Social Interaction. Video-Based Studies of Human Sociality.
2024 Vol. 7, Issue 4
ISBN: 2446-3620
DOI: 10.7146/si.v7i4.152386

Social Interaction

Video-Based Studies of Human Sociality

The Temporal Organisation of Leaning in Social Interaction

***Kristian Mortensen*[1] *& Spencer Hazel*[2]**

[1]University of Southern Denmark

[2]Newcastle University

Abstract

EMCA research has documented how the moving human body is a core resource for sense-making. This means that people engaged in interaction are constantly foraging for materials from which to fashion their contributions (Goodwin, 2018). Co-participants, in turn, are faced with a set of raw materials being mobilised and potentially used as resources for sense-making. In this paper, we focus on a particular bodily movement, learning forward. The unsupported lean is temporally organized and bringing the body off balance projects that the lean will be resolved. The study uses video-data from a range of institutional settings to explore how a leaning body is treated as indexing a range of social actions. We discuss this as having emerged from the human capacity to stand upright, and a shared knowledge of the additional exertion required to counteract gravitational forces when bringing the upper body off its vertical axis.

Keywords: leaning, temporality, bodily conduct, EMCA, gravity

1. Introduction

Although in much research on social interaction, participants' bodies have been treated as static by default, it takes only the most cursory of glances at interaction to conclude that the body is anything but immobile. People are constantly adjusting their body parts, extending them, twisting them and fashioning them into particular shapes. Hands gesticulate, touch, and fidget, eyes flit to and fro in their sockets, heads are rocked back and forth and side to side, feet tap, shoulders rise, eyebrows perform all manner of facial acrobatics. A member's problem is to be able to parse all of these behaviours into those which are performing some social action, and those which are simply manifestations of physiology. They must both identify when a movement displays what Kendon (2004, p. 7) calls 'the features of manifest deliberate expressiveness', but also how such movement is coordinated alongside any other action as accountable, performing a particular recognisable social action.

Where one line of interaction research has looked at social practices involved in participants who move their entire body along a horizontal axis, for instance while walking, cycling or driving (see Haddington et al., 2013 for an overview), another line of research has focused on instances where participants are more or less 'anchored' in one specific place, typically marked by their feet and lower body (Kendon, 1990), but where unrestricted parts of the body are mobilised as resources for producing social action. Here, it may well be significant when (a part of) the body comes to a hold – such as a hand gesture (Cibulka, 2016; Groeber & Berger, 2014) or facial mimics (Pajo & Klippi, 2013). The transition from moving to hold, and from hold to moving may then be indexical of some social action, such as prompting some form of repair (e.g., Seo & Koshik, 2010).

The focus for this article is the temporal organisation of one particular category of postural configuration, namely the unsupported lean (see Figures 1-3).

Figures 1-3. *Unsupported lean*

This involves postural shifts where a person moves the whole body, the torso or the position of the head, off its central axis. While we also find people adopting this body configuration in a wide range of *physically-supported* configurations (against a wall, against the back of the chair), we are specifically interested in occasions where there is no environmental object that serves to counteract the effects of the gravitational pull that the leaning configuration generates. Without

such counter support, the person experiences an increase in muscular and tendon stiffness, which is only resolved when the body is returned to a balanced, 'upright' position. Importantly, such an unsupported lean cannot be held indefinitely. It requires physical exertion on the part of the person leaning. Hence, bringing the body off-balance projects to others the eventual return of the body to an upright position, and these two postural shifts can act as left and right boundary markers for whatever social action is being occasioned by the lean-hold. In other words, a person's move into a lean is understood as sequentially tied to the unfolding interaction, as is the move to extract oneself from the lean and release the physical strain.

Adam Kendon (1990), in his influential paper on f-formations describes how participants use their bodies to display their current focus of attention to a co-participant. This is done through what he refers to as the transactional segment, which is the spatial surrounding in front of the upper body. The human body, Kendon argues, is hierarchically organised with the lower part of the body displaying the most enduring site of attention. Here, (vertical) flexibility of the body becomes relevant as human beings are able to torque (Schegloff, 1998) their torso, heads and eyes in different directions than the lower body. Such body torques are mobilised to display divergent orientations, for example to temporarily engage in other, secondary, activities while displaying an ongoing engagement with a primary activity. Importantly, with the lower body oriented to the primary and the upper parts of the body directed at the secondary site of attention, the configuration projects that the torque will be resolved, with the bodily configuration eventually unwinding to return to the primary point of attention. We would contend that the unsupported lean projects resolution in a similar way.

1.1 The upright individual

The ability to stand upright has been celebrated as a cornerstone in human evolution, giving rise to the species' ability to survive and thrive in a range of habitats, as well as freeing up their hands for other activities. Fossil evidence points to humans developing bone structures approximately 4-7 million years ago that eventually led them to develop as a bipedal species (e.g., Harcourt-Smith, 2010). For the past few million years this adaptation has been a defining feature of human evolution, shaping our anatomy, behaviour, and ultimately, our success as a species. Even now, infants' first upright standing and their first steps are celebrated as a development milestone and a rite of passage. Losing the ability to stand or walk is conversely treated as a major disturbance in a person's ability to live their lives to the full. Upright configurations have also come to occupy a place in our cultural life and imaginations, with languages such as English using 'upright' or 'upstanding' to both denote a person's physical posture as well as to connote a sense of moral integrity (see also 'recto' in Spanish or 'aufrecht' in German). Off-balance configurations are treated as a

source of intrigue. We may travel to Pisa to photograph its famous leaning tower, gawp at a magician who produces an overextended lean as part of a magic show, or amuse ourselves with popular slapstick comedy, where an inability to remain upright causes no end of mirth in the spectator. The upright configuration appears to be ingrained as default, that it is treated as noticeable when deviated from.

Although the physiological ability to stand upright requires the body properties bestowed on us by evolution, it also requires a regulatory mechanism for keeping balance, the ability to maintain the body's position over its base of support (for discussion, see Pollock et al. 2000) With two-thirds of a human's body mass located two-thirds of body height above the ground, we possess an inherently unstable structure, or it would be if we did not have a control system continuously acting to manage perturbations in the balance (Winter, 1995, p. 193). Humans being bipedal, their balance system consists of a complex set of sensorimotor-control systems. It involves input from sensory organs such as eyes, muscles and joints and the vestibular apparatus in the ears, all of which interact with different parts of the brain.

The result is that postural configurations such as an unsupported 'lean' are possible, but are temporary configurations – the boundary points on a 'inverted pendulum'. They are holds that members adopt in between rest or equilibrial positions, with the body's centre of mass eventually needing to be brought back over a base of support. Anyone witnessing an unsupported lean may project that as an unstable configuration it will be resolved in the imminent future. Moreover, with the leaning configuration requiring a physical effort to sustain, its adoption during interactional moments can also be read as indexical of some or other social action, and its suspension a boundary marker.

This projection in turn allows members to produce such an action as having what Adam Kendon calls 'the features of manifest deliberate expressiveness', which renders an action recognisable as a full-body gesture. These off-centred body gestures are ubiquitous in our everyday interactions with one another and this paper looks at how a leaning posture may serve as a resource for sense-making practices.

