

POSTPRINT

Retrospection and understanding in interaction^{*}

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This paper shows how understanding in interaction is informed by temporality, and in particular, by the workings of retrospection. Understanding is a temporally extended, sequentially organized process. Temporality, namely, the sequential relationship of turn positions, equips participants with default mechanisms to display understandings and to expect such displays. These mechanisms require local management of turn-taking to be in order, i.e., the possibility and the expectation to respond locally and reciprocally to prior turns at talk. Sequential positions of turns in interaction provide an infrastructure for displaying understanding and accomplishing intersubjectivity. Linguistic practices specialized in displaying particular kinds of (not) understanding are adapted to the individual sequential positions with respect to an action-to-be-understood.

1. Retrospection in interaction

It is a commonplace that linguistic action is context-dependent. Context-dependency intimately implies temporality: To act in a context-sensitive manner requires retrospection, i.e., to take into account what has happened before in the interactional encounter (and maybe also beyond it). One major facet of the retrospective, context-sensitive design of linguistic action is understanding: The situated production of actions and linguistic structures in interaction fundamentally rests on understandings of partners' prior talk. Moreover, understandings have to be publicly displayed if intersubjectivity of meanings is to be achieved. Acting in interaction thus both exploits and is expected to build on retrospection.

The goal of this paper is to flesh out this temporal perspective on understanding in interaction by dealing with three aspects of it:

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- a. The respecification of ‘understanding’ as a temporal and interactive phenomenon (Section 2) constitutes an object of research that is largely different from ‘understanding’ in other theoretical and methodological approaches, in particular, those dealing with understanding texts (Section 2).
- b. The temporal sequential structure of interaction provides for three systematic positions which are minimally relevant for each turn-to-be-understood. These positions account for a minimal temporal organization of displaying understanding and accomplishing intersubjectivity, which becomes extended in case of trouble (Section 3).
- c. Linguistic practices are designed to give evidence of specific kinds of (not) understanding. My analysis is intended to reveal how a grammar of displaying understanding builds on the temporal affordances of the sequential positions in which linguistic resources are used (Section 3).

Retrospection in interaction crucially involves taking prior actions of interactional partners into account when designing current actions. Those actions which immediately precede the emerging action to be produced are inevitably relevant for its design (Sacks et al. 1974): Sequential pre-context always needs to be taken into account for any next action to be produced (Schegloff 1992a; see below). ‘Relevance’ here means both resource and constraint. Producers of emerging actions can use others’ prior turns in interaction in various ways as a combinatorial resource to build their own action (Goodwin 2013). Retrospective use of prior talk as a resource lies at the core of various linguistic phenomena, e.g., pragmatic presupposition, anaphor, analepsis, paraphrase/reformulation, repetition, and quotation. Prior turns, however, also constrain the next action to be produced: They establish expectations and projections on various orders (speakership, grammar, action, topic, interactional key, etc.; see Auer this volume) to be dealt with by next turns. The design of an emerging turn, thus, is shaped in many ways by the precise moment of its production in terms of preceding actions and the spatial configuration in play when the turn is being produced (Deppermann 2013).

Still, the retrospection relevant for turn-construction may and regularly does reach well beyond sequential context. In its most general sense, the reliance of every spate of talk produced on prior linguistic practice is captured by the notions of ‘dialogue’ and ‘dialogicality’, pertaining to all activities of meaning-making mediated through language (Bakhtin 1981; Linell 2009). Understood this way, retrospection is necessarily in play in all kinds of linguistic production, because speakers always draw on resources provided by prior experience with dialogue partners, adapting them to the ends and needs of the current interaction. Consequently, this view of retrospection extends far beyond the individual interactional episode and takes account of processes on the level of language acquisition, diachronic linguistic

change, the emergence of speech communities and the workings of socio-cognitive, dialogical memory. In this paper, however, the treatment of retrospection will be restricted to retrospection within an interactional episode.

2. Respecification of understanding as a temporal, interactional phenomenon

When designing a turn at talk, the retrospective interactional context allows and requires speakers to display how they have understood their partners, most importantly with respect to their immediately preceding action(s). Understanding in interaction is retrospective in essence, because the prior and on-going actions of partners are objects of understanding in interaction that participants have to deal with. Displays of understanding are indispensable for accomplishing intersubjectivity in interaction (Schegloff 1992b).

