Title: Experiencing space: Some uses of Japanese proximal spatial deictic expressions

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Funding:

This work was supported by the Japan Society for the Promotion of Science under the Grant-in-Aid for Scientific Research (C) (20K02131).

### Abstract

This study explores aspects of experiencing space, focusing on uses of the Japanese proximal spatial deictic expressions (JPSDs). These expressions may or may not be accompanied by a pointing gesture. In the analysis of interactions between the driver and passengers during a car trip, this study compares the uses of JPSDs and investigates how the participants organize their spatial experiences. It makes three observations: (1) a JPSD used with a pointing gesture differentiates a spatial feature as its referent in the environment, (2) a JPSD without a pointing gesture refers to the participants' current location and organizes the location as experienced in the temporal unfolding of the ongoing driving activity, and (3) a pointing gesture, accompanying a JPSD referring to the participants' current location, positions this location in its geographical relationships with other landmarks. How spatial experiences are organized varies according to what activity the participants are currently engaging in. Spatial experiences involve temporal and social dimensions.

Keywords: Spatial deixis, Pointing, In-car interactions, Conversation analysis, Activity

#### 1. Introduction

This study investigates aspects of spatial experiences by exploring some uses of Japanese proximal spatial deictic expressions (hereafter JPSDs). To do this, it explores how JPSDs are used with or without a pointing gesture by analyzing naturally occurring in-car interactions. In JPSDs, we include the proximal spatial pronoun koko ("this place"), the proximal adjective kono ("this") plus a noun indicating a specific place (such as *kono michi* ["this road"]), the proximal directional pronoun kotchi ("this direction").<sup>1</sup> As Kuno (1973) suggested, Japanese proximal (kotype) demonstrative expressions are basically used deictically-when their referents are perceptually accessible. Therefore, the uses of JPSDs can serve as a window through which to explore the perceptual organization of space experiences on an empirical basis. To do this, this study employs conversation analysis (CA) (Sacks, 1992; Schegloff, 2007). According to Schegloff (1972), participants select alternative place formulations in order to accomplish particular goals (see Enfield & Roque, 2017). The description of the participants' accomplishments requires a description of the participants' orientations exhibited in all details of the interaction. Employing CA, this study examines the details of interactions in which specific uses are made of JPSDs and demonstrates how, via the use of the JPSDs, participants perceptually organize their spatial experiences in the interaction.

Previous research has addressed the question of how demonstrative references are understood. Clark et al. (1993), for example, explored how the determination of the reference relies on "common ground" such as perceptual salience or mutual beliefs. Fillmore (1997) showed that the understanding of a sentence relies on our knowledge of the social context onto which the sentence is "deictically anchored."

CA studies of deixis have emphasized the importance of the roles that nonlinguistic resources play in the understanding of references of deictic expressions. Such resources include embodied conducts, such as gaze directions and pointing gestures, and common knowledge about the environment (e.g., Blythe et al., 2016; de Dear et al., 2021; Goodwin, 2003; Hindmarsh & Heath, 2000; Mondada, 2014; Nishizaka, 2011; Stukenbrock, 2020). For example, Hindmarsh and Heath (2000) demonstrated that referencing a feature on the monitor screen by pointing at it can be successful only when bodily and visual conduct is adequately coordinated with the speaker's utterance and others' bodies in a way appropriate to the ongoing activity in which the reference is made (see also Goodwin, 2000, for the mutual elaboration of talk, a gesture, and a material feature of the environment). CA studies have not only addressed the issue of understanding references but also explored the organization of space. In contrast to Levinson's (2003) experimental study of how spatial experiences systematically vary according to different languages,<sup>2</sup> Goodwin (2003), for example, focused on a "situated activity system" (Goffman, 1961)-that is, a describable and identifiable unit of activity performed by actors whose bodies are perceptually accessible to one another. Goodwin observed that pointing, embedded in this "situated activity system," can restructure the space in which the pointed-at feature is located and connect multiple relevant spaces, such as the space created on a map and the space where the actors are currently located (see also Goodwin, 1995).<sup>3</sup>

Previous CA studies specifically focusing on spatial or directional deictic expressions have addressed how reference to a location in the environment is

accomplished—specifically, how a visible feature in the environment is differentiated (e.g., Mondada, 2012, 2014) or how the direction of a remote and therefore currently invisible feature in the environment is accurately shown (e.g., Blythe et al., 2016; de Dear et al., 2021). For example, Mondada (2012, 2014) observed that when the French proximal spatial adverb *ici* ("here") is produced at a turn-initial position, it is simultaneously or belatedly accompanied by an index finger pointing and contributes to singling out a specific object as a locus for a subsequent action in the speaker and recipient's common visual field. However, spatial deictic expressions have what Filmore (1997) called "symbolic use," in contrast to "gestural use"; they can be used without a pointing gesture to indicate the speaker's and the recipient's current locations. Specifically, proximal spatial deictic expressions, in contrast to distal spatial deictic expressions, can indicate the location that both the speaker and recipient currently occupy. However, referential practices with spatial deictic expressions that refer to the speakers' current locations are still understudied in the field of CA.

This study addresses the following question: How do various uses of JPSDs organize spatial experiences differently in different bodily configurations in which multiple bodies are mutually perceivable in performing a specific activity? One of this study's foci is on the temporal dimension of spatial experiences achieved via the use of JPSDs. Hanks (1990), focusing on Maya referential practices, examined how community members used socio-culturally provided schematic frames for locations and directions and observed that these frames included facets of the temporal dimension, such as seasonal cycles and body movements. However, we attend to participants' orientations to the temporal dimension that are exhibited in the details of their interactions. In this respect, Mondada's (2005) research is relevant in the following way: in her detailed analysis of interactions from various settings, Mondada demonstrated that which feature in the environment is referred to from the viewer's location varies according to the action being currently performed, while the very action may also change the viewer's location from where the feature is viewed and perceptually restructure the environment itself (see also Mondada, 2014). This study also examines interactions in the mobile context to explore how uses of *spatial* deictic expressions involve the temporal dimension.

In what follows, we will make three observations. After describing the data, we will first examine cases of using a JPSD with or without a pointing gesture. We observe that while (1) a JPSD used with a pointing gesture refers to a spatial feature differentiated in the environment, (2) a JPSD without a pointing gesture refers to the participants' current location and organizes the location as experienced in the temporal unfolding of the ongoing driving activity. Next, we will examine three additional cases to reflect on how pointing is treated by the participants themselves. Then, we will examine cases in which the reference to their current location is accompanied by pointing gestures and observe that (3) these pointing gestures position their current location in its geographical relationships with other landmarks (Figure 1). These three observations do not exhaust all possible cases. However, this study will demonstrate the variety and multi-dimensionality of spatial experiences.

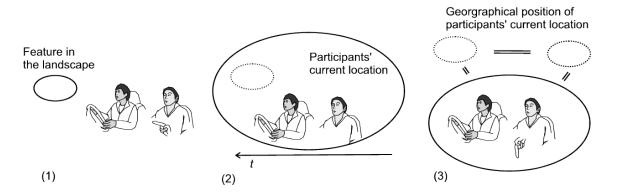


Figure 1 Three practices with JPSDs: solid-line ellipses are the referents of JPSDs.