2. The Moving Social Body

The last couple of decades of social interaction research have witnessed an increased consideration and analysis of participants' bodily conduct as constituting systematically occasioned practices for sense-making. This led Nevile (2015) to talk about an 'embodied turn' in research on language and social interaction. The inclusion of participants' bodily conduct is of course not new in EMCA research. Indeed, it can be dated back to at least the early work of Goodwin (1979; 1981), Heath (1984), Streeck (1988) and others in the late 1970s and early 1980s. However, the significant growth of studies that include

consideration of the communicative function of the body, a more systematic focus in analyses, and above all the research findings of how participants' bodily conduct feature as part and parcel of sense-making practices have together made it increasingly difficult to justify a 'talk only' perspective on talk-in-interaction. That is, participants' bodily conduct has come to be accepted as not simply contextualising (e.g., Gumperz, 1982) or 'shaping' turns-at-talk, but that it is integral to how participants produce and recognise social practices for sense-making.

This increasing bulk of studies has challenged an implicit assumption found in earlier interaction research that the human body in interaction is static by default, and that any bodily conduct beyond the verbal/vocal can be separated out as bounded instances. For instance, Goodwin's (1981) highly influential book on gaze focuses primarily on *changes* in gaze. More recently, studies have built on Kendon's description of the temporality of gestures, consisting of a preparation phase, a hold and a retraction. These have described how a participant may bring a gesture to a recognisably uncompleted hold as a way to prolong some ongoing action and project turn-transition (Cibulka, 2016; Groeber & Pochon Berger, 2014) or as a way to postpone some action (Waring & Lo, 2024). In particular, studies that focus on facial mimics reveal the relevance of both temporal and sequential aspects of movements, holds and releases (e.g., Clift & Rossi, 2023; Dix & Groß, 2023).

However, when observing the human body during moments of interaction with others, we find it is in *constant* movement. Gestures appear and disappear in time and space from amidst an ongoing flow of body modulations (Streeck, 2009), gaze is rarely maintained on one spot more than a fraction of a second (as evidenced by the growing number of interaction studies that use eye tracking, such as Auer, 2017), the face performs a steady flow of shifting configurations (Groß et al., 2023), and the waveform of respiratory movements expands and contracts. Indeed, it might be argued that movement is the default of the body rather than non-movement, with instances of immobility such as gestural holds treated as noticeable (Cibulka, 2016; Waring & Lo, 2024). It is one such hold that the current article is concerned with, namely an unsupported lean. Here, the body is brought off its central axis at particular moments in an interaction and returned to its upright position once a required action has been performed by an interlocutor.

In this article, we focus on how leaning towards a co-participant can be a resource for producing a specific social action. We start by looking at repair sequences, then will broaden the analysis to consider other social actions.

A core notion in EMCA research is *indexicality* (Garfinkel, 1967) which refers to the observation/assumption that a resource that is being invoked in interaction - a word, a prosodic feature, a gesture - may be used as a component for communicating various social actions. Its meaning relies on its sequential placement and turn design which lay out the much-quoted CA-analytic phrase

why that now (Schegloff & Sacks, 1973). In what follows, will explore this by looking at unsupported leaning when it is carried out as part of repair sequences, before broadening the analysis to consider other social practices where a lean is drawn on as a resource for sense-making.

3. Leaning in Repair Sequences

Repair organisation constitutes without doubt one of the most studied aspects of social interaction in CA research. It describes a set of practices through which participants deal with what they orient to as problems of speaking, hearing and understanding. As in most areas of CA, the description of such practices has primarily focused on verbal and vocal resources for initiating and accomplishing repair respectively (Hayashi, Raymond & Sidnell, 2013b; Schegloff, Jefferson & Sacks, 1977). More recently, CA studies have also looked at bodily conduct as a systematic resource in repair sequences. For instance, Seo (2011) describes how repair initiations can be multimodal packages composed of talk, the human body and material or technological objects (see also Kääntа, 2010). Mortensen (2016) describes how a stand-alone cupped hand behind the ear is understood as initiating repair and treated as a problem of hearing. Similarly, facial gestures have been described as resources for initiating repair (Stolle & Pfeiffer, 2023; Wang & Li, 2024).

In addition, a number of studies have described the movement of leaning forward in relation to repair initiations. Rasmussen (2014) shows how speakers in lengthy repair sequences may lean forward during reformulations of the initial repair initiation, thus literally 'coming closer to an understanding' (p. 31). Day's (2012) autobiographic ethnography describes leaning forward as a recognized practice for increasing sound volume. Pajo & Klippi (2013) similarly describe how participants with hearing loss frequently lean forward towards the speaker's ongoing turn-at-talk. In these studies, participants are invariably sitting at tables, which then can act as a support structure to counteract the gravitational pull brought about by the lean. Unsupported leans can be found however in Seo & Koshik's (2010) study, where they describe what they refer to as 'two gestures that engender repair' – a head poke and a head tilt, understood as indicating a problem of understanding. Here, gestures are frequently produced in the absence of talk, thereby taking up a turn on their own and work in ways that are similar to co-called 'open' class repair initiations (Drew, 1997). These studies document how participants' bodies are invoked as sense-making resources as they become salient for co-participants in their quest for tracing ongoing displays of understanding. A subtle mobilisation of some part of the body – or the halt of one *in media res* – becomes meaningful in its sequential position as indexical of some social action. What that action is, that is how a co-participant treats it in a next turn, provides us with a glimpse of the creative world of human sociality.

4. Methodology

The methodological approach adopted here is situated in the field of Ethnomethodological Conversation Analysis (EMCA). EMCA describes the systematic and recognisable social practices that make up the common-sense knowledge in our everyday social life (Garfinkel, 1967; Sacks, 1992). This forms a basis for sense-making as a practical accomplishment for participants during courses of interaction. For the present paper, we highlight two methodological aspects stemming from this line of research – sequentiality and indexicality. *Sequentiality* refers to the observation that social actions are organized in relation to some previous action, most noticeably the immediate prior action (Schegloff, 2006). The notion of sequentiality as it is used in CA research builds on Sacks' description of how *turns-at-talk* are organised sequentially – with one turn following the other. This is the basis for one of CA's most basic analytic findings – the ubiquity of turn taking – and allows for the social norm of 'one at a time' (Sacks, Schegloff & Jefferson, 1974, p. 720). As CA research has increasingly included participants' full bodies as sense-making resources, the temporal divergence between what Goodwin (e.g., 2013) refers to as semiotic resources means that for instance a gesture may extend the boundaries of talk (Cibulka, 2016). This has led to the description of social action being both sequentially and simultaneously organized (e.g., Deppermann & Streeck, 2018; Mondada, 2022). *Indexicality* refers to the observation that a resource that is being invoked in interaction.