Intersubjectivity consists of understandings which are shared to an extent considered to be sufficient by participants at a given moment. Participants need to produce publicly observable, reciprocal displays of understanding in order to see whether they have established meanings which are sufficiently shared for all practical purposes, i.e., for the effective management of the interactional business at hand. Consecutive progressive action can only become coordinated cooperation if actions build on sufficiently shared understandings. Therefore, intersubjective grounding (Clark & Brennan 1991; Clark 1996) of interpretations of actions is a task to be dealt with in interaction continuously. In this way, understanding and intersubjectivity in interaction are thoroughly temporal phenomena: They rely on retrospection and may be accomplished only in temporally extended exchanges of mutual displays of understanding.

This view of understanding in interaction, however, requires us to rethink established notions of understanding, which will be sketched in Section 2.1. The need for a different view crucially relies on differences between understanding texts – the task of understanding scholars have mostly dealt with – and understanding in interaction (2.2). Section 2.3 will outline ontological properties of understanding as a temporal, interactional phenomenon.

2.1 Traditions of theorizing ‘understanding’

‘Understanding’ is a key issue in many theories of cognition, social order and text interpretation. Processes of understanding in everyday talk-in-interaction, on the other hand, have only rarely become an object of inquiry. In the humanities, we can identify the following three major strands of theorizing about understanding.

a. Theories of consciousness and social theory: Starting with Weber (1922) and Schütz (1932), the notion of ‘understanding’ moved into the centre of the reflexion on the foundations of social action and society, namely, in phenomenological philosophy and sociology. Building on Husserl (1995[1929]), Schütz (1932) revealed how the objectivity of the life-world is grounded in the intersubjectivity of categorizations, interpretations, and expectations of action. The accomplishment of intersubjectivity in turn rests on the presumption of being able to understand other persons. This presumption implies the attribution of analogously structured consciousness and shared meanings to other persons as *alter ego*. Crucially, idealizations about the reciprocity of perspectives (Schütz & Luckmann 1979) are taken to be prerequisites for the possibility of empirical understanding. The Schützian approach is egological, i.e., it ultimately locates understanding and intersubjectivity in constitutive acts of the individual consciousness. In contrast, Luhmann (1984) assumes an observer’s perspective in his theory of social systems. For him, social reality is always (contingently, selectively) interpreted reality. It consists of semiotic facts resting on expectations of expectations, i.e., all symbolic structures and acts have to be reciprocally expected and accepted to be part of a shared social reality. Understanding each other and reaching a common grasp of the world is thus the foundation of its very existence as a field of action and perception. In social theories, understanding and intersubjectivity are seen as a prerequisite for social action rather than as its design feature and its product implemented in real-time social interaction.

b. For hermeneutics, questions of understanding have arisen out of practical problems and conflicts over the right interpretation of canonical or literary texts (Schleiermacher 1977[1838]). Hermeneutics is concerned with providing a methodology for interpretations that are more explicit, more systematic, and better justified than naïve understandings by lay persons. It is a matter of dispute whether and to what extent this involves explicating the meanings that the author intended (Scholz 2001). The deconstruction of the notion of ‘subjective meaning’, the debate over the relevance of unconscious meanings and the methodological critique of both subjectivism and objectivism of meanings are major concerns of contemporary hermeneutics (see, e.g., Frank 1989). So, hermeneutics is precisely not concerned with everyday understanding. It is attracted by those objects which challenge our everyday comprehension: the interpretation of the obscure and ambiguous, the historically remote, the irreducibly individual and the culturally distant.

c. Cognitive psychologists are interested in understanding as a mental process. They study representations and strategies of comprehension that readers use to construct coherence and to infer intentions and implicit propositions from texts

(Kintsch & van Dijk 1983; Kintsch 1998), crucially drawing on world knowledge and abductive heuristics (Hobbs 2004). In this approach, understanding is represented in the mental model a person has constructed out of semiotic materials. Understanding is seen as a cognitive rather than a practical matter. It is conceived of as the product of one-way communication, determined by private mental activities of the recipient in isolation. Successful understanding and intersubjectivity are defined in an essentialistic way: Understanding another person amounts to sharing the same mental representation of pairings of linguistic forms and meanings (Kindt 2002).

