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Multimodal accomplishment of alignment and affiliation in the local space of distant meetings

Technology-mediated (i.e. distant) meetings are complex settings that involve distributed participation frameworks and the coordination of actions in multiple interactional spaces (cf. Mondada 2013). This paper examines how problems with hearing, speaking, or understanding in the overall meeting space enable the negotiation of alignment and affiliation by co-present participants in the same local meeting space. Conversation Analysis (CA) is used to investigate the local accomplishment of alignment and affiliation achieved through the sequential and temporal organization of verbal, embodied, and material resources of interaction in three types of situations: during technological trouble, silences, and disagreements. The analysis shows that the local participants draw on their physical setting and the material environment to make interactional problems relevant amongst themselves. During these parallel interactions, the co-construction of alignment and affiliation enhances the sense of local community and enables the building of alliances that are not made public in the overall meeting space.

Keywords: alignment, affiliation, technology-mediated meetings, conversation analysis, multimodality, interactional space

#### 1 INTRODUCTION

Companies today use modern technologies to enable meetings between colleagues over distances. Although material surroundings are known to play an important role in the sequential organization of face-to-face meetings, little is known about the ways in which the challenges and affordances of technology-mediated settings affect interactional order (e.g. Heath & Luff 2000; Rintel 2010, 2013; Hutchby 2001, 2014). Drawing on multimodal Conversation Analysis (see e.g. Hazel et al. 2014), this paper looks into the ways in which participants in the same physical location make problems related to hearing, speaking or understanding relevant during distant meetings by constructing sequences of alignment and affiliation with each other. Both alignment and affiliation are forms of cooperation of which the former functions on the structural and the latter on the affiliative level of interaction (Steensig 2012; Stivers et al. 2011). Previous studies on multiparty interactions show that alignment and affiliation are powerful means in the organization of alliances (Kangasharju 1996, 2002) and in advancing in-progress activities (e.g. Stivers & Robinson 2006; Mondada 2006).

The data for this study comprise fourteen distant business meetings video-recorded in one of the offices of an international company. In addition to the people present in the meeting room, others participate distantly in the meetings via Microsoft Live software that enables all participants to be audio-connected and share the agenda and other relevant materials (e.g. tables, Word files). The agenda is typically displayed on the participants' individual computers or a large shared screen in the meeting rooms. Active participation in the meeting thus calls for verbal contribution but also for displaying orientation towards the screen(s). This study adopts the view that participants seek to coordinate their actions in multiple interactional spaces (cf. Wasson 2006): i.e. while having a sense of belonging to 'an overall

meeting space', with their bodies and presence they are also engaged in the interaction of 'a local space' (Figures 1 & 2). However, rather than as separate entities with stable structures, these spaces are treated here as co-constructed through interaction by the participants themselves.

This study investigates the ways in which alignment and affiliation are constructed in a local meeting space. The analysis shows that when local participants display their orientation towards a shared problem they engage in a parallel turn-taking system, thus departing from the main activities of the meeting (cf. schismatic interaction; see Sacks et al. 1974; Goodwin 1987; Egbert 1997). Junctures vulnerable to such problems are technological trouble, silences and disagreements. The findings suggest that local alliances are co-constructed through a three-stage process of 1) inviting alignment in the local space, 2) negotiating/ratifying the local community, and finally, 3) closing the parallel interaction. Physically co-present participants draw on their bodies and the material environment to make interactional problems relevant. They enhance the sense of a local community, but at the same time, exclude the distant participants and make oppositional alliances visible in their local space. The findings contribute to earlier research on the interactional ecology of distributed workgroups that depicts the organization of social actions within technologized meeting environments (Hutchby 2001, 2014; Markman 2009; Oittinen & Piirainen-Marsh 2015).

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Figure 1. Interactional spaces in distant meetings.

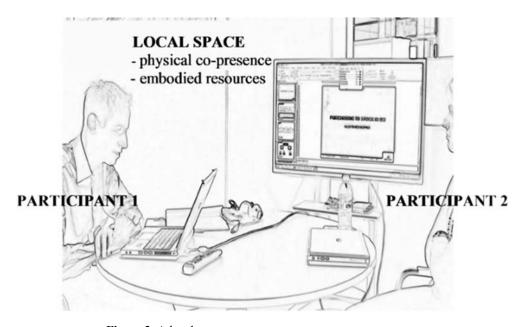


Figure 2. A local space.

#### 2 MULTIMODAL INTERACTION IN DISTANT MEETINGS

Whereas Goffman (1963) frames co-presence, mutual monitoring and central situational focus as the primary requirements for multiparty face-to-face meetings, today's distant meetings are characterized by multiple interactional spaces, separate participation structures and mutual monitoring channels (Wasson 2006). Interactional spaces are thus constantly negotiated in interaction (e.g. Mondada 2011, 2013). Furthermore, technology-mediated meetings are susceptible to simultaneously occurring space-making practices. In previous studies of multiparty conversations, parallel turn-taking systems have been characterized as schismatic interaction (Sacks et al. 1974; Goodwin 1987; Egbert 1997). However, little is known about how parallel activities emerge and are negotiated during meetings where visual access and the availability of embodied resources are restricted. This study examines how parallel interactions create the opportunity to co-construct alliances during task-related talk.

Meetings utilizing a distributed participation framework have received little attention in linguistic and interactional research. From the perspective of linguistic anthropology, Wasson (2006) suggests that participants in distant meetings may actually engage in three interactional spaces: the local space, the meeting space, and other virtual spaces (e.g. instant messaging). In this paper, interactional spaces are viewed as dynamic constitutions that are "constantly (re)established in interaction" (Mondada 2013, p. 250), rather than being fixed, stable entities where social actions occur. Thus, shared focus on the meeting space is an interactional accomplishment and always a pre-requisite for beginning and upholding agenda-related conversation (Oittinen & Piirainen-Marsh 2015). The temporal coordination of multimodal resources, including physical actions (e.g. clicking a mouse), embodied displays (e.g. gaze) and verbal contributions is important for the accomplishment of shared orientation in and between the spaces and specific meeting activities (e.g. openings, closings,

or problematic sequences). In other words, advancing meeting progressivity and mutual understanding are affected by the participants' orientation towards both the affordances and constraints of technology (Rintel 2010, 2013).

A growing number of studies have described participants' use of multimodal resources during face-to-face meetings, addressing topics such as the social organization of meetings (Clifton 2008; Asmuß & Svennevig 2009; Nielsen 2009; Mirivel & Tracy 2005), accomplishment of transitions (Nielsen 2013; Deppermann et al. 2010), turn-taking (Ford 2012), negotiations of entitlement (Asmuß & Oshima 2012), topic organization (Svennevig 2012) and community building (Nielsen 2012; Kangasharju 2002). Recently, growing attention has been paid to the communicative affordance of objects and to the physical setting as an interactional resource (see e.g. Hutchby 2001, 2014; Nevile et al. 2014; Goodwin 2007; Mondada 2007, 2013; Markaki & Mondada 2012; Nielsen 2012). However, the processes involving the joint accomplishment of distributed workgroups, i.e. how participants negotiate their participation and roles within "technologized interactions" (see Hutchby 2014), remain to be investigated.