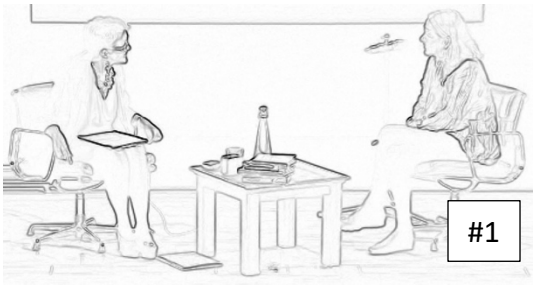
5. Analysis

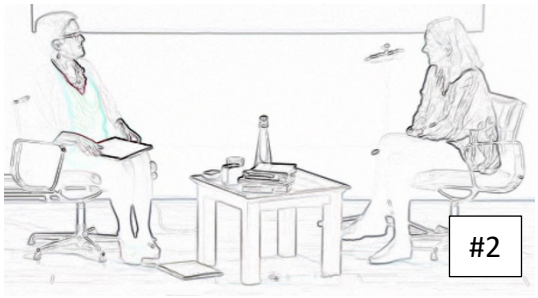
Our analysis draws on data recordings of institutional settings. We will start by looking at a few cases in which leaning forward co-occurs with a verbal repair initiation. Later, we turn to cases in which leaning in the absence of talk is oriented to as a repair initiation in its own right.

In Extract 1, a British journalist interviews a German author, who in line 3 introduces an English literal translation, 'ever-seller', of a German word (presumably '*Dauerrenner*').

Extract 1. *Ever seller* (INT Interviewer; AUT Author)

```
01 Aut:  it is very special,
02       .hhhh ehrm(h) it is an astonishi:ng phenomenon (0.2) ehrm
03       called ever- (.) ever selle(h)r hh ◦hu◦
04       .hhhh in Germany(h) hu huu
05       (0.5)
06 Int:  #+called,
   INT:   +leans upper torso forward
   Fig.  #1
07       (0.3)
08 Aut:  .tsk ever seller.
09       #+(0.4)
   INT:   +returns to upright position
   Fig.  #2
10 Int:   *ehrm* oh a- an ever (says) so i- it's it's (source) is a
11       best selle:r and it se[:ll i-
12 Aut:                        [.hh no it- it sells
13       (0.2=
14 Aut:  it[´s
15 Int:    [all the time (0.2) yeah
16       (.)
17 Aut:  it's *a* out of history huh
```





The interviewee is giving an account of the publishing success of one of her books, and in doing so describes it with the non-idiomatic expression, *ever-seller*. At this point, the edited video changes to another camera that shows both participants thus orienting to an expected and projected response from the host. Her response (line 6) is a partial repeat of the prior turn with continuing intonation as she brings her upper torso forward in the direction of the author and into an unsupported lean. The multimodal Gestalt (Mondada, 2014) of talk and bodily movement is understood as a repair initiation as the author repeats what is projected to be the problematic item, *ever-seller* (line 8). The interviewer then returns her torso to an upright postural configuration. Once she has done so, she produces a change-of-state token (Heritage, 1984) ('oh') followed by a candidate understanding of what the term might denote.

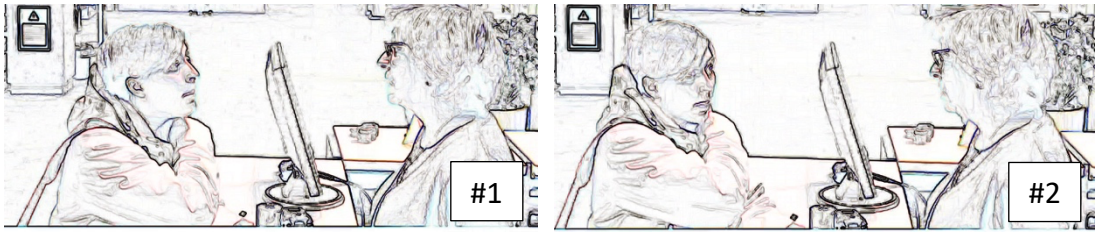
In this extract we note how the repair initiation is done by a leaning forward co-occurring with a verbal repair initiator, here in the form of a partial repeat, that specifies the trouble source in the prior turn. More frequently, however, leaning forward co-occurs with a so-called 'open' class repair initiation (Drew, 1997), as in Extract 2 below. These are open in the sense that they do not specify the trouble source and do not indicate the kind of trouble being alluded to. It has been argued that open class repair initiations are often first treated as a problem of hearing and only if that does not lead to an establishment of intersubjectivity it is treated as a problem of understanding (Svennevig, 2008). In addition, open class repair initiations are often followed by a repeat of the trouble source, which

orients to the trouble source as a problem of hearing (e.g., Hayashi, Raymond & Sidnell, 2013a).

Here, a staff member at a help desk for national and international exchange students at a Danish university is assisting a non-local student. This is an example of the repair initiation being composed of leaning forward and a verbal open class repair.

Extract 2. *Bank statement* (TAN Tanja-staff; PAU Paulina-client)

```
69 Pau:  and declaration of sufficient (0.2) means?
70       (0.5)
71 Pau:  what it does it means?=
72 Tan:  =that you have money enough
73       to support yourself
74       while you are here
75       (0.3)
76 Pau:  ah okay (.) [erm::,]
77 Tan:              [a bank] statement or something like that
78 Pau:  #*yeah?
   PAU:   *leans forward over the counter
   Fig.  #1
79 Tan:  or a sti- a statement from the bank?
80       (0.6)
81 Pau:  #*okay?
   PAU:   *straightens back to upright
   Fig.  #2
```



Following the staff member's turn in line 77, the student angles her upper body forward towards the staff member and into an unsupported lean. Concurrently, she produces what is treated as an open class repair initiation – *yeah?* (line 78). The staff member's repair turn is performed as a reformulation of the trouble source turn and is produced with rising intonation that requests a confirmation by the student. The student produces an upwardly inflected confirmation ('okay?, line 81), while straightening her body into an upright configuration.

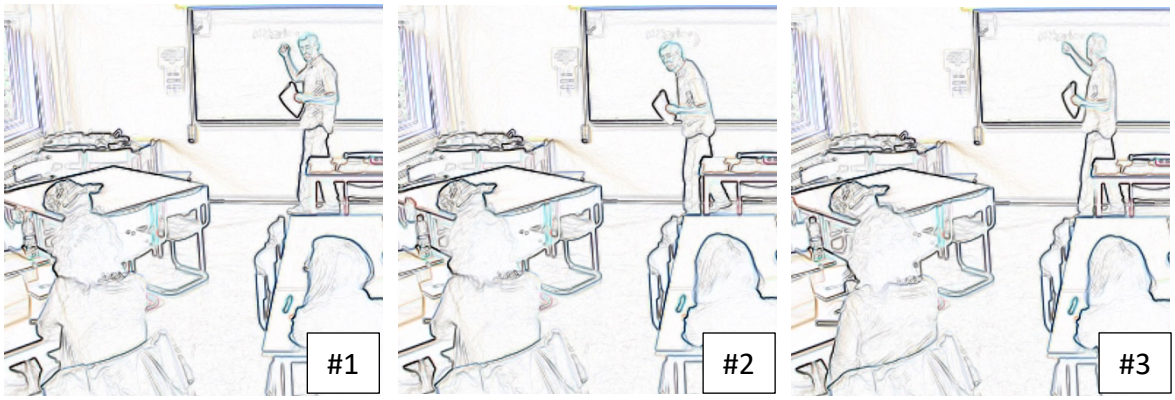
In the first two extracts in this section, we have seen how the bodily movement of leaning forward towards the speaker of the prior turn is one component of a repair initiation. In these cases, the verbal turn indexes the action as a repair initiation and may point to the kind of trouble the speaker alludes to and what is treated as problematic in the prior turn, or may simply index a problem, but leaves it to the speaker of the trouble source turn to locate the trouble source. As such, these findings add to prior findings on how the human body may be a

resource for initiating repair (e.g., Mortensen, 2016; Seo & Koshik, 2010). We now turn to cases in which leaning forward towards the prior speaker is oriented to as a repair initiation in the absence of a verbal turn-at-talk.