2.2 Distinctive properties of face-to-face interaction and their consequences for understanding in interaction

Although social theorists aim to account for everyday understanding, they do not deal with temporally extended intersubjective processes of understanding. Hermeneutic and cognitive studies of understanding mostly refer to the comprehension and interpretation of non-interactive texts. When we think of prototypical differences between textual one-way communication and talk in face-to-face interaction, however, we soon recognize that for the latter understanding is organized in different ways and concerns phenomena that are entirely different from those which apply when studying text-comprehension. I will shortly review major differences between both modes of communication (cf. Koch & Oesterreicher 1985) and point out how they impact on the specificity of objects, processes and displays of understanding in interaction.

a. *Interactivity*

When comprehending a non-interactive text (like a novel, a newspaper, a letter, etc.), writer and reader do not interact with each other. The text is fixed and independent from the reader's reactions. In social interaction, on the other hand, turn-taking involves an exchange of the roles of producers and recipients of communication (Sacks et al. 1974). Consequently, addressees can, but also must react to the speakers' turns and display their understandings.¹ In turn, the producer can and must show if s/he accepts the understandings of his/her recipients. This is completely different from literary and mass media communication: Here, the recipient does not have to account for his/her understandings to the producer of the text. This lack of recipient accountability provides for much of the openness, creativity and selectivity of reception in one-way modes of communication

1. To be sure, this also applies to interactive textual media like SMS or chat.

(Eco 1981). In one-way communication, it is impossible and often unnecessary for authors and readers to match their understandings in the process of text interpretation.

b. Situational conditions

In literary and mass communication, authors do not know their readers personally. The inverse is also often true: Readers do not know anything about the author except the text they are reading. The communicative situation is temporally and locally split (Meyrowitz 1990): The situation of production is separate from the situation of reception (Ehlich 1983). Thousands of years may have passed between the production of the text and its reception, and author and recipient do not share a common field of perception. In face-to-face-interaction, producers and recipients are simultaneously present (Schütz 1932), which means that they may share a common perceptual field and create a shared interactional space (Mondada 2009). Consequently, in talk-in-interaction, there is no need to “merge” distant historical and situational “horizons” (cf. Gadamer 1960), which is often necessary when interpreting literary or religious texts. Talk-in-interaction can exploit shared perceptual space when referring to events and things available to all participants. Assumptions about the knowledge of the specific addressee, grounded in prior experience or known category-membership, can be used in order to design turns for a specific recipient (Sacks & Schegloff 1979).

c. Semiotic modes

In textual communication the mode of writing dominates. Typography and pictures may provide additional sources for sense production, while the text itself is fixed. In face-to-face interaction the verbal mode is only one among others. Prosody and voice, facial expression, gesture, gaze, manipulating objects and other body movements are mobilized in conveying meaning. All of these modalities, however, are transient (Bergmann 1985). Multimodal resources are finely tuned to each other and coordinated in both sequential and simultaneous relationships, which are constitutive of their indexical situated meanings (Deppermann & Schmitt 2007; Keevallik this volume; Mondada this volume). Consequently, textual communication and face-to-face interaction involve different objects of understanding and offer different resources for displaying understanding. Written texts allow for extensive interpretation without temporal restriction by the object of understanding, the text itself. It can be read repeatedly without being subject to change, and different texts can be compared simultaneously, etc., without being forced to jump to premature conclusions. In talk-in-interaction, however, recipients must display some understanding more or less contingently. Since vocal

action is transient, recipients cannot return to the original action later in order to scrutinize it more closely. The difference between immediate understanding and methodologically skilled interpretation, which lies at the heart of hermeneutics (Schleiermacher 1977[1838]), presupposes the fixation of the text. It cannot be applied to the participants' understandings of on-going social interaction in the same way. In addition, there are tasks of understanding which are basic for social interaction, but which do not arise in textual communication. Most important among these are understanding projections concerning turn-taking (Does current speaker intend to keep the turn? Who is selected as next speaker?), understanding projections and expectations concerning next actions, and making sense of bodily behaviours, including prosody.

d. *Pragmatic frame*

In many forms of textual communication, authors and readers are not involved in joint projects. Of course, producing an intelligible text requires the author to design it with respect to potential readers, and its comprehension requires the recipient to attribute meaningful intentions to the author in a Schützian fashion. Talk-in-interaction, however, additionally requires a common focus of attention (Goffman 1963) and cooperative joint action, building on each other's contributions, in order to accomplish joint projects (Clark 1996; Tomasello 2008). Consequently, producing comprehensible turns and reaching individual understandings is not enough. Participants need to negotiate and convene on shared understandings sufficient for the tasks to be collaboratively accomplished.