Studies focusing on technology-mediated interactions suggest that the challenge for participants is their asymmetrical access to the shared interactional resources (Rintel 2013; Hutchby 2001; Heath & Luff 2000; Markman 2009). Heath & Luff (2000) found that even in encounters using a video-connection, embodied conducts may lose their interactional and sequential significance, as participants fail to achieve alignment of gaze to secure recipiency at the beginning of turns. Then again, other studies have found evidence for technology as an interactional resource (Rintel 2010, 2013; Olbertz-Siitonen 2015). In his work on relational video calling, Rintel (2013) noticed that silences and problematic responses derive from either technological distortion or inattention. In either case, technology was used as a

'way out' of situations that were somehow problematic. This paper examines the ways in which local meeting participants orient to constraints and communicative affordances when accomplishing alignment and affiliation with each other.

#### 3 ALIGNMENT AND AFFILIATION

Alignment and affiliation are both forms of cooperation (Steensig 2012; Stivers et al. 2011). On the structural level of social interaction alignment is about projecting mutual understanding of the unfolding of the interaction, accepting in-context roles (e.g. speaker/hearer, chair/participants) and supporting ongoing actions or turns-in-progress (Steensig 2012; Raymond & Zimmerman 2016; Rendle-Short et al. 2014; Riordan et al. 2014; Stivers et al. 2011; Stivers 2008). For instance, vocal continuers ('mm', 'yeah') and embodied actions, such as gaze, are common ways to facilitate the proposed action and signal focus on a speaker's turn. In comparison to alignment, "affiliation is the affective level of cooperation" (Stivers et al., p. 21) designed to project cooperation with an action preference, display empathy, or support a prior speaker's stance (Steensig 2012; Stivers et al. 2011). By contrast, disalignment is defined as a set of actions that interfere with the main activity in progress (e.g. changing the topic) (Butler et al. 2011; Stivers 2008), and disaffiliation as those that reject a stance (e.g. disagreements). It is worth noting that whereas all utterances inherently call for aligning responses, they do not always invite affiliative ones (e.g. Steensig 2012).

Both levels of cooperation are important resources for ensuring progressivity in mundane and institutional settings. That is, participants engaging in any conversation constantly evaluate what has been said in deciding on a relevant next action, and thus orient to securing progression of the interaction (Schegloff 2007; Sacks 1987). A relevant term that intertwines with progressivity is intersubjectivity which is the inherent product of relevantly organized

turns at talk and manifests the participants' mutual understanding about the unfolding of the interaction (Heritage & Clayman 2010). Focusing on the family context, Stivers and Robinson (2006) found that in multiparty conversation where someone is selected as the next speaker, there is a clear preference for an answer (i.e. progressivity) over waiting for the selected next speaker to respond. Some studies also emphasize the interconnection between sequence size and orientation to progressivity in institutional encounters. For instance, in her study on food ordering in a Japanese restaurant Kuroshima (2010) suggested that while interactional work to restore intersubjectivity (i.e. via repair) is always done at the expense of progressivity, orientation to advancing the conversation may nevertheless promote trust and affiliation between customer and chef. What underlies this kind of inherent mutual understanding and the successful production of minimal aligning responses is the presupposition of access: i.e. to know, see and hear. In their work on box office service encounters Lindström et al. (2016) found that while orientation to artefacts within the given setting facilitates intersubjectivity it also provides a resource for temporary exits from mutual accessibility. Understanding the function of progressivity and intersubjectivity is relevant for this study, because the ways in which the meeting participants orient to problematic instances render junctures for alignment and affiliation work visible. In technology-mediated interactions where only the physically co-present participants in the local meeting sphere have visual access to each other and share similar resources, the restrictions on equal access to relevant information may interfere with the construction of relevant next actions and cooperative responses (Rintel 2013; Heath & Luff 2000).

Alignment and affiliation have been found to be central in certain meeting activities, such as agreement formulations (Barnes 2007), securing participation (Nielsen 2012; Mondada 2011), negotiating entitlements (Asmuß & Oshima 2012), transitions (Nielsen 2013; Mondada 2006; Ford 2012) and forming oppositional alliances in multiparty meetings

(Kangasharju 1996, 2002; Nguyen 2011). Kangasharju (2002) showed how collective disagreement and alliances are constructed via displays of alignment and affiliation primarily after specific kinds of utterances: i.e. matter-of-fact statements, stance-takings and proposals. Furthermore, alliances are generally invited either verbally via collaborative completion of the previous turn, and/or nonverbally via embodied conducts such as gazes and headshakes. Oppositional teams are thus developed sequentially through two or more turns that contradict the previous speaker, and via displays of agreement that are targeted specifically to the initiator of the disagreement (Kangasharju 2002). In addition, with bodily practices it is possible to signal co-operation with others while at the same time distancing oneself from the rest (Kangasharju 1996, 2002; Nguyen 2011). Other studies have further shown the empowering effect of embodied resources and multimodal displays of orientation in securing recipient alignment and participation at different stages of meetings (e.g. Streeck 2009; Deppermann et al. 2010; Nielsen 2012; Ford 2012; Mondada 2006; Samra-Fredericks 2010). This study looks at how participants make use of various surroundings to engage in alignment and affiliation work, and sheds light on the ways in which troublesome moments during distant meetings can become resources for social actions.

#### 4 DATA AND ANALYTIC APPROACH

Drawing on video-recorded data collected in the Central European office of an international company, this article aims to provide a fine-grained analysis of the joint production of alignment and affiliation in one local space of distant meetings. Distant meetings can be described as involving the use of a communication technology and engagement in a distributed participation framework: i.e. participants are physically located in different geographical locations but connected with each other via audio transmission and online interaction. The data consist of fourteen meetings characterized as formal, i.e. they are pre-

scheduled events with a specific turn-taking format and predetermined chair and participant roles, and have the purpose of either sharing information or solving task-related and organizational problems (see e.g. Boden 1994; Sacks et al. 1974). The fieldwork was conducted in one geographical location, where two video cameras and audio recording devices were placed in the meeting rooms. The technology used by the participants was Microsoft Live, which enables audio-connection between distant locations and the distribution of written agendas and other relevant materials (e.g. charts, pdfs and companyrelated programs) in the overall meeting space. During the meetings, the agenda was quite commonly projected onto a large screen in the room, but also appeared on the participants' laptops, to which the people co-present were frequently orienting. The length of the meetings in the data varies from half an hour to two hours. In the recordings, participant numbers vary. In most cases, one to three participants are present in the physical location where the recordings take place and two or more participants are in distant locations. However, one meeting involves the participation of four teams in addition to twelve participants seen on camera (Extracts 1 & 2). In this case, the number of distant participants is not known. English is the company working language and hence a lingua franca. Both the local and distant participants gave their informed consent to be recorded. Their identities and the company's name are protected by pseudonyms in the extracts analyzed.