The following extract is from a Danish second language class. In the excerpt, we find the teacher has written the word "*målsætning*" (Eng. *aims, goals*) on the blackboard, is pointing to it and has torqued his upper body in the direction of the students. At this point, a student asks in Danish what the word means.

Extract 3. *Målsætning* (Student (STU); Teacher (TEA))

```
01 Stu:  hvad betyder det.
         what does it mean
02 Tea:  #*sorry?
   TEA:  *produces slight head poke in direction of Stu]
   Fig.  #1
03 Stu:  hvad betyder det?
         what does it mean
04 TEA:  [steps forward into a lean in direction of Stu]
05 Stu:  what mean?
06 Tea:  ja hvad *betyder det #målsætning
         yeah what does it mean målsætning
   Fig.                       #2
   TEA:           *steps back and straightens to upright
         * looks to the word on the board
07       #*det betyder our aims our goals
           it means
          *turns fully to the students and steps forward
   Fig.  #3
```



In the excerpt, we find the student asking in Danish what the word 'målsætning' means (line 1). The teacher looks to her and produces the open repair initiator 'sorry?', accompanied with a slight head thrust in her direction (line 2). This is treated by the student as a problem of hearing, and she repeats the question (line 3). Again, the teacher does not answer, but rather he steps forward, transferring his weight onto the forward foot, and adopting a leaning

configuration in the student's direction. On this occasion it is produced without verbal accompaniment, but this is still treated by the student as a repair initiator, and on this occasion, she asks the question again, but now switching to English to do so (line 5). The teacher now accepts the question, repeats the Danish version, and transitions back to an upright configuration, following which he answers her question (line 7).

We see then how an initial head poke is produced in conjunction with 'sorry?', and this is treated by the recipient as a repair initiator. Her subsequent repair turn, where she repeats the initial query, leads to the teacher leaning his entire body forward in an unsupported off-axis configuration in her direction. This is treated by the student as a renewed attempt to repair, and she recalibrates the repair to address not a problem of hearing but of understanding. In response, the teacher brings his body back into an upright position, displays recognition now of what her initial question had been, and moves to answer it.

We see in the above examples how the lean can both transform a co-occasioned utterance such as 'called' (Extract 1) or 'yeah' (Extract 2) into something recognisable as a repair initiator; and it can be produced independent of the verbal utterance ('sorry?', Extract 3) and treated still as a repair initiator. We also note how the body is returned to a straight upright position once the sequentially relevant next action is performed. In the following extracts, we show how even in the absence of verbal utterance, the lean is treated as seeking to repair or pursue a response.

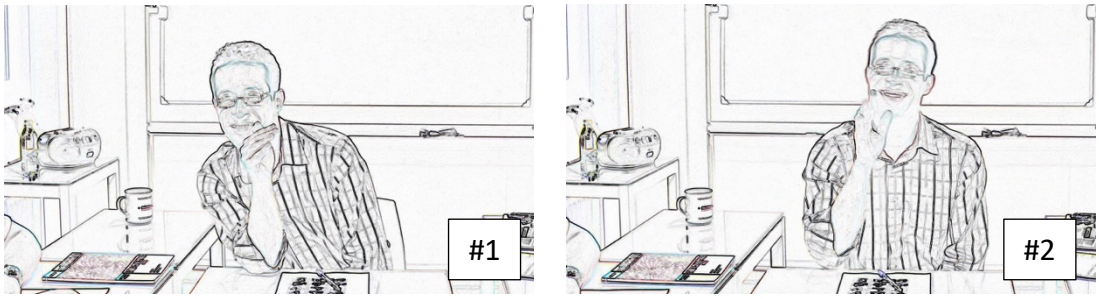
Extract 4 comes from an English as a Foreign Language-classroom. The class consists of a teacher and three students tasked with describing pictures on a handout, by suggesting relevant verbs in English. Just prior to the beginning, Sabine has mistakenly suggested 'reading' for describing a picture. This has resulted in several unsuccessful prompts from the teacher for self-correction.

Extract 4. *To study (04:24)*

```
01 Tea:  and it's not a tea:cher
02       (0.2)
03 Tea:  it's a,
04       (1.0)
05 And:  student
06 Tea:  <a student>
07       (0.7)
08 Tea:  the ve:rb (.) to,
09       (1.4)
10 And:  °student°


11       (0.2) +(.)          +(0.7)      #+ ((1.0))
   TEA:        +gaze to And +gaze fwrd   +leans sidewards twrds And
   Fig.                                  #1
12 And:  student
13       (0.5)
```

```
14 Tea:  #+°ehr:: to:°
   TEA:  +release of the lean and return to an upright position
   Fig.  #2
```



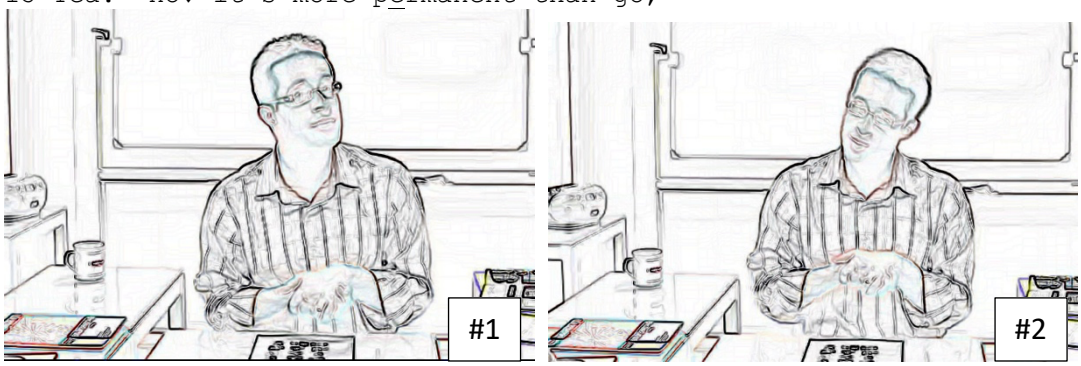
Here, the teacher produces designedly incomplete utterances (Koshik, 2002) that prompt the students to finish the target sentence. After a 1.4 second pause in line 9, André produces a candidate completion of the teacher's turn – 'student' (line 10) with low volume. Following his turn, the teacher leans sideways towards André without turning the head towards him. André treats the teacher's movement as a repair-initiation that treats his prior turn as problematic, and he now repeats the turn with increased volume. Following the repair turn, the teacher releases the leaning position and returns to an upright sitting position. Note that the teacher does not accept the repair as a correct answer to the question but continues the repair sequence in the form of another designedly incomplete utterance in line 14 (see Extract 6 below). He does however treat André's repair as resolving the problem, namely his previous low-voiced response.