# 2. Data and method

We will examine Japanese in-car interactions between the driver and the passengers. The main reason for this choice of data was that these interactions were expected to involve many instances of using a JPSD both with and without a pointing gesture. In a journey from one place to another, new sceneries constantly enter the participants' view. In addition, where they are currently driving can always be a potential issue for the participants. In-car interactions are a "perspicuous setting" (Garfinkel, 2002) for examining organizations of various spatial experiences (see Haddington et al., 2012, for an overview of studies of in-car interactions). Some previous studies on this topic are relevant to this study. For example, Mondada (2005) showed that driving in one direction by reference to features of the landscape changes the context for spatial references and that the participants (the driver and passengers) may refer to the changing contexts in their negotiation regarding the route to be taken. Keisanen (2012), distinguishing between two types of noticings, observed that while noticings

of something in the environment single out a specific event or specific area of scenery,<sup>4</sup> noticings of trouble related to driving are also environmentally occasioned but do not necessarily single out a specific object or event in the environment.

This study uses the Corpus of Everyday Japanese Conversation (Koiso et al., 2022), which includes 19 in-car interactions. We located 144 cases in which the driver or a passenger uses JPSDs (*koko, kotchi*, and *kono X*). We excluded cases in which these terms are used in a way other than to refer to the speaker's current location or spatial features in the speaker's vicinity (e.g., in direct quotations of others' real or imaginary speech or in idiomatic expressions such as *atchi kotchi ni* ["here and there" or "all over"]<sup>5</sup>). We also excluded cases in which the speaker's body is not adequately visible to discern whether a JPSD is accompanied by a pointing gesture.

A pointing gesture is definable as a "bodily movement which projects a vector" (Enfield et al., 2007: 1724; Kita, 2003: 1) that is designedly addressed to a recipient and designedly invites the recipient's attention to an indicated direction, not to the movement as such. Previous gesture studies have observed variations in pointing gestures in terms of meanings and interactional functions, depending on the shape, size, and sharpness of the bodily movement (Enfield et al., 2007; Kendon, 2004). They have also observed that a pointing gesture is made by body parts other than a hand, such as a head or eyes. Enfield (2001) observed that the Lao use "lippointing" to indicate an object expected to be recognizable by the recipient. Nishizaka (2007, 2020a, 2020b) examined complex situations in which the speaker points at a recipient's body part by touching or pressing it. Stukenbrock (2020) observed that even the speaker's stationary gaze functions as an attention-getting toward the target object of a deictic expression. However, we did not include head or gaze movements

that appeared to be made specifically to look at a feature in the environment, rather than *doing* drawing the recipient's attention to the feature via a specific head or gaze movement. Remember, however, that the final definition should be the one exhibited in participants' interactional conduct. We will address this issue at the end of Section 4. As a result of our decision to exclude head or gaze movements for looking, all pointing gestures included in our collection were some kind of hand gesture.

Out of the 144 cases in which JPSDs are used, 65 cases involve a pointing gesture—that is, 79 cases do not involve a pointing gesture. Once the referent in question has been introduced and the common attention to it has been established, the next reference to it may not need pointing. However, out of 79 cases in which a JPSD is not accompanied by a pointing gesture, there are a substantial number of cases (more than 50) in which the speaker uses the deictic term without a pointing gesture at a "sequentially initial position" (Schegloff, 1996a).

As noted in the introduction, by employing CA, we ground our descriptions of the participants' orientations in the details of the interactions, as when their understanding of a co-participant's action may be exhibited by their next action; for example, a driver's moving the car in the direction pointed out by a passenger exhibits the driver's understanding that the passenger has provided an instruction by the pointing out although the understanding is not verbalized in so many words (see Sacks et al., 1974, for "proof procedure"). We can further compare similar and contrastive cases to make our descriptions of the participants' orientations robust (see Schegloff, 1996b, for the procedure of CA). We also relied on Goodwin's (2017) perspective, which situates the target practices in the arrangement of multiple bodies in the material and technological environment. 3. First practice: Visually differentiating a feature in the landscape

When a JPSD is used *with a pointing gesture*, we observe that the referential act visually differentiates a feature in the landscape in a way similar to the ways observed by previously cited scholars (Keisanen, 2012; Goodwin & Goodwin, 2012). In this section, we examine two cases to show that the visual differentiation organizes the referenced location as affording an incipient or past specific action in the course of the participants' current local activity. In the first example (Excerpt 1), the driver (DR), driving with two passengers, is trying to determine how he can change the direction of the car. They have located a parking lot that the driver can use to make a U-turn. In line 03, a passenger (P1) uses the JPSD *koko* ("this place"), with a pointing gesture (Figure 2), in response to the driver's question ("How can I do it"; line 02). See Appendix for the transcription convention.

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(1) CEJC: c002_007 (DR: Driver; P1: Passenger1, in the front seat:
P2: Passenger2, in the rear seat)
01
       (1.8)
02 DR: do' yatte |ya(h)ru(h)?
       how do
       How can I(h) do(h) it?
  p1:
                 looks to R
                      fig.2
                       J.
03 P1: \rightarrow /(chot -)
                   |koko
                               de::/
                   this.place at
        (a bit-) |At this place
        raises RH |points to R |withdraws RH
  p1:
04
        |(0.2)
  dr: |turns his head to R
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*Figure 2* P1 points to the right (line 03).

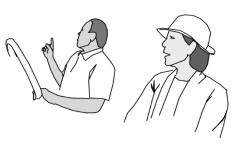
Here (line 03), P1's referential act differentiates as its referent a specific spatial feature in the landscape. The feature is specifiable in the direction of pointing in ways relevant to the participants' current activity. The driver's question (line 02), produced with "trouble-resistance" laughter (Jefferson, 1984), is implemented as seeking a proposal that helps him out of his current trouble in finding a way to change the direction of the car. Therefore, P1's response ("At this place"; line 03) constitutes an instruction on where the driver can make a U-turn in the parking lot, thereby differentiating the spatial feature as one that *affords* the action of making a U-turn— namely, an empty space that is large enough—in the direction of pointing; the referenced space is organized as relevant to an incipient action in the activity of finding a way to change the direction. Then, the driver turns his head in the direction of the pointing (line 04) and, while offering an agreement by claiming that he now understands the point of P1's instruction ("Oh, right"; line 06), begins to enter the space; this action by the driver exhibits his understanding of what kind of spatial feature P1's referential act has differentiated as its referent in the landscape.

In the next example (Excerpt 2), the driver requests an agreement from the passenger about a veterinary clinic located at the intersection where they are stuck in a traffic jam. The driver uses the proximal deictic adjective *kono* ("this") modifying a place name ("veterinary clinic") (line 01). Haru-chan is their dog.

(2) CEJC k006\_006 ((DR: Driver; PS: Passenger in the front seat) fig.3  $\downarrow$ 01 DR: $\rightarrow /\uparrow kono \mid doobutsu \quad byo \mid in te ikkai \mid kita \downarrow yone=\mid ano$ this veterinary clinic Q once came P uhm We came to this veterinary clinic once, right?=uh dr: |raises RH -----> |points to FR ----->> dr: -->>looks to R ----->|turns to F |to R ps: turns her head to R while yawning---->> 02 *|ichiban saisho ni| hora:|* for the very first time, see? dr: -->>turns to R -->|looks to R |leans toward R ----->| ps: 03 PS: |aa:: a h<u>a</u>:ru chan no toki |<sub>Γ↓</sub>desh<u>o</u>o Oh, it was for Haru-chan right? 04 DR: Lharu chan no tokini/: It was for Haru-chan turns to F -----> turns and looks to R->> ps: dr: moves the car slowly 05 PS: |n:n Yeah withdraws R index finger and holds RH-->> dr: turns and looks to F -->> ps: 06 (0.1) | (0.5)----> turns and looks to R-->> ps: fig.4 Т 07 DR:→ />tashik'< koko nan' da yo=kore/-I take it this place is that, this-08 PS: Lmushi kur'shi/:: For vermicide extends R index finger dr: and points to FR -----> ps: ->>looks to R----->



*Figure 3* The driver points to the right (line 01).