Considering the differences between textual one-way communication and face-to-face interaction, it almost seems misleading to think of 'understanding' as a homogenous concept that can be applied to both modes. In fact, it appears that their only commonality is a focus on the comprehension of signs. Objects, processes and displays of understanding, however, involve different processes, strategies and stocks of knowledge. Crucially, the accomplishment of intersubjectivity figures centrally in talk-in-interaction in ways it can and often need not in textual communication.

2.3 Understanding in talk-in-interaction as an empirical phenomenon

Understanding as a mental process is not an event which can be part of a conversation (Luhmann 1995). As a private mental phenomenon, understanding is not available to others. They can neither check it nor react to it. 'Understanding' as a phenomenon therefore has to be respecified through attending to how it becomes relevant, observable and treatable for participants in the interaction itself. This

approach is in line with what discursive psychologists, drawing on Garfinkel (1967), call the ‘respecification’ of mental phenomena as discursive phenomena (Potter & te Molder 2006; cf. Deppermann 2012). Discursive psychology has shown how psychological phenomena which are treated by (cognitive) psychology as private, inner, mental states and processes (e.g., memories, emotions, knowledge) surface in social interaction in discursive practices. These practices are treated by participants as displays and evidence for psychological states and processes (Edwards & Potter 1992; Edwards 1997; Edwards & Potter 2006). For the study of understanding in interaction, this means that we have to attend to

- the multimodal practices used to display understanding,
- the interactional phenomena which participants consider as evidence of understanding,
- the objects of understanding,
- the ways by which displays of understanding refer to prior actions,
- the interpretation which is attributed to prior actions,
- the criteria participants apply for correct understandings and for ways of expressing them, and
- the sequential formats by which issues of understanding are dealt with (Deppermann & Schmitt 2009).

An interactional approach also involves studying the ways in which understanding is relevant to the joint activity at hand and at which point issues of understanding become topical in interaction. Practices of displaying understanding are socially organized: There are social expectations, rights and obligations to understanding displays which are related to genres, participation frameworks and identities, e.g. who may or may not display understandings, and who can require others to check them or enforce criteria of adequacy (cf. Stivers et al. 2011). Therefore, it would be insufficient and often even misleading to consider understanding displays only as public expressions of participants’ interpretive work in interaction. Rather, displays of understanding are practical moves with their own interactional uses and consequences.

3. Interactional organization of retrospective understanding

This section aims to show how understanding in interaction is a temporally unfolding, sequentially organized phenomenon:

- Understanding is a basic feature of action in interaction on behalf of the workings of adjacency, turn-taking and interpretive defaults;

- interactional structure provides systematic positions for consecutive turns by which mutual understanding of actions is organized;
- there is a grammar of understanding, i.e., linguistic practices specialized in dealing with tasks and problems of understanding.

Displaying understanding and accomplishing intersubjectivity require two basic moves from each participant:

- i. The recipient has to display how s/he understands an action-to-be-understood;
- ii. the producer of the action-to-be-understood has to display if s/he accepts what s/he takes as recipient's understanding of his/her turn.

The sequential organisation of talk-in-interaction provides a temporal infrastructure for dealing with these two basic tasks of displaying and negotiating understanding. Every action is a potential object of understanding. It represents a first position with respect to following displays of understanding. In the second position, next speakers display their understanding of the action-to-be-understood. These displays constitute a first order of understanding. Intersubjectivity, however, can only be accomplished observably by producing a turn in third position: The producer of the original action-to-be-understood, the action in first position, responds with an action that shows whether s/he accepts the display of understanding which has been produced by its recipient(s) in second position. So, here second-order understanding is at issue (cf. Schneider 2004: 329ff): If the producer of the action in first position accepts its reception in second position, s/he ratifies recipients' displays of understanding; if not, the speaker will produce a repair turn, which requires uptake from the partner in fourth position. Alternatively, the third-positioned turn can become a new object of understanding, a new first position which needs to be dealt with recursively by another sequence of three positions.