Curl (2005) describes how repairs in the form of verbatim repetitions of the trouble source are phonetically marked for instance through increased volume when the trouble source was sequentially and topically fitted. Our collection includes many cases like this, which suggests that participants treat the stand-alone lean towards the speaker of the prior turn as a repair initiation that orients to a problem of hearing rather than understanding. A similar example is Extract 5, in which the repair takes the form of a repeat and expansion of what is treated as the trouble source turn.

Extract 5. *Go*

```
01 Tea:  okay (.) eh sabine what is the <ve:rb> for ↑picture number one
02       (1.5)
03 Sab:  °hmm ↑hm°
04       (4.3)
05 And:  .hh °ah:°
06       (4.5)
07 Tea:  any idea
08       (3.0)
09 Tea:  Camilla?
10 Cam:  go:
```

```
11        (0.2) +(0.5) ((0.7))
   TEA:         #+leans forward, turns head, gaze maintained at CAM
   Fig.         #1
12 Cam:   go in flat=
13 Tea:   =#+not to go.
   TEA:     +releases lean, turn to upright position
   Fig.     #2
14        (.)
15 Tea:   no↓ it's more permanent than go,
```



Extract 5 is from the same activity as in Extract 4. Here the teacher has selected Sabine to find the verb for the first picture (line 1). However, as the response is not forthcoming, the teacher now selects Camilla, who has displayed willingness to answer his question (Mortensen, 2008). Her turn is a lexical TCU with the proposed verb – 'go'. After the turn, the teacher turns the head slightly to the left, and leans forward towards Camilla. He maintains the direction of his gaze towards her (thus looking to her from the corner of his eyes). Immediately after the lean is instigated, Camilla produces a repair turn that orients to the form of the trouble source turn, e.g., it does not constitute what participants treat as a pedagogically adequate answer (such as 'a full sentence'). Immediately after the repair turn, the teacher releases the leaning posture, leans back in his chair while producing a negative assessment of the answer.

So far, we have argued that the lean towards the speaker of the prior turn is treated as a repair-initiation – as a first pair-part of an adjacency pair. First pair-parts make a second pair-part conditionally relevant (Schegloff & Sacks, 1973) and any delays or absence of their production are noticeable and consequential for the continuing progression of the interaction. Extract 6 occurs just before Extract 4 above. Here, the teacher has selected André to provide the relevant verb in the form of a designedly incomplete utterance, but in line 25 Camilla self-selects and provides a possible turn-completion of the teacher's turn.

Extract 6. *Stjudy*

```
08 Tea:  the ve:rb (.) to,
09       (1.4)
10 And:  °student°
11       (0.2) +(.)          +(0.7)      + ((1.0))
   TEA:        +gaze to And +gaze fwrd +leans sidewards twrds And
12 And:  student
13       (0.5)
14 Tea:  +°ehr:: to:°
   TEA:  +release of the lean and return to an upright position
15       (2.0)
16 Sab:  to (léieren)
17       (0.5)
18 Cam:  teach
19       (6.8)((TEA stands up, walks to the board and starts writing))
20 Tea:  'kay (remember) it's a student
21       (2.5)
22 Tea:  from the ve:rb (.) to,
23       (4.8)
24 Tea:  yeah- (.) andré (.) to,
25 Cam:  °stjudy°
26       +(0.2)
   TEA:  +turns towards Cam
27 Cam:  °non°
28       #1+(1.2)            #2+(0.8) ((2.0))
   TEA:   +leans towards Cam +cupping hand gesture
   Fig.  #1                 #2
29 Tea:  °camilla +(.) I didn't hear°
   TEA:           +return to upright position
30       +(0.2)
   TEA:  +retracts cupping hand gesture
31 Cam:  to student
```

Camilla's turn in line 25 is produced with low volume, and in a normatively incorrect way – 'stjudy'. The teacher who has been facing the board during her turn now turns to face Camilla. He then leans towards her, and as she does not produce a repair immediately he releases the lean as he returns to an upright position, raises the right hand and makes a cupping hand gesture behind the ear (Mortensen, 2016), and produces another repair initiation, this time verbally (line 29). The verbal repair initiation indexes the problem as a hearing problem ('I didn't hear'). In this way, the teacher orients to the lack of a repair following the repair initiation. The lean is thus not merely a movement of the body. It becomes an embodied resource for sense-making that is sequentially organised in relation

to the prior turn-at-talk. Camilla now produces a repair turn, 'to student' after which the teacher turns to the board and starts writing the right form of the verb on the board while producing another prompt in the form of a designedly incomplete utterance ('to:'). We see how the release of the leaning posture follows the repair turn of the student, albeit it does not coincide with the completion of the repair sequence.

6. The lean as Organisational Feature of Other Social Actions

In this paper, we look at a specific bodily movement – leaning the torso off its vertical axis. Such leaning movements may be used as a practice for indexing various social actions, besides the repair intitiation that we have focused on above. Leaning forward towards a co-participant may, for instance, display intimacy between lovers, aggression prior to a street fight, empathy towards a co-participant's trouble telling or be a conventional posture during religious rituals and prayers. Or it may preface the upcoming talk as delicate, as gossip or as something that should not be heard by co-present individuals. Below, we give some examples of how unsupported leans are used in the management of interaction.

6.1 Displaying availability

Apart from considerations of the activity type, we can also look at postural modulations at the level of sequential organisation such as in regulating turn-taking, or sequences. For example, in the following extract, a human participant leans towards an approaching social robot to display availability to enter a focused interaction with it.

Extract 7. *Human-robot interaction*

```
01 Rob:  ((robot moves towards Hugo))
02 Hug:  #((leans in a bow towards the Robot))
   Fig.  #1
03       (0.8)
04 Rob:  hello
05 Hug:  hello:
```

Here, the Robot is approaching Hugo and in line 1 torques its body into position to 'face' him. Hugo, presumably projecting an incipient encounter with the Robot leans towards it and bows in order to come to a face-to-face level with the Robot (which is significantly smaller than Hugo). After a short pause, the Robot initiates a first greeting upon which Hugo produces a second-greeting.

6.2 Participation management

If we move within the boundaries of an established encounter, the leaning torso may be used to negotiate participation status (Goffman, 1981) and engagement within the participation framework. Extract 8 comes from a design workshop in which people with arthritis present to a group of designers their favourite tools and objects to assist them in everyday activities such as opening jars and cans, buttering bread, and the like. Here, D is presenting a can opener that fixates the can for easy handling.