*Figure 4* The driver points to the right (line 07). The car is moving slowly now.

The

first specification of the referent is provided through its general characterization as a "veterinary clinic" (line 01), and there is a building with the sign "Veterinary Clinic" in the direction of the pointing (Figure 3). The building is differentiated in the landscape as the referent of the driver's referential act. Note, however, that the driver's referential act is not merely differentiating the building as a building. The driver requests from the passenger an agreement about their having visited the clinic (line 01) and invites her to remember it; in line 02, the driver adds an increment to pursue the passenger's remembering (*hora:* ["see?"]). Immediately after the driver utters the JPSD, the passenger turns her head in the direction of the driver's pointing. At the completion of the driver's utterance, the passenger claims her recognition of the clinic with an emphasized "change of state" token (*aa*:: *a* ["Oh"]; Heritage, 1984) and demonstrates her remembering by mentioning the occasion of their visit to it (i.e., when their dog was sick ["it was for Haru-chan"; line 03]). In this fashion, the building is differentiated as a recognizable one-recognizable as one that they have visited. In fact, in response to the passenger's recognition demonstration, the driver confirms, by the identical repeat of the core part of what the passenger just said, that what the passenger said was what the driver had meant (see Schegloff, 1996b, for a similar phenomenon). Then, in line 07, the driver appears to be *doing* connecting their past visit back to the building he pointed at earlier by using the JPSD *koko* ("this place") and another pointing gesture to the building (Figure 4), introduced by the remembering marker *tashika* (translated as "I take it"). Thus, the use of JPSDs in this example, combined with pointing gestures, differentiates its referent in the landscape as a specific spatial feature that specifically affords the action of visiting in a past event.

In both examples (Excerpts 1 and 2), the places (a space at a parking lot and a veterinary clinic) are the referents of the JPSDs and are visually differentiated *in the vicinity of* and *outside* the speaker's and recipient's current locations. Furthermore, the participants experience these places as affording a specific action of moving in (i.e., making a turn or visiting the clinic) in their local joint activities such as finding together a way to change the direction and remembering together a family event. Now, let us turn to the second practice which relates the referent of a JPSD to a larger joint activity of driving.

4. Second practice: Referencing the participants' current location in the temporal unfolding of the ongoing activity

In this section, we first examine two examples of using JPSDs *without making pointing gestures* to provide a general description of the second practice (Section 4.1). We then examine several additional examples, including contrastive cases, to discuss the role of *doing* pointing (Section 4.2).

#### 4.1. A general description of the practice: Space in time

Excerpt 3 includes the use of the JPSD *koko*. A family (parents and two children) is moving from Tokyo to the west. One of the children (P3), in the rear seat, asks a question about where they are currently located. The JPSD, unaccompanied by a pointing gesture, does *not* differentiate any features in the landscape as its referent.

(3) CEJC: t003\_018 (DR: Driver; P1: Passenger1, in the front seat: P2: Passengers2 & 3, in the rear seat)

01 P3:→ ima koko nani ↓ken ((no pointing gesture; now this.place which prefecture looking forward)) Now, what prefecture is this place?

02 (0.2)

03 DR: kanag<u>a</u>wa ↓ken Kanagawa Prefecture.

04 (1.2)

- 05 P3: .SHh ((sniff))
- 06 (0.6)
- 07 DR: yokohama ↓da yo (ne) Yokohama.

08 (1.0)

09 P3: a chuukagai da. Oh, Chinatown.

The question appears to include an instruction on how to specify their current location—that is, by indicating the name of the prefecture where they are now. In fact, the driver, the father of the children, answers the question with the name of the prefecture (line 03). However, after the observable lack of the child's receipt of the answer (lines 04–06), the driver adds the city name—which is not only more specific but also is expected to be more recognizable or more salient to children because Yokohama is a major city in Japan. This specification by the driver exhibits his understanding that the child's question is not based on his interest in the name of the prefecture as such. Furthermore, the child uses the temporal indexical term *ima* ("now") together with *koko*. The participants thus appear to orient to the temporal dimension (ever-changing position) of their current location in the unfolding of the ongoing traveling rather than the "geographical" (never-changing) positions of prefectures.

In the next example, the passenger in the rear seat (P2) suggests the possibility that they are taking an incorrect route. The speaker uses the proximal deictic adjective *kono* and a place word (*michi* ["road"]) without making a pointing gesture; he looks out the window while producing his utterance.

In line 01, *kono michi* ("this road") refers to the road their car is currently on, not to a specific spatial feature differentiated in the landscape, although the utterance has been occasioned by the specific landscape (see Keisanen, 2012, for noticings of driving-related trouble). In response to P2's suggestion, the driver first produces a

disagreement token (*iya*, translated as "well"; line 02) and then denies the suggested possibility that the road may be incorrect (line 03). Note that the driver replaces the JPSD *kono michi* with the proximal directional deictic pronoun *kotchi* ("this direction"), repeating *wa ikare-* (translatable as "is possible to get through") as post-framing. He thus positions the original reference to the road in the direction in which the vehicle is currently going. This positioning is done in a way that is sensitive to the design of P2's original suggestion (line 01). The suggestion is hearable as caution-giving, raising the possibility of failure to reach the destination by reference to past experiences; the final particle *ke* indicates that he is inviting the recipient to remember their common experience (see Hayashi, 2012). The suggestion embodies the orientation to the ongoing moving toward the destination of their trip.

Furthermore, the caution-giving nature of P2's suggestion has another temporal dimension—namely, it should be done before it is "too late" (Haddington, 2010). If they are going in an incorrect direction, they should change the direction as early as possible. The JPSD *kono michi* ("this road") in P2's question thus refers not simply to the road as a material construction but to the road on which they are currently driving in a particular direction at a particular time.

In both examples (Excerpts 3 and 4), the places referenced by the JPSDs *koko* and *kono michi* are distinguishable from other places (e.g., other prefectures and other roads) in the larger activity of driving. However, they are not distinguishable in geographical relations to other places; rather, they are characterizable as the places in which the participants are *currently located in the temporal unfolding of their ongoing driving activity*.

## 4.2. The constitutive role of doing pointing

Fillmore (1997) notes, "[I]f you hear me use the phrase 'this campus,' you do not need to look up, because you know my meaning to be 'the campus in which I am now located,' and you happen to know where I am" (63). Thus, the language ("this campus") in this specific situation (in which the recipient happens to know where the speaker is—on a campus) appears understandable as referring to the speaker's current location by itself. This is true of P3's question in Excerpt 3; in other words, the absence or presence of a pointing gesture does not appear to make any difference in what the JPSD refers to. However, how constitutive its absence or presence is of the referent of a JPSD (i.e., whether it refers to a feature in the participants' vicinity or their current location) may vary according to situational contexts. Some reflections on the constitutive role of pointing are in order here.

In this respect, the next example (Excerpt 5) may be illuminating: in the example, the same JPSD is used twice, first without a pointing gesture (only looking out the window; Figure 5) and then with a pointing gesture (Figure 6). As it begins, the driver and passengers are discussing where they should park the car in the parking lot that they have entered.



*Figure 5* P1 does not make a pointing gesture at the first *koko* in line 02.

*Figure 6* P1 makes a pointing gesture while producing the second *koko* in line 02.