The challenge of conducting *in situ* analysis of interactional achievements in distant meetings arises from the distribution of the participating groups in multiple geographical locations and the dynamics in and between the interactional spaces (Wasson 2006; Oittinen & Piirainen-Marsh 2015). All participants are physically situated in a 'local space' which allows them access to the interactional resources within that material setting, including the embodied displays of the other co-present participants and the objects in the meeting rooms. They are also engaged in an 'overall meeting space' that comprises not only the agenda that

they see moving on their screens, but also various interactional resources: the physical environment, the audio-connection and the online shared materials. Therefore, the definition of a 'local space' is always subjective. For the sake of clarity, it is systematically used in this paper to refer to the physical space occupied by the participants on camera.<sup>1</sup>

As an inductive method, Conversation Analysis (CA) enables description of the details of interactional processes and the ways in which verbal, embodied and other semiotic resources (i.e. actions and orientations to material objects) are organized in time and space (e.g. Streeck et al. 2011; Mondada 2006; Sacks et al. 1974; Hazel et al. 2013). CA is specifically relevant for the current study, as it facilitates microanalysis of the turn-by-turn negotiation of cooperative responses, alignment and affiliation, providing important insights into how participants in distant meetings orient to interactional problems and the establishment of intersubjectivity and progressivity (e.g. Heritage & Clayman 2010; Schegloff 1992). The transcripts are based on the conventions developed by Jefferson (2004). For the multimodal details, the symbols created by Mondada (2001) are applied (see Appendix). Capital letters mark a speaker as a distant participant.

# 5 BUILDING ALLIANCES WITH ALIGNMENT AND AFFILIATION IN PROBLEMATIC SITUATIONS

The results show that problematic situations, i.e. technological trouble, silences, and disagreements, can be used as resources for creating opportunities to negotiate alignment and affiliation and thus enhance the sense of a local community. In general, the local participants indicate their availability and alignment with the ongoing talk in the overall meeting space via silence and by physically orienting toward the agenda on either their

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<sup>&</sup>lt;sup>1</sup> For this study, it was not possible to collect video-recorded data from multiple locations.

laptop screens or the large screen on the wall. However, what happens during interactional disruption is that they break away from the main conversation in the overall meeting space: In the present data, two or more local participants shift their focus (e.g. via gaze) away from the shared screen and towards each other, which occasions the formation of a participation framework separate from the meeting activity. The analysis describes the process of constructing an alliance by 1) inviting alignment in the local space, 2) negotiating/ratifying the local community, and 3) closing the parallel interaction. This involves using a range of multimodal resources, such as gaze, gesture and bodily action, and orientation to material objects, like the mouse or the shared screen in the meeting room.

#### 5.1 Alignment and affiliation during technological trouble

Hearing-related technological problems occur frequently in distant meetings, and they leave the participants with two choices: to either let the situation pass with no effort to restore intersubjectivity in the overall meeting space, or to initiate repair. In Extracts 1 and 2, the interactional problem of not hearing leads the local participants to deviate from the main activity in the overall meeting space and engage in parallel interactions.

The first extract comes from a meeting with a team of twelve people sitting around a large oval table in a meeting room and three other teams participating distantly via an audio-connection (Figure 3). The written agenda is controlled by the meeting chair, Dietmar, who is a distant participant. The leader of the local team, Hannu, is responsible for setting up the devices and projecting the agenda from his laptop onto a wide screen at the front of the room. The purpose of the meeting is to share comments on recently launched work practices. At the beginning of the extract, Dietmar invites one of the two other distant participants, Petri or Anders, to take the floor (lines 1-2). For some reason problems occur during Petri's

subsequent turn and the local participants initially react to these by orienting towards one another.

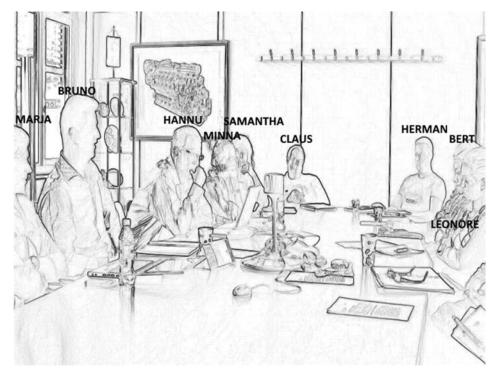


Figure 3. Twelve local participants sitting around the table.

#### Extract 1

1 DIETMAR any judgements from you: Petri or Anders that you 2 would like to, (.) share too 3 (1.1)**PETRI** u:h (.) <yes but> yeah (.) if you think about (the character) 5 [( )] 6 [((flash from wide screen, everyone but Bert turn gaze to screen)) 7 [((Bruno and Minna frown, shake heads; Bruno and Leonore turn heads 8 to left; Bruno whispers to Hannu)) ((Hannu leans forward, gaze directed at laptop screen)) H---->\* ((Leonore and Claus giggle quietly, Herman sneers)) 10

```
11
                 ((Bruno whispers to Marja, leans back, smiles at people sitting opposite))
                 ((Minna leans forward, Hannu straightens posture)) H---->*
12
13
                 ((Samantha raises hand on pursed lips))
14 Claus
                 [no- now it's clear
15
                 [((Claus turns gaze to Leonore, raises right hand holding up index finger,
                  smiles))
16
                 ((Minna, Samantha, Leonore, Sarah and Herman turn gaze to Claus))
17 Leonore
                 \mathfrak{t} \uparrow a(h) h \mathfrak{t} ((Leonore raises left hand holding up index finger))
18
                 ((laughter among local participants))
19 PETRI
                 ( )
                 thank you very much I can (.) fully agree on that one that sounds
20 DIETMAR
21
                 like a prominent thing I totally get your point (0.2) fully agreed
22 Minna
                 °I don't understand°
23
                 ((Minna turns gaze to Leonore, leans back))
24
                 [((Leonore shakes head, Hannu opens right palm))
25 DIETMAR
                 [uhm (.) Ricardo
26
                 ((Hannu leans back))
27 DIETMAR any chip from you
28
                 ((Hannu, Minna and Claus turn gazes to screen one after the other;
29
                 Bruno and Marja gaze to each other, smile))
```

The extract begins with Dietmar inviting Petri or Anders to offer their 'judgements' on the topic (lines 1-2). Petri begins his turn by projecting a dispreferred response (Schegloff 2007): a minimal verbal token 'u:h' and a negation indicative 'yes but' uttered slightly slower than the preceding words. Suddenly a technical problem transforms his talk into an unidentifiable mumble (line 5), and at the same time the wide screen emits a blue flash. All but one (Bert)

of those present in the local space react by turning their gaze towards the wide screen. The participants orient to the technological disruption by turning their gazes to one another, making disconcerted facial expressions (e.g. frowning) and smiling. In addition, Bruno and Minna shake their heads at the same time, and Bruno turns his upper body towards Hannu, who is sitting next to him, and whispers something. Hannu then leans forward and stays close to his laptop microphone for a few seconds, which seems to display an orientation towards taking a turn (line 9; cf. Mondada 2007, 2013). Meanwhile, Bruno turns his upper body again, towards Marja, and whispers something to her. He then leans back and smiles at the people sitting opposite, which invites them to smile. As Minna leans forward, Hannu shifts from the forward leaning position and straightens his posture a little (line 12). Samantha invites alignment by putting the fingers of her left hand around her pursed lips to imitate mumbling and turns her gaze first to Leonore and then to Minna. However, no one looks at her, and, partly in overlap, Claus turns his gaze to Leonore, then smiles, slightly raises his right index finger and makes a sarcastic comment on the ongoing technological trouble (line 14). His use of the contextual reference 'now' with a clear emphasis invokes shared knowledge of another troublesome moment experienced by the participants prior to this extract.