Extract 8. *Can opener (abbreviated)*

```
01 D:  kender du den ikke
       don't you know it

02 A:  ne:[:j]
       No

03 D:     [du ka købe den i enhver isenkræm
           you can buy it in every convenience store

04     (0.2)

05 A:  ka man det=
       you can

06 D:  =mm
        Mm

07     (0.5)

08 D:  å i (   )
       and in the (   )

09     (0.6)

10 A:  jaer
       Yeah

11     +(0.6)
   D:  +passes the can opener to A

((lines omitted))
```

12 A: så trykker du bare ned he:r [#+( )
then you just press down here
B: ***+drops pen; holding gesture***
Fig. #1

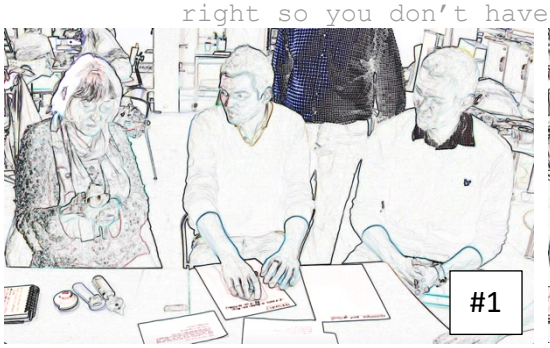
13 D: [mm
[mm

14 D: tryk på knappen der #+ja
press the button there yeah
B: ***+leans back in the chair***
Fig. #2

15 B: det smarte ved det >det er det' jo< den har den låsefunktion=
the good thing about it that is that it has the closing function

16 D: =ja[er å den har et godt (.) godt greb
yeah and it has a good (.) good grip

17 B: [ikk os så du ikk ska klemme
right so you don't have to squeeze



The tool is unfamiliar to A, and D passes it to her (line 11) for inspection (Mortensen & Wagner, 2019). As she does so, B is hovering a pen over a piece of paper on which he makes notes. However, as A produces a candidate understanding of how the tool is used (line 12), he drops the pen to the table, forms the writing hand into a gesture that mimics holding the tool, and leans back in his chair in overlap with D's confirmation of A's prior turn. He is clearly moving into a speaker position by projecting a turn-at-talk, and following D's confirmation (line 14) he launches a turn – an assessment of the tool (line 15). The gesture and the lean provide a visible modification to the established participation framework as bodily resources for projecting a turn-at-talk. Previous studies have shown how a turn is often preceded or projected by what Schegloff (1996) calls pre-turn beginnings. Such pre-beginnings might be acoustic, such as lip smacks, coughs or inbreaths (Jefferson, 1984), or done via bodily resources such as head/gaze turns, facial expressions (Streeck & Hartge, 1992) or pointing gestures (Mondada, 2007). These changes in body posture may index upcoming speakership as a way of 'gearing up' (Jefferson, 1984: 13) for a turn.

6.3 Occasioning speaker transition

Learning may also be a way to index that speaker transition is relevant. In Extract 9, which is the same fragment as in Extracts 4 and 6, the teacher in an English as a foreign language classroom is prompting the students to produce the verb *to study* and this leads to a lengthy repair sequence (see above). Here, the teacher has just moved to the board and written 'a student ((blank space)) to'.

Extract 9. (04:47) *Stjudy (04:47) (Tea Teacher; Cam Camilla)*

```
01 Tea:   'kay (remember) +it's a student
   TEA:                    +--->writes "a student ((blank space)) to" on
          board
02        (2.5)+
   TEA          +stops writing
03 Tea:   from the ve:rb #(.) to-> ((TEA turns towards students))
   Fig.                  #1
04        #+(4.8)
   TEA:    +leans forward towards the students
   Fig.   #2
05 Tea:   yeah- (.) andré (.) to->
06        (1.0)
07 Cam:   °stjudy°
08        +(0.2)
   TEA    +turns towards CAM
09 Cam:   °non°
10        +(1.2) +(0.8) ((2.0))
   TEA:   +leans towards CAM +cupping hand gesture
11 Tea:   °camilla +(.) I didn't hear°
   TEA:              +returns to upright position
12        +(0.2)
   TEA:   +retracts cupping hand gesture
13 Cam:   to student
```

In line 3, the teacher produces a designedly incomplete utterance (Koshik, 2002). We note how the teacher abandons the turn with continuing intonation, makes a small pause and leans forward towards the students. These combined resources mark turn transition as relevant although the turn has not reached a syntactic completion thus prompting the students to complete the part of the verbal utterance (Hazel & Mortensen, 2019).

6.4 Sequence closing

Changes in posture by leaning a part of the body can also work as a resource for closing a sequence – as an indexical, visible boundary marker. In the following extract, we see how leaning the torso back and forth in a sweeping rocking movement following a period of relative instability becomes part of a sequence closing. Here, a group of colleagues are having a video mediated meeting in which they organise an event with visitors from abroad. After a discussion about finances, Michael sums up by asking for confirmation that financing is needed for one visitor from Sweden and one from Germany.

Extract 10. *One from Sweden and one from Germany*

```
01 Mic:  ja ska vi ikke lige sige at jeg får et svar forhåbenligt i
         yes should we say that i get an answer hopefully

02       morgen (.) på det
         tommorrow (.) about that

03       (0.3)

04 Pat:  jaer
         yeah

05 Lea:  [jaer
         Yeah

06 Mic:  [så ka jeg li::ge s:ende det ud til jer for det er rigtigt det
         then i can forward it to you because it's right this is

07       er den nemmeste vej (.) at gå
         the easiest way to do it

08       (0.3)

09 Pat:  jaer
         yeah

10      (0.7)

11 Mic:  så der skal vi regne me:d e:n eh (1.3) en fra sverige og en fra
         so we should budget with one (1.3) one from Sweden and one from

12       tyskland
         Germany

13       (1.9)

14 Lea:  jaer
         Yeah

15       (0.4)
16 Pat:  hm
         Hm
```

```
17 Bri:  jaer
         Yeah

18       (1.3)

19 Mic:  go#+d[t
         Good
   MIC:     +->leans back and rocks back and forth in his chair
   Gif.    #1
20 Lea:       [men ska vi så ikke prøve at eh (.) ta fat på den +der eh
               but should we then start with the

21        navn å: den der beskrivelse
          name and the description
```

We note how Michael, during the request for confirmation in lines 11-12, is moving his head slightly, and changes his gaze (presumably) from one participant to another on the screen in front of him. However, following the turn, he adopts a state of relative immobility: his head stops moving, and his eyes fixate on one position on the screen. After a pause, Leah confirms with a *jaer* (yeah, line 14) and Michael moves his gaze. Now Patrick nods slightly and produces a confirmation token, *hm* in line 16, and Brian also confirms with a *jaer* (yeah, line 17). Michael nods and produces a boundary marker, a sequence closing third (Schegloff, 2007) *godt* (good) in line 19. He then leans back in his chair in a rocking movement, adjusting his sitting position by shortly rising from the chair before leaning forward again thereby torquing his upper body back into what Sacks and Schegloff (2002[1975]) refers to as a home position. Note that during the lean, Leah moves on with suggesting the next topic to be discussed (line 20-21) thereby orienting to the prior sequence as having come to a closing (Scheflen, 1972).