In line 01, P2 suggests that they should park the car in the space (referenced by "over there") that is closer to a specific retail shop that he wants to visit. In line 02, P1 offers a countersuggestion, in the course of which she uses the JPSD *koko* twice. When used without a pointing gesture (Figure 5), the JPSD refers to the place where they are currently located. This place is distinguishable from the place referred to by P2 with the indexical spatial pronoun *mukoo* ("over there"; line 01). The latter place ("over there") is a place at which they might arrive in the potential moving forward and is experienced in alternative developments of the current journey—either parking the car here and walking there or moving there by car. Immediately after the first

turn-constructional unit (Sacks et al., 1974) becomes complete, P1 adds the justification for her countersuggestion while pointing to the left side along with the *second* use of the JPSD (line 02; Figure 5); with this pointing, the justification indicates the availability of a specific space on their left side. Note that without the pointing gesture, the phrase *koko aite'ru* could be heard as "the area where we are now is not fully occupied." The second use of the JPSD refers to a specific space on that side and differentiates the space that affords their potential subsequent action—namely, parking the car. This space is *not* (yet) the one where they are currently located.

Let us examine an atypical case to show that a pointing gesture can be used to rule out the possibility that a JPSD refers to the participants' current location. This case is atypical and does not fit any type of practice that we observe because the referent of the JPSD is *not* perceptually accessible to the participants. Therefore, in this case, although the JPSD *koko* is used with a pointing gesture to indicate an object, this object is not visually differentiated in the landscape. However, because of the pointing gesture, the JPSD does not appear to refer to the speaker's current location, either. Its atypicality thus makes the case illuminating with regard to the constitutive role of a pointing gesture. The focus in Excerpt 6 is on the driver's referential act in line 10, where an elementary school is referred to with the JPSD *koko* ("this place"). A passenger remarks that children from an apartment house called Nakano Broadway walk a long distance to the school (lines 01–04). The car is now moving in the direction of Broadway, and the school is invisible from its current position (indicated by the arrow in Figure 7).<sup>6</sup>

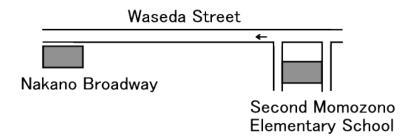


Figure 7 The current position of the car, indicated by the arrow

(6) CEJC: t007\_015 (DR: Driver; P1: Passenger 1, in the front seat; P2: Passenger 2, in the rear seat; the car is now stopped by a traffic signal) 01 P1: no:: buroodowee no hitotachi ino:: .hh as'ko P people that.place P PN Ρ 02 .h ano ga-:-: kodomotachi tte |ko|ko |no:-: |th.pl.|P uh children Q The children of the residents at that place, Broadway, come over to this place, the Second Momozono Elementary School. [Lines 01-03] p1: raises RH looks to L momentarily p1: points to L --->> dr: looks at p1's RH |momozono daini shoo|gakkoo kurun' de↓su ↑yo::| 03 PN second elementary.s come AUX.PL P p1: ----->| dr: looks to L -----> 04 P1: .h |kon'na toko' made |aruite kurun' de↓su yo: like.this place till walk come AUX.POL P They walk to a place like this place. p1: points to F 05 DR: fu::<sub>Γ</sub>:n Really. Lfu::<sub>Γ</sub>n 06 P2: I see. 07 DR: La buroodowee de- yoh PN at Oh, at Broadway, 08 (0.2)09 P1: n:nYeah.