In what follows I discuss how the sequential positions of consecutive actions in relation to an action-to-be-understood, the 'first position', provide a systematic procedural infrastructure for displaying understanding and accomplishing intersubjectivity in interaction:

- Displaying understanding in second position: understanding (3.1),
- Displaying understanding in third position: intersubjectivity (3.2),
- Displaying understanding in fourth position: restored intersubjectivity (3.3),
- Displaying understanding of non-adjacent actions (3.4).

3.1 Displaying understanding in second position: Understanding

Most displays of understanding remain silent. Here is an example from doctor-patient-interaction:²

Extract 1. IDS doctor-patient DIDA 1402.5³

- 01 DR: SO und weswegen komm sie denn heute hierher? ((lacht))
okay and because of what do you come here today? ((laughs))
- 02 PA: ja ich hab eben schon einmal überL↑EGT,
well I've just thought about it
- 03 wegen allgEMEINbefinden könnte man so sagen- (.)
because of my general condition one could say

The patient seems to have understood that the doctor is asking for the reason of her visit, but she does not display this explicitly. She rather presupposes this understanding through her own action, i.e. her answer. In talk-in-interaction, there is a preference for progression of action and description (Heritage 2007): Preferentially, a next speaker produces a turn which builds progressively on prior talk, i.e., by advancing the joint action. Importantly, this means that there is a preference for next speakers to fulfil, or at least deal with, projections for next actions established by prior actions, without first checking separately that the previous speaker has been understood correctly. If the next speaker performs an action in second position which is acceptable to the producer of the action in first position, then the producer of the first-positioned action will take this as evidence that his/her prior action has been understood sufficiently by the respondent.

The progressive orientation of action depends on understanding, but may also compete with requirements to display understandings (Heritage 2007). Displaying understanding is retrospective. Therefore, it does not itself contribute to the progression of joint action.⁴ Interactional progression, however, must build on intersubjectively shared understandings. Preference for progressivity in interaction thus implies that understanding displays will be minimized to the extent that is necessary to provide sufficient grounds for progression. Therefore, understanding will be dealt with by presupposition and displays built into progressive action itself whenever possible, avoiding activities specialized in displaying understanding

2. All transcripts in this paper represent data in German language.

3. All extracts are transcribed according to GAT2, see Appendix A.

4. The opposition between understanding and progressivity does not hold for types of interaction whose main aim is to work out understandings, e.g., psychoanalytic sessions.

which do not advance the current line of action. Talk would be charged with the burden of uneconomical, delaying self-reference, if a next speaker always had to make explicit how s/he understood previous actions before producing the projected next action on the basis of that understanding.

Still, participants in talk-in-interaction may use practices specialized in dealing with matters of understanding built into a second-positioned turn. One practice is other-repetition (Svennevig 2004) or format-tying (Sacks 1992): A second speaker repeats (part of) the talk of the previous speaker and thereby shows that s/he specifically takes up this talk and responds to it (Betz et al. 2013). Comprehension of the upshot of a prior turn can be displayed by repeating precisely the phrase or lexical item which carries the main semantic or pragmatic load of the previous turn.

Extract 2. (= Extract 1) IDS doctor-patient DIDA 1402.5

- 01 DR: SO und weswegen komm sie denn heute hierHER? ((lacht))
okay and **because** of what do you come here today? ((laughs))
- 02 PA: ja ich hab eben schon einmal überL↑EGT,
well I already thought about it
- 03 **wegen** allgEMEINbefinden könnte man so sagen- (.)
because of my general condition could be said so