7. Discussion

What is clear from the analyses presented in this paper is that the unsupported leaning of the body (or the upper part of it) is treated as a relevant component of some social action. The leaning body is part of a multimodal Gestalt (Mondada, 2014) and may be used to index various social actions in various sequential positions. As such, it is indexical – like all social conduct – so co-participants are faced with the practical question of what to make of it in this sequential position. Rather than assuming a correlation between movement and action, analysts need to describe what participants themselves make of it.

In his paper on movement coordination, Kendon (1970[1990]) refers to the notion of *interactional synchrony*. He argues that participants engaged in a focused interaction often move simultaneously - and often remain immobile simultaneously (see also Scheflen, 1972). This requires a mutual understanding of the ongoing, and more importantly, projected action, boundaries of sequential actions or activities and so forth. Kendon, and more broadly the tradition of

context analysis argues that these and other types of bodily conduct are part and parcel of how participants establish and maintain intersubjectivity, not mere ways for organising – or orchestrating – what happens within the physical boundaries of participants' bodies. Such a view would place talk at the centre of analysis. In this paper too, the unsupported leans occur in specific sequential positions thereby displaying the participant's understanding of some prior action. These are not merely manifestations of physical tension, but components of participants' resources for sense-making.

Although interaction studies for many years have been occupied with describing how the human body serves as a resource for sense-making, most studies have focused on a rather narrow understanding of bodily movement. This includes specific kinds of gestures such as pointing and depicting gestures, eye movement – most often inferred by head turns – vis-a-vis co-participants and/or objects in the surrounding environment, bodily orientation towards or away from co-participants etc. In sum, the understanding of the body as *social* is described in relation to co-participants, that is, within the frames of established participation frameworks. They are immediate semiotic signs that are recognizable by members of society. However, the human body is in constant movement with various parts of the body engaged in movements that may be coordinated as choreographic orchestrations. They may appear as background features upon which bodily figures appear and disappear, but even such movements form part and parcel of the rich ecology within which participants are embedded.

Finally, although rarely emphasised, the body is a *physical* entity, and as such it has a relationship to the physical world in which it is situated. In social interaction studies, we already consider how people use the body to manipulate the surrounding physical world for communicative purposes. For example, speech is the voice-box manipulation of proximal pockets of air to fashion patterns of sound that others can perceive. Likewise, hands are used to manipulate physical objects in the environment in ways that are perceived as meaningful to others who witness the manipulation (see Nevile et al, 2014), or to fashion objects that on their own provide others with multimodal texts from which to garner some meaning. Less common however is to consider the interplay between the human body and its many working parts, and the physical world it inhabits. For example, the acoustic signal of speech only carries so far before it ceases to have enough power to create the waveforms that can be perceived by another, even if the person has direct visual access to the speaker. A facial gesture can only be held for a brief period before the plasticity of the facial muscles pulls the face back into a neutral configuration.

Similarly, and related to our analysis, hand and arm gestures are subject to gravitational forces that any gesturing person will experience. More than any other factor, this will broadly direct how hand and arm gesturing is organised, or how gesturing behaviours emerge in the first place. If moving one's hands away

from the torso increases the physiological energy required to counteract the gravitational pull, then this will always be a temporary arrangement awaiting a return to a less energy-consuming body configuration. Any muscle strain brought about by these periods of gesturing will eventually be alleviated by the hands and arms returning to a supported position, either supported by some object or the arms aligned with the upright body. Such demands on the body provide members with a temporal frame through which to understand one another's bodies in interaction. While the onset of such bodily actions is sequentially organised, the exertion involved in producing the action (e.g., torquing the body, producing a gesture hold, smiling, leaning) projects a return to a physically equipoised state. This somatic resetting is then also treated by co-participants as indexical of some communicative intent, and sequentially fitted to other elements in the unfolding interaction. The unsupported lean analysed here provides us with one clear illustration of how this has evolved as a means for indexing some social action. Simply by moving one's upper torso off its body-axis is treated by co-participants as a temporally organised social action in need of resolution, with the means for this required of the recipient.

References

Auer, P. (2017). Gaze, addressee selection and turn-taking in three-party interaction. *InLiST - Interaction and Linguistic Structures*, *60*(August). www.inlist.uni-bayreuth.de/issues/60/index.htm

Cibulka, P. (2016). On how to do things with holds: Manual movement phases as part of interactional practices in signed conversation. *Language and Linguistics*, *16*(4), 447-472.

Clift, R. & Rossi, G. (2024). Speaker Eyebrow Raises in the Transition Space: Pursuing a Shared Understanding. *Social Interaction: Video-Based Studies of Human Sociality*, *6*(3).

Curl, T. S. (2005). Practices in other-initiated repair resolution: The phonetic differentiation of 'repetitions'. *Discourse Processes*, *39*(1), 1-43.

Day, D. (2012). Hearing poorly with skill. In W. Gunn & J. Donavan (Eds.), *Design Anthropology: Building Relations between Designing and Using*. Ashgate.

Deppermann, A. & Streeck, J. (Eds.) (2018*). Time in Embodied Interaction: Synchronicity and Sequentiality of Multimodal Resources.* John Benjamins.

Dix, C. & Groß, A. (2024). Surprise About News or Just Receiving Information? Moving and holding Both Eyebrows in Co-Present Interaction. *Social Interaction: Video-Based Studies of Human Sociality*, *6*(3).

Drew, P. (1997). "Open" Class Repair Initiators in Response to Sequential Sources of Trouble in Conversation. *Journal of Pragmatics*, *28*(1), 69-101.

Garfinkel, H. (1967). *Studies in Ethnomethodology*. Prentice-Hall.

Goffman, E. (1981). Footing. In E. Goffman (Ed.), *Forms of Talk* (pp. 124-159). University of Pennsylvania Press.

Goodwin, C. (1979). The Interactive Construction of a Sentence in Natural Conversation. In G. Psathas (Ed.), *Everyday Language: Studies in Ethnomethodology* (pp. 97-121). Irvington.

Goodwin, C. (1981). *Conversational Organization: Interaction Between Speakers and Hearers*. Academic Press.

Goodwin, C. (2013). The co-operative, transformative organization of human action and knowledge. *Journal of Pragmatics*, *46*, 8-23.

Groeber, S. & Pochon-Berger, E. (2014). Turns and turn-taking in sign language interaction: A study of turn-final holds, *Journal of Pragmatics, 65,* 121-136. https://doi.org/10.1016/j.pragma.2013.08.012.

Groß, A., Dix, C., Ruusuvuori, J. & Peräkylä, A. (2024). Facial Gestures in Social Interaction: Introduction to the Special Issue. *Social Interaction: Video-Based Studies of Human Sociality*, *6*(3).

Gumperz, J. J. (1982). *Discourse Strategies*. Cambridge University Press.

Haddington, P., Mondada, L., & Nevile, M. (Eds.). (2013). *Interaction and Mobility: Language and the Body in Motion*. de Gruyter.

Hayashi, M., Raymond, G., & Sidnell, J. (2013). Conversational repair and human understanding: An introduction. In M. Hayashi, G. Raymond, & J. Sidnell (Eds.), *Conversational Repair and Human Understanding* (pp. 1-40). Cambridge University Press.

Hayashi, M., Raymond, G., & Sidnell, J. (Eds.). (2013). *Conversational Repair and Human Understanding*. Cambridge University Press.