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fig.8
                                      Ţ
                                 |koko nan'↓da
10 DR:→ (ano) |sun<sub>Γ</sub>de'ru to::
        well
              live
                         if
                                 |th.pl AUX
        (well) If they live there, this place is it.
11 P2:
                   Lsunde'ru ko ta↓chi-
                    Children living there
   dr:
                points to L and | thrusts L index finger to L
                swings L index
                finger twice
```



*Figure 8* The driver points to the left (line 10).

In lines 02 and 03, P1 uses the proximal spatial pronoun *koko* with the particle *no* plus the name of the school (the Second Momozono Elementary School) with a pointing gesture in the direction of the school. P1 momentarily looks to the left when the car passes the corner from which a school building is barely visible (but not identifiable). In line 05, the driver receipts the information provided by P1 with an intonation of surprise (*fu:::n* [translated as "Really" rather than "I see"]). Then, when in lines 07 and 10, the driver describes what surprised him, he uses the JPSD *koko* and makes a pointing gesture in the direction of the currently invisible school (line 10) while the driver maintains his gaze forward (Figure 8).

In the context of Excerpt 6, where the participants discuss the children's potential trouble in commuting to a particular school at a long distance, the use of the *proximal* deictic pronoun, makes the location of the elementary school (Second

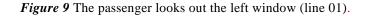
Momozono) specifically contrastive with the other focused-on place referenced by the distal spatial pronoun asoko ("that place"; line 01)—namely, Broadway. Despite the perceptual inaccessibility of the referent of the JPSD, this word selection fits the gist of P1's remark well: the long distance for the children to walk. However, given that the school is not perceptually accessible, the JPSD as such might be heard as referring to the speaker's current location (i.e., the area where they are driving), inclusive of the school, rather than this very school to which the children commute—the place at the same categorial level as Broadway. In this context, the pointing gesture appears to be used to rule out the possibility that the JPSD refers to the participants' current location in the following way: the driver's pointing accompanying the JPSD koko in Excerpt 6 appears to segregate the referent of the JPSD in the pointed direction (i.e., the school over the terminal point of the projected vector) from the participants' current location (i.e., the initial point of the projected vector). Thus, pointing may signal not only *which* spatial object should be seen but also *that* a spatial object is indicated. In other words, the organization of spatial experiences can vary not only according to where they are pointing but also according to the absence or presence of pointing. If a pointing gesture makes a difference in the referent of a JPSD, the absence, not only the presence, of a pointing gesture can also be an accomplishment (see Schegloff, 1986).

Another related issue that we must address at this point concerns the participants' distinction between looking and pointing. We provided the analyst's tentative definition of pointing in Section 2. Now, we address whether this definition (i.e., that looking at an object to see it should be distinguished from pointing) is also the participants' definition by examining one example.

In the next example, the speaker (the passenger) looks out the left window in the direction of the feature but does not *do* pointing (Figure 9). We will show that, without *doing* pointing, the participants orient to the place referenced by the JPSD as their current location in the temporal unfolding of driving (see Figure 1 [item 2]).

In Excerpt 7, the passenger produces a noticing of a high school called Nishi High School on the left side of the street (line 01).

(7) CEJC: c002\_008 (DR: Driver; PS: Passenger, in the front seat; PS locates a high school from the window.) fig.9 01 PS:→ nishi kookoo tte koko ni <u>a</u>ru n'da ne<u>:</u>: PN high.school Q this.place at be AUX P Nishi High School is at this place. ps: -->> looking out the left window ----->> 02 (0.8) 03 DR: a |konnani tooi n'da. Oh, it is at such a long distance. dr: looks out the left window ps: -->> looking out the left window ----->> 04 PS: Nn/:n Ye::s! dr: turns forward -->> looking out the left window ----->> ps:



The passenger's noticing invites the recipient (the driver) to see the object. In

response (line 03), the driver acknowledges ("Oh") the information that the passenger's noticing conveys and extracts the point of which the noticing is implicative in the following way: by using the same phrase as the passenger has used (n'da), the driver post-frames the phrase "at such a long distance" (line 03); in doing so, he highlights the point of the passenger's noticing as the "distant" location of the high school. The passenger's emphatic agreement (line 04) may confirm that the point the driver has extracted is precisely what she meant.

The passenger's mention of the name of the high school differentiates a structural feature (identifiable as a high school) in the landscape, but the *referent* of the JPSD *koko* is not the school but its location. As indicated by the driver's remark on its distance (possibly from their starting point), the referent of *koko* (i.e., the location of the school) is inclusive of the current location that they have reached after a substantial journey.

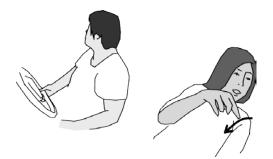
In this example, the passenger continues to look to the left throughout the excerpt (Figure 9). Certainly, the driver uses the passenger's seating position, her posture, and her head direction, together with what he has seen on the side of the street, to infer what the passenger sees when she produces the noticing. In fact, he successfully identifies the feature identifiable as a school. However, the example suggests that the JPSD, used without *doing* pointing, refers to their current location, which also covers the location of the visible structural feature. Consistent with the examples in Section 4.1, the location is experienced in the temporal unfolding of driving. Thus, her looking in its direction is not treated by both speaker and recipient as part of her referential act, although head-pointing may be employed in other contexts (see Blythe et al., 2016; de Dear et al., 2021). In this subsection, we have

demonstrated that *doing* pointing is a constitutive part of the organization of spatial experiences via the use of a JPSD. Now, we proceed to examine cases in which a JPSD is used to refer to the participants' current location along with a pointing gesture. In these cases, pointing gestures makes a difference not in what the JPSD refers to but rather in how the referent is organized.

5. Third practice: Positioning the current location in geographical relationships.

The speaker may make a pointing gesture to their current location in ways such as pointing downward. In this section, we explore this practice and show that via this practice their current location is organized in geographical relationships among certain landmarks (i.e., in a map-like representation, as it were). Pointing gestures used in this practice involve tracing movements. In the next example (Excerpt 8), the passenger locates a structure under construction in the direction in which the car is moving and addresses to the driver her wondering about what it will be (line 01); the structural feature in the landscape is differentiated by the proximal deictic pronoun (*kore*) plus a series of pointing gestures (pointing forward and then swinging the pointing hand horizontally). Then, the driver explains that a highway (New-Tômê) is being extended (line 02).

(8) CEJC: k011\_009 (DR: Driver; PS: Passenger, in the front seat) 01 PS: |kore- (.) |na-nani ga dekin'|↓darroo ↓ne P built | wonder P lthis what With this, what is being constructed? 02 DR: Lare shintooimee That is New-Tômê ((name of a highway)) swings the pointing hand ps: points horizontally ---> to F 03 (1.4)04 PS: e im- <toomee> rto heesoo shi↓ten'r↑no? What? No(w) Is it parallel to Tômê? 05 DR: L<sub>s-shin-</sub> Lsoo soo so'= Ne(w) Right Right 06 DR: =shintoomee ga nobite te:  $_{\Gamma}$ .hh New-Tômê will be extended, and 07 PS: Lnn Mm (2.2)08 09 DR: de:: And, 10 (1.6) ima sa shintoomee 'tte atchi no suso:no ja naku ite: .hh 11 DR: Currently New-Tômê, not Susono, 12 eeto gotemba no saki:: (.) atari ↓de wakarete'ru ↑jan'? It comes from around the head of Gotemba, right? 13 (0.2)fig.10 Ţ 14 PS: |hai hai hai hai=sorre ga zu:tto |koko *|ma*↓*de*:*|*↑:? ITJ ITJ ITJ ITJ it P MIM |th.pl.|till Yes, yes, yes, yes=is it extended till this place? 15 DR: Lsore ga z<u>u:|</u>:tto |kotchi|no Ρ MIM it here P It is extended till here. [Including line 16] raises RH ps: points downps: ward-> dr: turns to L 16 hoo ↓made. direction till



*Figure 10* The passenger points downward by depicting an arc with the right index finger (line 14).

