. (2007). Hand touching hand: Referential practice at a Japanese midwife house. *Human Studies*, 30(3), 199–217.
- Nishizaka, A. (2010). Self-initiated problem presentation in prenatal checkups: Its placement and construction. *Research on Language and Social Interaction*, 43(3), 283–313.
- Nishizaka, A. (2011a). The embodied organization of a real-time fetus: The visible and the invisible in prenatal ultrasound examinations. *Social Studies of Science*, 41(3), 309–336.
- Nishizaka, A. (2011b). Response expansion as a practice for raising a concern during regular prenatal checkups. *Communication & Medicine*, 8(3), 247–259.
- Nishizaka, A. (2013). Distribution of visual orientations in prenatal ultrasound examinations: When the healthcare provider looks. *Journal of Pragmatics*, 51, 68–86.
- Pomerantz, A. M. (1986). Extreme case formulations: Away of legitimizing claims. *Human Studies*, 9, 219–230.
- Raymond, G. & Heritage, J. (2006). The epistemics of social relationships: Owning grandchildren. *Language in Society*, 35(5), 677–705.

- Sacks, H. (1992). *Lectures on conversation*. 2 vols. Oxford, England: Basil Blackwell.
- Schefflen, A. (1973). *Communicational structure: Analysis of a psychotherapy transaction*. Bloomington: Indiana University Press.
- Schegloff, E. A. (1980). Preliminaries to preliminaries. *Sociological Inquiry*, 50(3-4), 104–152.
- Schegloff, E. A. (1998). Body torque. *Social Research*, 65, 335–596.
- Schegloff, E. A. (2007). *Sequence organization in interaction*. Cambridge, England: Cambridge University Press.
- Schegloff, E. A. & Sacks, H. (1973). Opening up closing. *Semiotica*, 8, 289–237.
- Stivers, T. & Rossano, F. (2010). Mobilizing response. *Research on Language and Social Interaction*, 43(1), 3–31.
- Tanaka, H. (1999). *Turn-taking in Japanese conversation: A study in grammar and interaction*. Amsterdam: John Benjamins.

Base activity	Writing measurements	Searching for the target foetal part			Resuming ultrasound demonstration
Additional activities		1) Pre-advice on having prune	2) Giving advice to have fresh water	3) Giving advice to take iron through beans	
Extracts		4	7		5–6

Figure 1 Synopsis of Extracts 4–7