Affiliative displays follow Claus's comment. Leonore responds with a smilingly uttered 'ah' and an exaggerated hand gesture (line 17), and the other local participants laugh (see Stivers et al. 2011). Petri and the other distant participants do not display any (verbal) orientation to the audible comments made in the local space, which suggests that they might not have heard them. Instead, Dietmar initiates sequence closure by thanking Petri and verbally agreeing with him (line 20-21). Minna then makes an additional, barely audible, verbal remark about not understanding, and turns her gaze to Leonore (line 22). Leonore displays her agreement with a headshake (line 23; see Kangasharju 2002). Hannu then opens his right

palm, shakes his head, and concurrently with Dietmar's selection of the next speaker, leans back (line 26). His actions function as a distancing move that also marks the shift towards establishing a shared focus on the overall meeting space, even though repair was never initiated nor the missing information retrieved by the local participants. The meeting is then moved on by Dietmar (lines 25 and 27), who makes no recognition of the parallel interaction.

In the above extract, the local participants are faced with a shared problem of hearing, which they react to in their multimodal displays of alignment and affiliation (e.g. facial expressions, gazes, smiles, gesture, and whispers). Their disalignment from the main activity of the meeting and their allotted roles (i.e. speaker, hearer) is not made public in the overall meeting space, indicating orientation to progressing the meeting. At the same time, alignment and affiliative actions are used to enhance the sense of a local community. Although at some point Hannu's bodily orientation (i.e. leaning forward, close to the microphone, line 9) anticipates his taking a turn in the overall meeting space, he does not initiate a repair sequence that would restore the lost information (see Schegloff 1992). Hannu's further actions have a twofold function: by raising his hand and shaking his head, he first affiliates with the local collective, and then by leaning back he physically distances himself from the local collective and thus invites closure of the parallel interaction (line 26).

The next extract is from a later point in the same meeting. Minna has been asked to give an update on a work task that she was involved in. Using Hannu's laptop, she has delivered a PowerPoint presentation projected onto the wide screen. In the extract, she is addressed by a distant participant, Hans, whose speech cannot be heard due to technological distortion. Since Minna is verbally targeted as the recipient, she cannot ignore this problem with the audio-connection.

#### Extract 2

```
1 Minna
                 so (0.5) I'm very happy how our (0.9) category move went and
2
                 our team is working very well together so (0.4) we're all good
3
                 (0.9) ((Minna straightens posture, smiles, fig. 4))
4
    Minna
                 thanks
5
                 (1.0)
6
   HANS
                 () Minna [we ()
7
                           [((Bruno, Hannu, Claus, Bert and Leonore turn gaze to screen))
                 [(\ )]
8
   HANS
9
                 [((Bert, Claus and Leonore turn gaze to Minna))
10 HANS
                 ([)
11
                   [((Minna touches keyboard mouse; Marja, Samantha, Claus, Bert,
12
                 Leonore and Julia turn gaze to screen))
13 HANS
                 [( ) how is (.) the ( ) going, and how is it ( )
14
                 [((Minna puts hand on right temple; Bruno, Minna and Leonore
                 frown, fig. 5))
15
16
                 ((Bruno and Leonore turn gaze to Minna; Leonore shakes head; Minna
17
                 turns gaze to Leonore))
18
                 [(0.9)]
19
                 [((Minna leans forward, turns gaze to wide screen))
20 Minna
                 .hh ((tongue click, micro headshake)) I could really hardly hear you it's a
21
                 very bad connection [could you <u>please</u> re↑peat
22
                                     [((Minna leans very close to laptop screen, turns
23
                 gaze to Leonore, grins, turns gaze to wide screen))
24
                 (0.5)
```

```
25 HANS
                yes. and get probably improved with (mine)
26 Minna
                ↑£oh£
27
                ((Bruno turns gaze to Minna, smiles))
28 HANS
                is it better now?
29 Minna
                yes (.) thanks [eh he
30
                             [((Marja, Bruno, Claus and Leonore turn gaze to screen;
31
                Marja, Bruno, Hannu, Bert, Julia and Leonore smile))
32 HANS
                okay (.) I was wondering --
```

The extract begins as Minna has just concluded her presentation and is orienting to topicclosure with a summary and a so-prefaced self-assessment 'we're all good' (line 2). She moves physically further away from the laptop and the table microphone, indicating that she is ending her turn and opening the floor to the other participants (Figure 4).

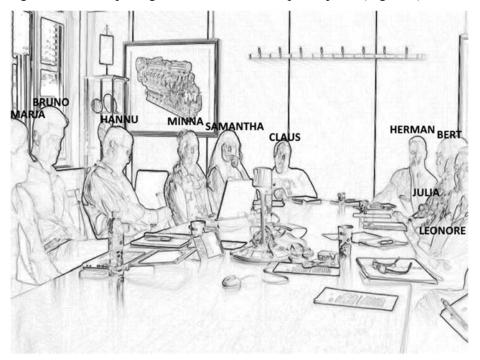


Figure 4. Minna straightens posture, smiles.

She produces a closing-implicative remark, 'thanks' (see e.g. Nielsen 2013), which is followed by a 1.0-second pause. Hans selects himself as the next speaker and targets Minna

as the recipient of his comment (line 6). The sound quality immediately deteriorates, and five people react by turning their gaze towards the wide screen for a few seconds (line 7). After three people have turned their gaze to Minna, she touches the attached keyboard mouse. This action is followed by seven people turning their gaze again towards the wide screen (lines 11-12). Minna displays discomfort by putting her hand on her right temple and frowning. Concurrently Bruno and Leonore make similar displays of their orientation to the shared problem (i.e. frowning; Figure 5), after which they both turn their gaze to Minna. When Leonore shakes her head, she concurrently turns her gaze to Minna, who looks at her for a while with a similar disconcerted facial expression.

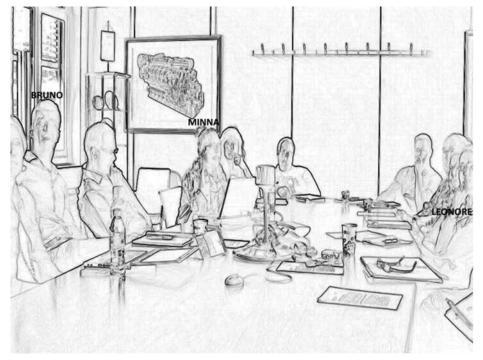


Figure 5. Minna puts hand on right temple; Bruno, Minna and Leonore frown.

Minna's turn-beginning markers, an in-breath and a tongue-click occurring concurrently with her change of posture (line 20), foreshadow the imminent nonaligning turn: she initiates a repair sequence by producing an epistemic account 'I could really hardly hear you it's a very bad connection', which also serves to account for her inability to provide a preferred response (i.e. an answer to Hans's question; line 20-21; Schegloff 2007). She then requests

Hans to repeat his turn, at the same time leaning far over the laptop and producing her utterance very close to the laptop microphone, thus showing embodied orientation to the problems of audio transmission (line 19-22). Next Minna turns her gaze to Leonore and grins, thereby displaying her discomfort and inviting the affiliation of the local collective. These actions seem related to the trouble caused by having to interfere with the progression of the meeting. When Hans offers a solution to the technical problem (line 25), Minna's high pitch 'oh', produced smilingly, not only acknowledges receipt of the information but also indicates a clear change of state (line 26; Schegloff 2007; Heritage 1984). Bruno immediately aligns with this "now-hearing" stance and smiles (line 27). Minna marks the sequence closure via a 'thank you' and post-positioned laughter that the five local participants further affiliate with via smiling (line 31).