Hazel, S., & Mortensen, K. (2019). Designedly incomplete objects as elicitation tools in classroom interaction. In D. Day & J. Wagner (Eds.), *Objects, Bodies and Work Practice* (pp. 216-249). Multilingual Matters.

Heath, C. (1984). Talk and Recipiency: Sequential Organization in Speech and Body Movement. In J. M. Atkinson & J. Heritage (Eds.), *Structures of Social Action. Studies in Conversation Analysis.* (pp. 247-265). Cambridge University Press.

Heritage, J. (1984). A Change of State Token and Aspects of Its Sequential Placement. In J. M. Atkinson & J. Heritage (Eds.), *Structures of Social Action* (pp. 299-345). Cambridge University Press.

Jefferson, G. (1984). Notes on some Orderlinesses of Overlap Onset. In V. D'Urso & P. Leonardi (Eds.), *Discourse Analysis and Natural Rhetoric* (pp. 11-38). Cleup Editore.

Käänta, L. (2010). *Teacher Turn-allocation and Repair Practices in Classroom Interaction: A Multisemiotic Perspective*. Jyväskylä Studies in Humanities, no. 137.

Kendon, A. (1990). *Conducting Interaction: Patterns of Behavior in Focused Encounters*. Cambridge University Press.

Kendon, A. (1990 [1970]). Movement Coordination in Social Interaction: Some Examples Described. In A. Kendon (Ed.), *Conducting Interaction: Patterns of Behaviour in Focused Encounters* (pp. 91-115). Cambridge University Press.

Kendon, A. (2004). *Gesture: Visible Action as Utterance*. Cambridge University Press.

Koshik, I. (2002). Designedly Incomplete Utterances: A Pedagogical Practice for Eliciting Knowledge Displays in Error Correction Sequences. *Research on Language and Social Interaction*, *35*(3), 277-309.

Mondada, L. (2007). Multimodal Resources for Turn-Taking: Pointing and the Emergence of Possible Next Speakers. *Discourse Studies*, *9*(2), 194-225.

Mondada, L. (2014). The local constitution of multimodal resources for social interaction. *Journal of Pragmatics*, *65*, 137-156.

Mondada, L. (2022). Adjusting step-by-step trajectories in public space: the micro-sequentiality of approaching and refusing to be approached. *Gesprächsforschung - Online-Zeitschrift zur verbalen Interaktion*, vol. 23, pp. 36-65.

Mortensen, K. (2008). Selecting Next-Speaker in the Second Language Classroom: How to Find a Willing Next-Speaker in Planned Activities. *Journal of Applied Linguistics*, *5*(1), 55-79.

Mortensen, K. (2016). The body as a resource for other-initiation of repair: Cupping the hand behind the ear. *Research on Language and Social Interaction*, *49*(1), 34-57. https://doi.org/10.1080/08351813.2016.1126450

Mortensen, K., & Wagner, J. (2019). Inspection sequences - multisensorial inspections of unfamiliar objects. *Gesprächsforschung - Online-Zeitschrift zur verbalen Interaktion*, *20*, 399-343.

Nevile, M. (2015). The embodied turn in research on language and social interaction. *Research on Language and Social Interaction*, *48*(2), 121-151.

Nevile, M., Haddington, P., Heinemann, T., & Rauniomaa, M. (2014). *Interacting with objects: Language, materiality, and social activity*. John Benjamins Publishing Company.

Pajo, K., & Klippi, A. (2013). Hearing-impaired recipients' non-vocal action sets as a resource for collaboration in conversation. *Journal of Pragmatics*, *55*, 162-179.

Pollock, A.S., Durward, B.R., Rowe, P.J., & Paul, J.P. (2000) What is balance? *Clinical Rehabilitation*. 14(4): 402-406.

Rasmussen, G. (2014). Inclined to better understanding - the coordination of talk and 'leaning forward' in doing repair. *Journal of Pragmatics*, *65*, 30-45.

Sacks, H. (1992). *Lectures on Conversation* (G. Jefferson, Ed.). Blackwell.

Sacks, H., & Schegloff, E. A. (2002 [1975]). Home Position. *Gesture*, *2*(2), 133-146.

Sacks, H., Schegloff, E. A., & Jefferson, G. (1974). A Simplest Systematics for the Organization of Turn-Taking for Conversation. *Language*, *50*(4), 696-735.

Scheflen, A. E. (1972). *Body Language and Social Order: Communication as Behavioral Control*. Prentice-Hall.

Schegloff, E. A. (1996). Turn Organization: One Intersection of Grammar and Interaction. In E. Ochs, E. A. Schegloff, & S. A. Thompson (Eds.), *Interaction and Grammar* (pp. 52-133). Cambridge University Press.

Schegloff, E. A. (1998). Body Torque. *Social Research*, *65*(3), 535-596.

Schegloff, E. A. (2006). Interaction: The Infrastructure for Social Institutions, the Natural Ecological Niche for Language, and the Arena in which Culture is Enacted. In N. J. Enfield & S. C. Levinson (Eds.), *Roots of Human Sociality: Culture, Cognition and Interaction* (pp. 70-96). Berg.

Schegloff, E. A. (2007). *Sequence Organization in Interaction: A Primer in Conversation Analysis* (Vol. 1). Cambridge University Press.

Schegloff, E. A., & Sacks, H. (1973). Opening up Closings. *Semiotica*, *8*, 289-327.

Schegloff, E. A., Jefferson, G., & Sacks, H. (1977). The Preference for Self-Correction in the Organization of Repair in Conversation. *Language*, *53*, 361-382.

Seo, M.-S., & Koshik, I. (2010). A conversation analytic study of gestures that engender repair in ESL conversational tutoring. *Journal of Pragmatics*, *42*, 2219-2239.

Stolle, S. I. & Pfeiffer, M. (2024). Stand-Alone Facial Gestures as Other-Initiations of Repair. *Social Interaction: Video-Based Studies of Human Sociality*, *6*(3).

Streeck, J. (1988). The significance of gestures: How it is established. *Papers in Pragmatics, 2*,1/2,60- 84.

Streeck, J. (2009). *Gesturecraft: The Manu-facture of Meaning*. John Benjamin.

Streeck, J., & Hartge, U. (1992). Previews: Gestures at the Transition Place. In P. Auer & A. D. Luzio (Eds.), *The Contextualization of Language* (pp. 135-157). John Benjamins.

Svennevig, J. (2008). Trying the easiest solution first in other-initiation of repair. *Journal of Pragmatics*, *40*(2), 333-348.

Wang, X. & Li, X. (2024). Teachers' Eyebrow and Head Movements and Repeats as Other-Initiations of Repair in Second-Language Classrooms. *Social Interaction: Video-Based Studies of Human Sociality*, *6*(3).

Waring, H. Z. & Lo, C. H. Y. (2024). Halt for speaking: Safeguarding contiguity during mealtime interactions. *Social Interaction: Video-based Studies of Human Sociality*, *7*(2).

Winter, D. A. (1995). Human balance and posture control during standing and walking. *Gait & Posture*, *3*(4), 193-214.