Our analytical focus is on the passenger's referential act in line 14, where with the JPSD *koko* ("this place"), the passenger refers to their current location while pointing downward (Figure 10). Her pointing gesture, with her right hand, also depicts an arc from her left shoulder toward her abdomen; it appears to represent a route of the new highway. Note also that the driver, who is the addressee, turns in the opposite direction of the pointing (Figure 10) and, even though she may see the pointing in her peripheral visual field, does not *do* seeing in such a way that her seeing is seeable by the passenger; the driver appears to show her understanding that the passenger's pointing is not intended to *visually differentiate* a specific feature in the landscape as the participants' common resource for their ongoing activity. In this respect, the role of pointing in Excerpt 8 is different from the one observed in Section 3.

In line 04, the passenger asks a question about the route of the new highway, which is introduced with a surprise display (*e* ["what?"]). In response, the driver initiates explaining the geographical relationship between the old highway (Tômê) and the new one (New Tômê) by mentioning the name of the city (or a junction in it) where the new highway leaves the old one, namely, Gotemba (lines 05 through 12). The driver's utterance in lines 09 through 12 is intelligible as a preliminary to the

main part of the initiated explanation; it requests from the passenger a recognition of the starting point of the new highway, which also serves as the starting point for the explanation, using the typical form for a request for recognition (*jan*', translated as "right?") (see Schegloff, 1980, for a request for recognition as a preliminary). Then, the passenger preemptively offers the projected explanation after four repeats of hai ("yes"), which serve to claim her preemptive understanding of what the driver is going to say (see Stivers, 2004, for a related phenomenon) as well as to emphatically claim the requested recognition (line 14). In this fashion, the passenger's referential act in line 14, using the JPSD with a pointing gesture (Figure 10), refers to her current location as the place geographically related to the mentioned city, Gotemba, rather than the location experienced in the temporal unfolding of their ongoing traveling. Note that if the JPSD in question were not accompanied by the pointing gesture, it could still be hearable as (symbolically) referring to the participants' current location (the area in which they happen to be). Therefore, the pointing here may not make a difference in what the JPSD refers to, as the pointing in Excerpts 5 and 6 does. However, the pointing in Excerpt 8, done in a specific way, appears to be a constitutive part of how the referent is experienced.

The same point can be made by examining the next example (Excerpt 9), in which the street on which they are currently driving is referred to by JPSDs several times but only once without a pointing gesture (line 17); the excerpt includes all three practices that we have observed. The street is complicated (Figure 11), and a passenger is explaining the geographical relationships between that street and another street. They are currently on Otowa Street, which joins Mejiro Street at the intersection called Mejiro Saka Shita, and after the intersection, the name of Otowa Street changes to Mejiro Street. They are now heading for Mejiro Saka Shita (Figure

11).

Figure 11 The geographical relationship between Otowa Street and Mejiro Street. At the beginning of Excerpt 9, they are moving just before Mejiro Saka Shita intersection (as indicated by the arrow).

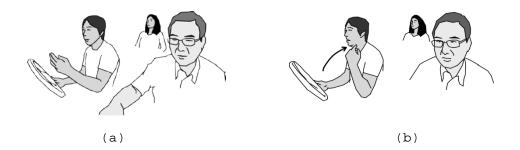
(9) CEJC: t007\_015 (DR: Driver; P1: Passenger 1, in the front seat; P2: Passenger 2, in the rear seat) fig.12(a) fig.12(b) ↓ Ţ 01 P1:→ .hh |koko otowa|doori ↓(na)no .hh |This place is Otowa Street. thrusts RH then bends R arm backward p1: to point backward with finger tips 02 (0.6) $\Gamma/\underline{nn}$ 03 DR: Mm Ĺ*kok′* 04 P1: kara mejiro:sakashi|ta ↓kara .h |gokokuji no ↓hoo th.pl. from PN from |PN P toward From here, from Mejiro Saka Shita, .h to Gokokuji. p1: thrusts RH |bends R arm backward to point backward turns head to dr p1: 05 DR: ↑*fu*::<sub>Γ</sub>:↓*n* Is that so. L.hhh |demo kono mejirosakashita kara mukoo wa 06 P1: But beyond this Mejiro Saka Shita, over there dr: |looks forward ---->>

07	ano .hh mejirodoori nan': ↓desu <b>uh .hh it becomes Meijiro Street.</b>
08	(1.2)
09 P2:	Γ <sup>nn</sup>
10 DR:	Laa:: <sub>[</sub> naruhodo. <b>Oh,  I see.</b>
11 P1:	<pre>\L/kotchi kara kite:: / rkoko wa (mo') mejir/dor-/  this.way from come   th.pl. P already PN    Coming from here, this street is Mejiro Str- </pre>
12 DR:-	Lfu:nfu:n L/kotchi
p1:	YeahThis wayextends RHslides RH to FRto the left>
dr:	points   to the right
dr:	looks to L looks forward>> f fig.13(b) fig.13(a)
13 -	↓ wa  oto <sub>F</sub> wadoori <sub>F</sub> nano ne?  P  PN  AUX P
14 P1:	is  Otowa Street, I take it.   <sup>L</sup> .hhh <sup>L</sup> nn <sub>F</sub> kotchi wa (otowa nan' da yone)
15 50.	Yeah, this way is Otowa.
15 P2: dr:	Yeah       points backward>
16 P2:	koko <sub>F</sub> ga mejirodoo <sub>F</sub> ri.  ((the car is now entering 
17 P1:-	PN     th.pl  from PN       Meji-     From this place, it is       Mejiro Street.
p2:	points to the right>

(a)

(b)

*Figure 12* P1 (a) first thrusts his right hand forward and (b) then bends it backward (line 01).



*Figure 13* The driver (a) first points to the right (line 12) and (b) then points backward by bending the right arm (line 13).

The JPSD *koko* in line 01 refers to the street on which they are currently driving. It is accompanied by a series of gestures to highlight the street; P1 points ahead of them with his right hand and then makes a gesture of tracing the street by bending his right arm backward (Figure 12). Note that, once again, the recipient does not turn in the direction of P1's pointing (Figure 13), and by not doing so, he exhibits his understanding that the pointing does not visually differentiate a feature in the landscape as a common resource for their activity.<sup>7</sup>

Here, P1's referential act to their current location (i.e., the street on which they are currently driving) is embedded in the geographical explanation of the street; this is evidenced by the subsequent development of P1's explanation. In line 04, after the delay in the driver's receipt of P1's explanation, P1 replaces *koko* in line 01 with a more concrete, geographically specified phrase that includes two endpoints (intersections) of the street—namely, Mejiro Saka Shita and Gokokuji (see Figure 11). More precisely, in line 04, P1 first refers to the Mejiro Saka Shita intersection, which is visible just in front of the car, with the JPSD *koko* and a pointing gesture visually differentiating the intersection in the landscape; and then replaces the JPSD with the name of the intersection, post-framing the replacement by *kara* ("from)" (see Schegloff et al., 1977, for repair organization). P1's entire utterance in line 04 is accompanied by the same pointing gestures that he made in line 01, such that the replacement of the JPSD *koko* in line 01 with the more specific phrase in line 04 ("from Mejiro Saka Shita to Gokokuji") is recognizable as such. In this fashion, P1's referential act in line 01 (using a JPSD with pointing gestures) hearably refers to their current location in geographical terms rather than in the unfolding of the ongoing driving. Furthermore, in the subsequent development of the interaction, the explanation by P1 so far turns out to be a preliminary to an explanation of the geographical relationships of this street (Otowa Street) with another street (Mejiro Street).

When P1 mentions the name of an ending point of Otowa Street (i.e., Gokokuji), he turns his head to the driver (line 04) to mobilize a response from the driver (Stivers & Rossano, 2010) before he proceeds to the main part of the explanation. After the driver emphatically receipts P1's explanation (line 05), P1 delivers the explanation that after the Mejiro Saka Shita intersection, the current street changes to Mejiro Street, which joins the current street from the right (lines 06– 07; Figure 11). In line 11, P1 indicates the street whose corner is visible ahead of the car (which intersects the street on which they are driving) as Mejiro Street. A series of referential acts using the first practice (explored in Section 3) visually differentiates a specific structural feature (identifiable as a street and exclusive of the participants' current location) in the landscape: specifically, he first refers to the street with the proximal directional pronoun (another JPSD) *kotchi* accompanied by a pointing gesture (extending the right hand to the front right) and then with the JPSD *koko* accompanied by another pointing gesture (sliding the hand to the left). In responding to P1's explanation, the driver demonstrates his understanding by requesting confirmation about the geographical positioning of the street on which they are currently driving relative to the just-referred-to street (Mejiro Street) (lines 12–13). The driver's referential act (to the current street, i.e., Otowa Street) is very similar to P1's one in line 01 in the following way: first, the construction of the driver's utterance is similar to P1's one in line 01 (i.e., "[JPSD] is [name of the street]"), and, second, the driver's pointing gestures are also similar to P1's ones in line 01 (i.e., pointing first to the right and then backward; Figure 13). His referential act is thus tied back to P1's previous one, which has been made to indicate their current location (i.e., the street on which they are driving) in geographical terms.<sup>8</sup> Note also that the driver uses the proximal *directional* deictic pronoun *kotchi* (line 12) instead of the *spatial* pronoun *koko*, which P1 used in line 01; in doing so, the driver also displays how he has understood P1's entire explanation: it is *this* part of the street before Mejiro Saka Shita (in the direction of Gokokuji) that is Otowa Street.<sup>9</sup>