As in the first extract, the local participants display their orientation to not hearing with a several bodily resources: gaze directed towards each other and towards the screen on the wall, and facial expressions that can be interpreted as projecting awareness of a problem (Olbertz-Siitonen 2015). Minna, on the one hand, is accountable for responding, and therefore cannot let the problem of hearing pass. At first, during Hans's turn, she affiliates with the others in the local space, but then initiates a repair sequence in the overall meeting space by orienting both to the technological problem and the lost content (for content-oriented repair, see Rintel 2010).

The extracts show the local participants drawing on a range of multimodal resources to make the shared problem relevant in their interaction. Technological problems can thus create an opportunity for establishing local alliances and building a local community. Problems like this are not typically made public in the overall meeting space, a phenomenon that may be explained by participants' preference for progressivity, i.e. maintaining the progression of

the main activities of the meeting. Extract 2 further demonstrates that when technological distortion disrupts the interaction and participants' ability to produce a relevant next action, the problem needs to be addressed in the overall meeting space.

#### 5.2 Alignment and affiliation during silence

Due to the restrictions on visual access, the reasons for silences are sometimes unclear to the participants in distant meetings. Not all instances where silences occur reflect interactional trouble; whether they do rather depends on their sequential position and what is preferred as the relevant next action in the conversation. In the data, silences after first-pair parts, especially those subsequent to questions, often interfered with the natural flow of the interaction and sometimes led to confusion between the local and distant participants.

In the next extract, Marja has suggested that she could be the one to train members of the company in a given protocol. The chair, Dietmar, has expressed his wish for rapid execution of the task, and Marja communicates her need to obtain more information from the other teams. Markku, one of the eight distant participants, is the only one to respond to Marja's request for information, but only after some delay (line 12).

#### Extract 3

1 [((Marja leans back, gazes at screen; Hannu gazes at Marja)] 2 Marja [< I: > I will try to do th- do the training next week but I need to know 3 from the units if the: using of the ( ) lists is [familiar to them or not. 4 [((Marja straightens posture)) 5 (2.3) ((Marja puts elbows on table, right hand on chin, fig. 6)) 6 Dietmar okay ((Dietmar puts hands on keyboard, turns gaze to screen)) 7 ((Hannu turns gaze to screen))

```
but it's quite simple (.) [°simple list°
8
    Marja
9
                                       [((Dietmar takes hands off keyboard))
                in Finland we have (1.0) [done ( ) lists
10 MARKKU
11
                                         [((Dietmar puts hands on keyboard))
                 (3.2) ((Dietmar starts typing)) D---->*
12
13 Dietmar
                 [okay
14
                 [((Hannu turns gaze to Marja))
                 ° ([scrapping)°
15 Hannu
16
                    [((Marja turns gaze to Hannu))
17 Marja
                 °mm[m° ((Marja tilts head to left)) D---->*
18 Dietmar
                      [any any objection that those people get trained and and that
19
                 they try to [spread it (.) ((Dietmar turns gaze to screen))
20
                           [((Marja turns gaze to screen))
                 [through: the purchasing next week
21
    Dietmar
22
                 [((Dietmar turns gaze to Marja; Hannu turns gaze to screen))
23
    Dietmar
                 is there any [limitation next ↑week
24
                             [((Dietmar turns gaze to screen and then window, fig. 7))
25
                 (4.2) ((Hannu turns gaze to Dietmar, then to Marja))
26
                 ((Dietmar turns gaze to Marja, smiles))
27 Dietmar
                 @I [love efficiency@
28
                 ((Marja turns gaze to Dietmar, smiles))
29
                 ((Hannu smiles))
                 let's go on. [eh he
30 Dietmar
31
                            [((Dietmar turns gaze to Hannu, then the screen, starts typing))
32 Marja
                 si(h)le(h)nce, [it can also mean that he he
```

33		[((Marja turns gaze to Hannu
34	Marja	no- not understanding [but,
35		[((Hannu turns gaze to screen, Dietmar
36		starts typing))
37		I was thinking that should we: [discuss about scrapping,
38		[((Maria turns gaze to Dietmar))

Marja's statement 'I will *try* to do the training next week' placed preceding a 'but'-prefaced clause indicates uncertainty and frames her future action as conditional on the acquisition of additional information that is needed to perform the task (lines 2-3). Her bodily orientation towards the screen suggests that she is waiting for a response (Figure 6).



Figure 6. Marja puts elbows on table, right hand on chin.

During the ensuing silence of 2.3 seconds, all three local participants look at their screens and thus display their orientation to the relevance of a response from the distant participants. Dietmar then acknowledges Marja's turn with a go-ahead marker, 'okay' (Schegloff 2007), and concurrently puts his hands on the keyboard. Marja continues with an assessment, 'but

it's quite simple', which seems primarily aimed at those who are *not* familiar with the procedure (line 8). When she repeats the last two words, 'simple list', in a quieter voice, Dietmar withdraws from his action-projecting body position by taking his hands off the keyboard. Markku responds to Marja's comment, and by using a recognitional reference, 'in Finland we', makes it clear that others may not necessarily be familiar with it (line 10). At the same time, Dietmar again puts his hands on the keyboard, during the following pause of 3.2 seconds, starts typing. Concurrently with Dietmar's acknowledgment of Markku's turn ('okay', line 13), Hannu turns his gaze to Marja (line 14). When he whispers, Marja turns to look at him, replies affirmatively with 'mmm', and a head tilt. While Dietmar is still engaged in typing and signals no recognition of these parallel activities, Marja and Hannu develop a local affiliation that is not visible in the overall meeting space.

Dietmar then ceases to type and formulates a proposal that has two components: a request to either reject or accept the future action (i.e. training) and its schedule (i.e. the following week) (lines 18-23). His post-expansion, 'is there any limitation next week', assumes agreement with the action itself, but at the same time, makes the latter request relevant for the production of a response. Towards the end of his turn, he gazes at Marja, who looks at her screen, then towards his laptop screen, and finally, towards the window (Figure 7). By so doing, he momentarily distances himself from the situation and displays unavailability for interaction in the local space (see also Lindström 2016). During the following pause of 4.2 seconds and partly in overlap with this action, Hannu turns his gaze towards Marja, who is still oriented to her screen. Also Dietmar turns his gaze towards Marja, smiles, and then comments on the lack of response as a sign of 'efficiency' (line 27), produced in an animated tone, and thereby invites a local alignment. Both Hannu and Marja affiliate via smiling and thus treat his comment as humorous (lines 28-29). When Dietmar declares 'let's go on' (line 30), he further takes the silence from the distant participants' side as a sign of common

agreement and an indication of their readiness to move on (cf. Nielsen 2013). After his post-turn laughter, during which he briefly looks at Hannu, he quickly restores his orientation to the meeting and starts typing (line 31). Marja continues to align with Hannu by commenting laughingly on the role of the silence (i.e. as potentially indicating 'not understanding') and looking at Hannu smilingly. Noticing that the other two local participants are already oriented to the overall meeting space, she realigns and uses the contrastive 'but' to accomplish a rapid in-turn shift to another meeting-relevant topic ('scrapping') brought up earlier in the extract by Hannu (line 34-37).



Figure 7. Dietmar turns gaze to screen and the window.

In the extract, the local participants orient to lack of response and protracted silences (lines 5 and 25) as problematic. They negotiate a local alliance among themselves, and promote their mutual understanding via humor. While silence is something that all three local participants orient to via bodily displays and verbal accounts, the moment-by-moment organization of aligning and affiliating displays is affected by Dietmar's engagement in other activities. Hence, the construction of alliances and the 'us' versus 'them' arrangement in

distant meetings relates not only to the asymmetries in visual access between the local and distant participants, but also to the ways in which the participants make their availability known to the others in the local space.

The reasons behind silences are not straightforward in distant meetings, and what makes them problematic is usually their sequential position and what is considered as a relevant next action (e.g. responses after questions). Extract 3 shows the local participants making use of silences as resources for enhancing their local alliance and accomplishing progressivity (cf. Nielsen 2013). Although engagement in other activities (e.g. typing) in the material setting may influence the ways in which alliances are temporally and sequentially structured, silences nevertheless create room for different kinds of negotiations of alignment and affiliation in the local space.

#### 5.3 Alignment and affiliation during disagreement

In face-to-face meetings, participants have access to each other's verbal and bodily resources; this is important as it enables anticipation of dissenting turns and the co-construction of oppositional alliances (e.g. via headshakes; see Kangasharju 1996). In distant meetings, not all displays of disaffiliation are made relevant in the overall meeting space, which on the one hand shows orientation to sustaining progressivity, yet on the other hand leaves situations sometimes unresolved.

The next two extracts are drawn from a meeting in which the local participants are Hannu, Marja and Dietmar. There has been a discussion on a problematic issue concerning lost warehouse materials and how to mark these in the system. As the specialist in the area, Marja has tried to correct false assumptions about the practices in use. A distant participant,

Markku, has asked for clarification on the responsibility of the carriers, and the extract begins with Marja's reply.

### Extract 4

1		>> ((Marja and Dietmar gazing at screen))
2	Marja	I think it's the same thing that we've had with the supplier deliveries
3		(.) that they have booked in a hundred pieces and they accidently put in two
4		hundred pieces (.) the easiest way is to check the inventory and the urgent
5		issue case \(\gamma\) area if the parts are not \(\gamma\) there (.) then
6		[(0.4)
7		[((Marja raises right hand, concurrently shrugs, fig. 8))
8		((Dietmar turns gaze to Marja, hand on temple))
9	Marja	then we can mark them as completed (.) the orders they are not going to
10		count they're lost
11		(2.2) ((Dietmar turns gaze to screen, starts typing)) D>*
12	MARKKU	I: guess we just cannot close the orders as [the ( ) has done (.)
13		[D>*
14		[for instance in our case
15		[((Dietmar turns gaze to Marja))
16	MARKKU	here in Finland so (.) they have checked that
17		[one hundred pieces left
18		[((Dietmar turns gaze to Hannu, then screen, starts typing)) D*>>
19	MARKKU	and only .hhh fifty pieces is reportedly in and uh (0.2) we just cannot
20		close them
21		(2.0)

```
22 GUNNART exactly
23 (0.5)
24 RICARDO Markku did we (.) [so we move the delivery date to the future
25 [((Marja turns gaze to Hannu, shakes head))
26 ((Marja sighs, [picks up coffee cup, leans back, turns gaze to screen))
27 [((Dietmar glances at Marja while typing))
28 ((Marja crosses arms))
```

Marja starts her multiunit turn with an 'I think'-prefaced assessment displaying an epistemic stance (lines 2-5) while maintaining her gaze at the screen. Her 'if – then' conditional account includes an emphasized deictic expression, 'there', that stresses the place where she thinks the missing parts can be found (line 5). She cuts off the natural continuance of her turn after the word 'then', and during the ensuing pause of 0.4 seconds raises her right hand and concurrently shrugs. This both anticipates the upcoming gist of her argument and prefigures her disengagement from the issue under discussion (Figure 8; see Streeck 2009).

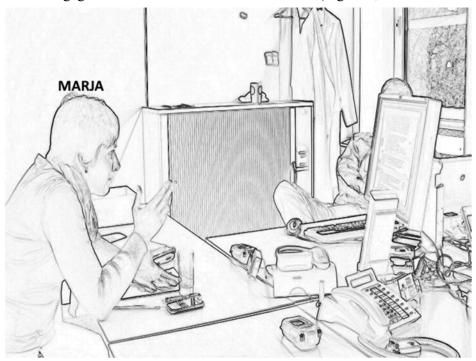


Figure 8. Marja raises right hand, concurrently shrugs.

Dietmar turns his gaze towards her and leans lightly on the fingers of his right hand, thus displaying an orientation to listening (line 8). Marja ends her turn with a matter-of-fact-statement (see Kangasharju 2002), a proposal to 'mark the orders complete', which is followed by a silence of 2.2 seconds. On the conversational level, Marja's turn (lines 4-10) invites instant cooperation with a preferred action (i.e. to agree/disagree; see Steensig 2012). Instead of contributing to the conversation, Dietmar turns his gaze back to the screen and starts typing (line 11). The ensuing silence thus displays passive opposition to the proposal and is followed by Markku's epistemic account that is also an other-correcting counterargument that explicitly disagrees with Marja (lines 12-20; see Kangasharju 2002). By mitigating and delaying the second part with an explanation (lines 14-19), he further orients to producing a dispreferred response (Schegloff 2007). During the turn, Dietmar momentarily ceases typing and as an alignment invitation, turns his gaze first to Marja, and then Hannu (lines 15 and 18). After this brief monitoring of the local participants, he then starts typing and continues to do so until the end of the extract.

Markku's opposing turn that has ended with a partial repetition of his argument 'we just cannot close them' (lines 19-20) is followed by a silence of 2.0 seconds. At this juncture, the sequence has reached the point that the disagreement has to be either ratified, or rejected. After some delay, Gunnart affiliates with Markku and thus makes their mutual agreement audible (line 23; Kangasharju 2002). By addressing Markku by name and asking about the delivery date, Ricardo further aligns with the proposed oppositional alliance and concurrently proposes Markku's opinion as overriding Marja's. In the local space, Marja invites Hannu's support by turning her gaze towards him and displaying disagreement with a headshake. She then sighs and disengages from the situation by leaning back, sipping coffee, and finally crossing her arms. Dietmar aligns with Marja's actions with a brief glance, yet quickly reorients to the screen.

Since the distant participants collectively disagree with Marja and establish an oppositional alliance, Marja makes her opposition tacitly known and invites the local participants to affiliate with her. While Hannu and Dietmar both acknowledge Marja's turn via gaze, and thus align with her actions, they do not explicitly affiliate with her, either via additional embodied displays in the local space or verbally in the overall meeting space. Although in face-to-face meetings tacit oppositional alliances are usually made public at some point (see Kangasharju 2002), in this case, Marja does not signal her disaffiliation again in the overall meeting space.