Now, at the beginning of line 16, as the car enters the Mejiro Saka Shita intersection, P2's referential act in line 16 is responsive to this entrance.<sup>10</sup> In line 17, P1 indicates that the street on which they have been driving is now changing from Otowa to Mejiro Street. He uses the JPSD *koko* without a pointing gesture (the second practice explored in Section 3). The referential act makes salient their entering Mejiro Street (or the name of the street changing) *right now*. In other words, the reference is made not (only) to the geographical position of Mejiro Street relative to Otowa Street but (also) to their current location in the temporal unfolding of the ongoing driving. In this fashion, P1 distinguishes among all three practices that we have been exploring in ways appropriate to the development of his explanation.

#### 6. Conclusion

We have observed three types of organization of spatial experiences via the use of a JPSD. The first type is the differentiation of the referent of the JPSD as a feature visible in the landscape; this differentiated feature is experienced as a specific site that specifically affords a specific action (e.g., making a turn). This organization of spatial experiences is embedded within a specific activity (e.g., searching together for a place to make a turn). This is observed when a JPSD is used with a pointing gesture to a visible feature in the landscape (Section 3). In these spatial experiences, the feature is perceived as action-relevant rather than as a sum of surface properties. The spatial feature is not merely experienced even as a set of "affordances" in the sense of the invariants directly perceived through body movements (Gibson, 1979). If an action is meaningful and its meaning is socially constituted, spatial experiences may also involve the social dimension (see Coulter & Parsons, 1991, for a criticism of Gibson's approach in this vein).

The second type is the organization of the experience of the participants' current location in the temporal unfolding of their ongoing driving activity. This is observed when a JPSD is used without a pointing gesture (Section 4). The temporal dimension involved in spatial experiences is not limited to the temporal course of an action or action sequencing; rather, the temporal dimension also concerns the temporal unfolding of a larger joint activity or an interactional occasion. In Section 4, we also explored the constitutive role that pointing gestures play in the organization of spatial experiences. We showed that whether or not the use of a JPSD is

accompanied by a pointing gesture makes a difference in whether the JPSD refers to a feature visible in the landscape or the participants' current location.

The third and final type is the representation of geographical relationships between the location referenced by a JPSD and other landmarks; this spatial experience is organized in the activity of explaining the geographical relationships of a particular location with other landmarks. This is observed when a JPSD is used with a pointing gesture to the participants' current location (Section 5). These pointing gestures may be characterizable as "representing" the geographical relationships of the highway or the street that they are referring to. The geographical representation is a more abstract, even timeless map-like representation. However, it is still not like a map represented from no one's perspective. Instead, it is a socially constructed commonsense geography.

These three are not all possible organizations of spatial experiences in driving. For example, as noted previously, the target referential act in Excerpt 6, an atypical case, does not fit any of these three types very well; it appears to position the referent of the JPSD, exclusive of the participants' current location, in the third party's temporal unfolding of the third party's movement from one landmark to another. We have addressed only the most salient practices using JPSDs in the data corpus—particularly, those involving reference to the participants' current position that are still understudied in the CA literature. By exploring how their referents are understood by participants in in-car interactions, we have demonstrated the variety of perceptual organizations of spatial experiences. Spatial experiences organized via different uses of JPSDs involve not only the spatial but also temporal and social dimensions in different manners. How these dimensions are involved varies according to the activity in which the participants are engaging. The multi-dimensionality of spatial experiences is not merely an organizing condition for spatial experiences. As suggested by the detailed analysis of talk in interaction, it rather constitutes various aspects of what is experienced or, in other words, is part of the "physiognomy" (Merleau-Ponty, 2012) of spatial experiences. The window we used to look into the organizations of spatial experiences is limited, but this study has presented an empirical demonstration of the multi-dimensionality and variety of experienced space.

### Notes

<sup>1</sup> A brief note on the Japanese system of deictic terms is in order. The system consists of three types: *ko-*, *so-*, and *a-*types (see Maynard, 1994: 28): (1) *ko-*type deictic terms refer to something proximal to the speaker; (2) *so-*type terms refer to something proximal to the recipient; and (3) *a-*type terms refer to something distal but accessible to both speaker and recipient. All types have pronouns, adjectives, adverbs, spatial pronouns, and directional pronouns. See also Filmore (1982) for an overview of spatial deixis in various languages.

<sup>2</sup> See Kataoka (2005) for Japanese spatial demonstrative expressions. See de Dear et al. (2021), who, in contrast to Levinson's view on the relation between languages and spatial experiences, suggested the relationship between the knowledge of the environment and the degrees of accuracy of spatial indication.

<sup>3</sup> In the detailed analysis of video-recorded narratives, Haviland (1993) demonstrated the constitution of "narrated space" within "interactional space"—space provided by

the speech context. Stukenbrock (2014) also suggested that using a deictic expression with a pointing gesture may create an imagined space interlocked with the speaker's and the recipient's actual space.

<sup>4</sup> See also Goodwin and Goodwin (2012), who showed that noticings occasioned by the ever-changing landscape initiate talk in cars, in which the differentiation of features seen out the window may be negotiated.

<sup>5</sup> Kuno (1973) observed that the anaphoric use of *ko*-type demonstrative expressions is very limited. Therefore, there were no *clear* cases of anaphoric use.

<sup>6</sup> The author visited the site to determine what is visible from which location.

<sup>7</sup> Throughout this excerpt, the participants use JPSDs to refer to different streets. In this respect, P1's pointing gesture in line 01, accompanying the JPSD, may also serve to distinguish the street on which they are currently driving from the other mentioned streets. In contrast, the passenger's use of a pointing gesture in line 14 of the previous excerpt does not play any such role, given that it is impossible to point at the other mentioned place that is currently perceptually inaccessible. We leave the exploration of how significant this difference is for the description of the practice in question to future investigations.

<sup>8</sup> In addition, the driver appears to provide an account for the lack of an adequate response to P1's explanation in line 01: he indicates that he now understands the point of the explanation.

<sup>9</sup> In line 14, P1 does not make any pointing gesture, although the proximal directional pronoun *kotchi* refers to their current location in the geographical relationship of the streets. The reason for this may be related to the fact that the turn is produced as a second-position action providing the requested confirmation, while it is done by

repeating *kotchi wa otowa nano*. If P1's repeat were accompanied by a pointing gesture, it might be hearable as produced as a first-position action. <sup>10</sup> We skip the detailed analysis of P2's utterance in line 16. She is referring to the street that has become visible on the right side of the car, using the JPSD *koko* and a pointing gesture (pointing to the right). Her referential act thus differentiates a feature (identifiable as a street) in the landscape. Although she is in the rear seat by herself, her pointing gesture may be expectedly visible to the driver through the rearview mirror.