Not being able to monitor the bodily-visual cues of the parties engaging in a dispute may lead to sequence expansion and require additional efforts to resolve the situation. In the final extract, a distant participant, Heinrich, has proposed that a group of operators be given a clear process schedule. Dietmar has acknowledged his turn, yet without actually agreeing to its content. In what follows Dietmar makes it clear that he has delegated the task of training to Marja and asks for others for their approval. This occasions disagreement that is addressed in the long multiunit turns by Marja and Heinrich.

#### Extract 5

1 ((Marja and Dietmar gaze at screen; Hannu writes with pen)) 2 Dietmar feel free to occupy them but as soo:n as Marja wants to give out 3 some training and instruction please read them (.) is that ↑good 4 (1.0)5 HEINRICH yeah that's good but it- it's a- it's a ↓shame (.) because >then we-6 then we try to set up a way and everybody will probably do it 7 differently I will do it differently< then Herman will do it and- (.) 8 others and Keijo: and in the end (.) then we have to (0.2) organize it again

```
9 Marja
                 yeah but what is- [what is your
                                   [((Hannu stops writing, turns gaze to Marja)) H*--->>
10
11
                  ((Dietmar turns gaze to Marja, frowns, fig. 9))
12 Marja
                 [\problem now
13
                  [((Marja leans forward, turns gaze to screen))
14 Maria
                  because I'm trying to understand from technical side (.) it is <not
15
                  that difficult> that you ask for the documents from the suppliers
16
                  for a certain [amount of materials.
                              [((Marja begins to move hands)) M---->*
17
18
                  then you check the documents you check the quality (.) if that is ok \approx ay,
19
                  you put it to the ( ) you create this [folder
20
                                                     [((Marja draws a rectangle with
                                                                       both forefingers))
21
                  for this supplier which there is instructions how to do that (.) then,
22
                  you add the information to the () file that you send to () to upload
23
                  (.) and [then the <system is uploaded.>
24
                         [((Marja taps table rhythmically with fingernails of both hands))
                  (0.2) so, the process as such is really really simple but it's a question of
25 Marja
26
                  what do you [ask
27
                               [((Marja holds out right hand, palm up, fig. 10)) M---->*
                  okay then [you organize some [problem (.) meetings
28 Dietmar
29
                                                [((Dietmar taps table with knuckles))
30 HEINRICH
                            [(°
                                          °)
                                                                    °) yeah
31 Dietmar
                 let's [organize [a meeting,
32
                       [((Marja turns gaze to Dietmar))
```

```
[°we don't-°
33 HEINRICH
34
                                [((Dietmar turns gaze to Hannu))
35 Dietmar
                 with [questions that those people have (0.2) [let's discuss it in the
36
                      [((Dietmar turns gaze to Marja))
                                                             [((turns gaze to screen))
37
                                                             [((Marja rolls eyes,
38
                 then turns gaze to screen))
39 Dietmar
                 group and, then (.) [let's get it going.
40
                                    [((Dietmar lifts both hands, palms up, fig. 11))
41
                 (1.3)
42 RICARDO maybe so- sorry guys ca- can I also comment a little bit (.) from
43
                 [my experience --
44 Dietmar
                 [((Dietmar turns gaze to right, puts right hand fingers on top of nose,
45
                 closes eyes, fig. 12))
```

By his statement and instruction (lines 2-3), prompting others to follow a certain procedure and attributing some authority to Marja, Dietmar makes clear his role as the manager and chair of the meeting. He ends the turn with a question, 'is that good' following a pause of 1.0 seconds. Heinrich begins his response with a "pro forma" agreement, 'yeah it's good', which is followed by an instant negation, 'but it's a shame' (line 5; Schegloff 2007). This anticipates his counter-argument, which is produced partly at a faster pace, indicating slight agitation (lines 5-8). Marja's response is immediate, and she constructs opposition through a turn-initial marker ('yeah but'), followed by a question 'what is your problem now', uttered in a tense voice. Hannu and Dietmar instantly display orientation to Marja's turn by ceasing their other actions and turning their gaze towards her. Dietmar frowns (Figure 9). At the beginning of her turn, Marja changes her body position and leans forward gazing steadily at the screen (line 13). Next Marja produces an epistemic account, 'I'm trying to understand



Figure 10. Dietmar turns gaze to Marja, frowns.

from technical side', that is followed by a disaffiliative assessment, 'it is not that difficult', uttered with emphasis (lines 14-15). She then continues with a long statement explicating the protocol stage by stage (lines 15-24), using her hands for further emphasis, and maintaining her gaze on the screen (lines 24). She produces the 'so'-prefaced summary (line 25-26), and holds out her right palm concurrently with uttering the final word 'ask' as a forward gesture to give away the floor (Figure 10; see Steensig 2012). Although her verbal contribution is directed specifically to the distant participants, her bodily displays visibly draw the attention of the local participants.

Dietmar acknowledges Marja's turn instantly via 'okay', and his expression (frown) and tense voice suggests that he orients to the issue as misplaced. He proposes that another meeting should be arranged to solve the problem and taps the table top emphatically with the knuckles of his right hand, concurrently with uttering 'problem meetings' (line 28). Overlapping with Heinrich, whose words are not audible (lines 30 and 33), Dietmar self-

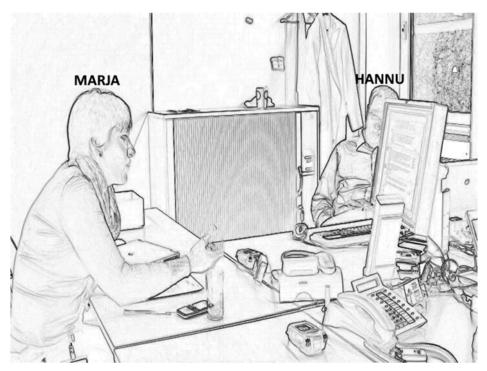


Figure 10. Marja holds out right hand, palm up.

repairs and reformulates his proposal with an inclusive 'let's' directive (lines 31, 35 and 39) and makes additional alignment invitations via gaze in the local space (lines 34 and 36). By looking at Marja while referring to 'those people', Dietmar explicitly orients to the juxtaposition of 'us' versus 'them', the local and distant participants (line 35). When he lifts his hands, palms up, he indicates disengagement from the topic and, concurrently, sequence closure (Figure 11). Marja rolls her eyes and thus indicates disagreement with the proposal (line 37), yet she aligns with the others, displaying her readiness to move on via silence (see Nielsen 2013). A distant participant, Ricardo, initiates a post-expansion in which his turn-initial delay, a pre-request, expresses that he is aware of performing a disaligning action (line 42). Dietmar displays his orientation to the inconvenience visibly by placing the fingers of his right hand above his nose, leaning slightly on his elbow and closing his eyes (Figure 12). By thus doing, he also makes his disalignment/disaffiliation available in the local space, but not the overall meeting space.



Figure 11. Dietmar lifts up both hands, palms forward.



**Figure 12.** Dietmar turns gaze to right, puts right hand fingers on top of nose, closes eyes.

In the above extract, Heinrich's disaffiliative response to Dietmar's proposal engenders a dispreferred sequence expansion, a dispute during which the physically co-present participants align with each other via embodied displays. Although Marja's embodied actions (lines 17-27) cannot be seen by the distant participants, they are closely monitored in the local space and seem like an attempt to invite an alliance. While Dietmar makes it verbally clear that the dispute interferes with the progression of the meeting, at the same time, he takes up the concern and thus, on a higher level beyond locally paired action, affiliates. He draws on the environment and bodily resources for further emphasis, and clearly orients to the juxtaposition of the local and distant participants' interactional resources (i.e. those *there* and us *here*). Although his attempt to restore alignment in the overall meeting space is made explicit to everyone, when it fails at the end of the extract, he makes his disappointment relevant only in the local space.

Restrictions in access to bodily resources limit participants' ability to display and resolve disagreements in distant meetings. The data suggest that local participants do not always make their opinions known in the overall meeting space, but instead, draw on their material setting and bodies, i.e. practices that are specifically available for the local participants to orient to, to construct tacit oppositional alliances (see Kangasharju 2002). In addition, practices aimed at making such alliances relevant in the interaction enhance the local participants' sense of a local community, but they do not facilitate the reaching of mutual agreement in the overall meeting space. Extract 5 further shows that while local participants' bodily emphases (e.g. frowns, gestures, tapping the table top) may accompany verbal disagreement formulations, they are not seen by the distant participants and thus may implicitly function as attempts to form a local alliance.

#### 6 DISCUSSION

The purpose of this paper has been to investigate how alignment and affiliation are accomplished multimodally between physically co-present participants, who coordinate their actions in multiple interactional spaces: the local space and the overall meeting space. The focus has been on instances where the interaction is challenged by either technological problems, silences, or disagreements. This involves the inducing of parallel interactions in the local space that potentially enable the formation of alliances. The analysis describes the process of constructing an alliance by 1) inviting alignment in the local space, 2) negotiating/ratifying the local community, and 3) closing the parallel interaction. This progression involves use of a range of multimodal resources, such as gaze, gesture and bodily action, and orientation to material objects, like the mouse or the shared screen in the meeting room. Although asymmetric access to interactional resources is clearly an obstacle to accomplishing intersubjectivity and mutual agreement in the overall meeting space, it is nevertheless drawn on in the interaction between the local participants and used as a resource to enhance their sense of local community.

In face-to-face encounters, embodied displays of alignment and affiliation have a significant function in securing contiguity (e.g. Ford 2012; Stivers 2008), providing clues about interactional trouble and the formation of alliances (Kangasharju 2002). In distant meetings where not everyone can see each other, a range of multimodal resources (facial expressions, gaze, gesture) is available only to the co-present participants, who can thus make use of them to display mutual agreement and construct a local alliance in a way that excludes the distant participants. On the one hand, the emergence of interactional problems enables the negotiation of these collectives, and on the other hand, alignment and affiliation make relevant the juxtaposition of the local and distant participants, and the creation of

oppositional alliances. However, although not all problems are made public in the overall meeting space, the local participants will nevertheless visibly orient to them amongst themselves (e.g. as in Extract 1, where some information is lost). Means for alliance-building between physically co-present participants depends on individual displays of availability in the material setting (see Extracts 3 and 4; Lindström 2016).

The present data suggest a clear preference exists for progressivity over sequence expansions: i.e. when problems occur, parallel alignments that emerge in the local space do so in a such a way as not to disturb the main activity of the meeting. Then again, on occasions where the continuity of the interaction is at risk in the overall meeting space (e.g. when one is unable to provide a relevant next action due to a hearing problem; see Extract 2), repair (e.g. Schegloff 1992, 2007) becomes a prerequisite for progressing the main activity. Thus, since repair always extends the sequence size, it is a resource that is resorted to with reluctance. In the extracts, initiating repair makes the interactional problems public and negotiating them relevant in the overall meeting space. At the same time, it accomplishes a shift in orientation from the local participants' alignment work to securing the progression of the meeting. As seen in Extract 2, repair can contribute to the process of closing parallel interactions between physically co-present participants, while also facilitating intersubjectivity between the participants in the overall meeting space.

Although alignment and affiliation represent different levels of cooperation, their functions are not always separable in the co-construction of alliances (see also e.g. Steensig 2012, Kangasharju 2002). The ways in which they are displayed are contextually multilayered, as the local participants are also engaged in the overall meeting space. For instance, in Extract 5, a local participant's embodied actions seem to invite alignment and affiliation in the local space, although the formulations of verbal disagreement are directed to a distant participant.

Furthermore, whereas the local participants may explicitly display their orientation to silences as problematic via verbal contributions in the overall meeting space (see Extract 3), their embodied displays may promote other, additional, orientations towards alignment/affiliation, relating to their understanding of the situation. Overall, how the local participants evaluate problematic instances and what they consider as both relevant and necessary actions for progressing the interaction may be different from that of the distant participants.

In previous research on institutional encounters, an orientation to progressivity has been shown to reflect trust in the interaction: i.e. that all participants know, see and hear (Kuroshima 2010). In distant meetings, participants similarly treat securing continuity and the ability to perform a relevant next action important, even if they cannot be sure to have access to all knowledge and resources. This study showed that, via alignment and affiliation, participants in the same physical location orient, firstly, to the asymmetries of interaction, i.e. restrictions in visual and audio access, and the availability of embodied resources, and secondly, to problems with hearing, speaking, or understanding. Hence, technological trouble, silences, and disagreements can be understood both as constraints on the unfolding of the meeting, but also as interactional resources with which alliances are built and solidarity is enhanced. Further studies are needed to look into whether a correlation exists between specific kinds of problems and the functions of alignment and affiliation, and whether similar practices can be found in other distant meeting contexts. For instance, the social implications of how simple, everyday problems like technical issues may become more than a discursive aspect in the interaction of distant meetings could be a worthwhile topic. Whereas disagreements appear to be more problematic for both the local and distant participants, technological problems are not always equally evident to everyone. Thus, investigation on how they can be negotiated, including in other types of technologized

environments would be welcomed (see also Hutchby 2014). Furthermore, such studies could help practitioners and designers of software technologies in developing applications that ensure participants more equal access to the interactional processes involved.

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#### **APPENDIX. Transcription conventions**

The excerpts have been transcribed according to the conventions developed by Gail Jefferson.

Multimodal details have been described by applying the conventions developed by Lorenza Mondada.

intonation is continuing intonation is final 1 rising intonation 1 falling intonation []overlapping talk thaa cut-off word what word emphasis >what<

speech pace that is quicker than the surrounding talk

<what> speech pace that is slower than the surrounding talk

°what° speech that is quieter than the surrounding talk

WHAT speech that is louder than the surrounding talk

£what£ smiley voice

@what@ animated voice

wh(h)a(h)t laughingly uttered word

(what) uncertain hearings

(x)unrecognizable or confidential item

(.) micro pause, less than 0.2 seconds

(0.5)silences timed in tenths of a second

((gazes))	transcriber's comments
*>	gesture or action described continue across subsequent lines
*>>	gesture or action described continue until and after excerpt's end
>*	gesture or action described continue until the same symbol is reached
>>	gesture or action described begins before the excerpts beginning