#### References

- Blythe, Joe, Mardigan, Kinngirri Carmelita, Perdyert, Mawurt Ernest, Stoakes, Hywel. (2016). Pointing out directions in Murrinhpatha. Open Linguistics, 2, 132-159.
- Clark, Herbert H., Schreuder, Robert, & Buttrick, Samuel. (1983). Common ground at the understanding of demonstrative reference. *Journal of verbal learning and verbal behavior*, 22(2), 245-258.
- Coulter, Jeff & Parsons, E. D. (1991). The praxiology of perception: Visual orientations and practical action. *Inquiry*, *33*(3), 251-272.
- de Dear, Caroline, Blythe, Joe, Possemato, Francesco, Stirling, Lesley, Gardner, Rod, Mushin, Ilana, & Kofod, Frances. (2021). Locational pointing in Murrinpatha, Gija, and English conversations. *Gesture*, 20(3), 412-452.

Enfield, N. J. (2001). 'Lip-pointing': A discussion of form and function with

reference to data from Laos. Gesture, 1(2), 185-211.

- Enfield, N. J., Kita, Sotaro, de Ruiter, J.P. (2007). Primary and secondary pragmatic functions of pointing gestures. *Journal of Pragmatics*, *39*, 1722-1741.
- Enfield, N. J., Roque, Lila San. (2017). Place reference in interaction. *Open Linguistics*, *3*, 582-590.
- Fillmore, Charles J. (1982). Towards a descriptive framework for spatial deixis. In Jarvella, Robert J. & Klein, Wolfgang. (Eds.), *Speech, place and action: Studies in deixis and related topics* (31-59). Wiley & Sons.

Fillmore, Charles J. (1997). Lectures on deixis. CSLI Publications.

- Garfinkel, Harold. (2002). Ethnomethodology's program: Working out Durkheim's aphorism. Rowman & Littlefield.
- Gibson, James, J. (1979). *The ecological approach to visual perception*. Houghton Mifflin.
- Goffman, Erving. (1961). Encounters: Two Studies in the Sociology of Interaction. Bobbs·Merrill.
- Goodwin, Charles. (1995). Seeing in depth. Social Studies of Science, 25, 237-74.
- Goodwin, Charles. (2000). Action and embodiment within situated human interaction. Journal of Pragmatics, 32, 1489-1522.
- Goodwin, Charles. (2003). Pointing as situated practice. In Kita, Sotaro (Ed.), *Pointing: Where language, culture and cognition meet* (217-41). Lawrence Erlbaum,.
- Goodwin, Charles. (2017). Co-operative action. Cambridge University Press.
- Goodwin, Marjorie Harness & Goodwin, Charles. (2012). Car talk: Integrating texts, bodies, and changing landscapes. *Semiotica*, *191*(1/4), 257-286.

- Haddington, Pentti. (2010). Turn-taking for turntaking: Mobility, time, and action in the sequential organization of junction negotiations in cars. *Research on Language and Social Interaction*, 43(4), 372-400.
- Haddington, Pentti, Nevile, Maurice, & Keisanen, Tiina. (2012). Meaning in motion: Sharing the car, sharing the drive. *Semiotica*, *191*(1/4), 137-167.
- Hanks, William F. (1990). Referential practice: Language and lived space among the Maya. University of Chicago Press.
- Haviland, John B. (1993). Anchoring, iconicity, and orientation in Guugu Yimithirr pointing gestures. *Linguistic Anthropology*, *3*(1), 3-45.
- Hayashi, Makoto. (2012). Claiming uncertainty in recollection: A study of kkemarked utterances in Japanese conversation. *Discourse Processes*, 49(5), 391-425.
- Heritage, John. (1984). A change-of-state token and aspects of its sequential placement. Atkinson, J. M. & Heritage, John (Eds.), *Structures of social action: Studies in conversation analysis* (299-345). Cambridge University Press.
- Hindmarsh, Jon & Heath, Christian. (2000). Embodied reference: A study of deixis in workplace interaction. *Journal of Pragmatics*, *32*(12), 1855-1878.
- Jefferson, Gail. (1984). On stepwise transition from talk about a trouble to inappropriately next-positioned matters. Atkinson, J. M. & Heritage, John (Eds.), *Structures of social action: Studies in conversation analysis* (191-222). Cambridge University Press.
- Kataoka, Kuniyoshi. (2005). Variability of spatial frames of reference in wayfinding discourse on commercial signboards. *Language in Society*, *34*(4), 593-632.

- Keisanen, Tiina. (2012). "Uh-oh, we were going there": Environmentally occasioned noticings of trouble in in-car interaction, *Semiotica*, *191*(1/4), 197-222.
- Kendon, Adam. (2004). *Gesture: Visible action as utterance*. Cambridge University Press.
- Kita, Sotaro. (2003). Pointing: A foundational building block of human communication. In Sotaro Kita (ed.), *Pointing: Where language, culture, and cognition meet* (1-8). Lawrence Erlbaum.
- Koiso, Hanae, Amatani, Haruka, Den, Yasuharu, Iseki, Yuriko, Ishimoto, Yuichi,
  Kashino, Wakako, et al. (2022). Design and evaluation of the Corpus of
  Everyday Japanese Conversation, *Proceedings of LREC2022*, 5587-5594,.
- Kuno, Susumu. (1973). The Structure of the Japanese language. The MIT press.
- Levinson, Stephen C. (2003). *Space in language and cognition*. Cambridge University Press.
- Maynard, Senko K. (1994). An introduction to Japanese grammar and communication strategies. The Japan Times.
- Merleau-Ponty, Maurice. (2012). *Phenomenology of perception*. Translated by Donald A. Landes. New York: Routledge.
- Mondada, Lorenza. (2005). La constitution de l'origo déictique comme travail interactionnel des participants : une approche praxéologique de la spatialité. *Intellectica*, 41-42(2/3), 75-100.
- Mondada, Lorenza. (2012). Deixis: an integrated interactional multimodal analysis. In Pia Bergmann, Jana Brenning, Martin Pfeiffer, & Elisabeth Reber (eds.), *Prosody and embodiment in interactional grammar* (173–206). De Gruyter.

Mondada, Lorenza. (2014). Pointing, talk, and the bodies: Reference and joint

attention as embodied. In Mandana Seyfeddinipur & Marianne Gullberg (eds.), From Gesture in Conversation to Visible Action as Utterance: Essays in honor of Adam Kendon (95–124). John Benjamins.

- Nishizaka, Aug. (2007). Hand touching hand: Referential practice at a Japanese midwife house. *Human Studies 30*(3), 199-217.
- Nishizaka, Aug. (2011). 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, Aug. (2020a). Guided touch: The sequential organization of feeling a fetus in Japanese midwifery practice. In Cekaite, A. & Lorenza Mondada (eds.), Touch in Social Interaction: Touch, Language, and Body (pp. 224-248). Routledge.
- Nishizaka, Aug. (2020b). Multi-sensory perception during palpation in Japanese midwifery practice. *Social Interaction: Video-Based Studies of Human Sociality, 3*(1).

Sacks, Harvey. (1992). Lectures on conversation (2 vols.). Basil Blackwell.

- Sacks, Harvey, Schegloff, Emanuel A., & Jefferson, Gail. (1974). A simplest systematics for the organization of turn taking for conversation. *Language*, 50(4), 696–735.
- Schegloff, Emanuel A. (1972). Notes on a conversational practice: formulating place.In David Sudnow (ed.), *Studies in Social Interaction* (75-119). Free Press.
- Schegloff, Emanuel A. (1980). Preliminaries to preliminaries: "Can I ask you a question?". *Sociological inquiry*, *50*(3-4), 104-152.

Schegloff, Emanuel A. (1986). The routine as achievement. Human Studies, 9, 111-

151.

- Schegloff, Emanuel A. (1996a). Some practices for referring to persons in talk-ininteraction: A partial sketch of a systematics. Fox, Barbara (Ed.), *Studies in anaphora* (437-486). Benjamins.
- Schegloff, Emanuel A. (1996b). Confirming allusions: Toward an empirical account of action. *American journal of sociology*, *102*(1), 161-216.
- Schegloff, Emanuel A. (2007). Sequence organization in interaction: A primer in conversation analysis (Vol. 1). Cambridge University Press.
- Schegloff, Emanuel A., Jefferson, Gail, & Sacks, Harvey. (1977). The preference for self-correction in the organization of repair in conversation. *Language*, 53(2), 361-382.
- Stivers, Tanya. (2004). "No no no" and other types of multiple sayings in social interaction. *Human Communication Research*, *30*(2), 260-293.
- Stivers, Tanya & Rossano, Federico. (2010). Mobilizing response. *Research on Language and social interaction*, *43*(1), 3-31.
- Stukenbrock, Anya. (2014). Pointing to an 'empty' space: Deixis Phantasma in faceto-face interaction. *Journal of Pragmatics*, 74, 70-93.
- Stukenbrock, Anya. (2020). Deixis, meta-perceptive gaze practices, and the interactional achievement of joint attention. *Frontiers in Psychology*, *11*, 1-23.

Appendix: Transcript convention

In all the excerpts, each line is composed of two or three tiers. First, there is a Romanized version of the original Japanese. Below this are phrase-by-phrase glosses where necessary. Finally, the third tier presents an approximate English translation. The first tier of the transcript utilizes Jefferson's (2004) transcription system. In the second-tier glosses, the following abbreviations are used:

- AUX auxiliary verbs
- ITJ interjection
- MIM mimetic expression
- P particle
- PN proper name
- POL polite expression
- Q quotation marker

Some excerpts include annotations of the embodied conduct of each participant in the extra tiers designated by lowercase abbreviations such as "dr." The starting and ending points of the movements are indicated by the sign |. Double arrows (-->>) in these tiers indicate continuation of the described conduct over the line. In these annotations, the following abbreviations are used:

- F front
- H hand
- L left
- R right