wegen ('because') here is the key term in the doctor's question, which defines the type of action performed, i.e. asking for the reason of the patient's visit. Some approaches to dialogue, such as Dialogic Syntax (Du Bois 2007) and Alignment Theory (Pickering & Garrod 2004) consider other-repetition most basic for the accomplishment of intersubjectivity. Still, other-repetition is used for many other concerns apart from displaying intersubjectivity, most importantly, for repair-initiation (Schegloff et al. 1977) and displaying independent epistemic access (Stivers 2005). Other-repetition *can* be used to aid in accomplishing intersubjectivity. In sequential contexts where the accomplishment of intersubjectivity has proved to be difficult or (potentially) faces obstacles, such as under impaired acoustic conditions, in exchanges with (second) language learners, or as confirmation of a successful repair, other-repetition is used to check and confirm correct uptake (Deppermann Ms.). When produced by the recipient of a turn-to-be-understood, other-repetition serves to index co-orientation to and receipt of a prior turn, but it does not already show sufficient understanding of the turn's content or the action it is to perform (Golato & Betz 2008). Extract 3 from a call-center interaction is an example. Participants are talking about a software producer, who is known to be expensive.

Extract 3. IDS-AGD callcenter out-bound_15_00.02.18-00.02.25

- 098 Client: firma eins is dazu auch noch ne apoTHEke;
 moreover the company is also a pharmacy
- 099 MUSS man mal sagen;
 one has to say this
- 100 (0.4)
- 101 Agent: was HEISST apotheke,
 what do you mean by pharmacy?
- 102 Client: TEUer-
 expensive
- 103 (0.3)
- 104 Agent: TEUer-
expensive
- 105 (0.3)
- 106 Agent: Ahja;
 oh I see

In S104, the agent repeats the client's self-repair *teuer* ('expensive') (S102), which was initiated by an understanding problem of the agent in S101. The source of the problem was the client's use of the metaphoric predication *ist eine apoTHEke* (S098), meaning that a company or shop sells goods at (excessively) high prices. In S104, other-repetition is used to display the receipt of new information which is relevant for solving an understanding problem. Still, it does not yet display understanding.⁵ It is only in S106 that the agent displays, with the particle *ahja* ('oh I see'), that his understanding-problem is now solved. In sum, while repetition is a major resource for displaying uptake and confirming understandings under difficult conditions and in contexts of repairing understanding problems, it is not a sufficient sequence-closing display in many contexts nor is it a generic practice for displaying understanding. There are many other practices which better support the preference for progressivity in interaction (Deppermann Ms.) and which provide better evidence of recipients' understandings by explication than other-repetition does (Sacks 1992: 252ff).

An example is turn-continuation and, more specifically, turn-completion (Lerner 1991, 2004): The next speaker produces a turn which syntactically builds on the previous turn and completes it syntactically, semantically, and pragmatically. If the prior turn has not reached a possible (syntactic) completion point, then there is the opportunity for a next speaker to complete the turn by delivering

5. The level intonation of the repeat "TEUer-" already indexes that the repair-sequence is still incomplete, because it can be taken to project either turn-continuation or an echo question amounting to another repair-initiation.

what has been projected as possible completion as a display of understanding. Completion can be cued by producing a designedly incomplete turn calling for completion by second speaker, or the second speaker may self-select for turn-completion, e.g., by helping out a prior speaker who is searching for a word. Below is an instance of the first type, drawn from a meeting in which adolescents and a youth worker (Alex) plan a radio-show together. They are discussing if songs by Coolio and the German Band Böhse Onkelz should be played in a row.

Extract 4. IDS-AGD JuK4 radio project: Coolio

- 01 Alex: NU:R was ich fragen wollte is::- (.)
but what I wanted to ask is
- 02 COolio äh::: was weiß Ich- (.)
Coolio uh just guessing
- 03 is n SCHWARZER ja;
is black right?
- 04 äh aus amERika ja?
from America right?
- 05 (.) un die ONkelz sinn-
and the Onkelz are-
- 06 (-)
- 07 Nadi: <<f> DEUtsche.>
Germans
- 08 Mich: deutsche.=
Germans
- 09 Alex: =deutsche die:: ziemlich rechten ROCK machen ja?
Germans who play pretty rightist rock right?

Nadine and Michaela both complete Alex' turn. His turn prompts completion, because he self-interrupts at a point which is neither prosodically nor syntactically a possible completion point and where the rheme, the semantic upshot of the turn, is still missing. Alex thus gives the girls an opportunity to display understanding by producing the right completion – a common pedagogical practice to elicit and check students' knowledge (Koshik 2002). Their completions (S07–08) are repeated by Alex (S09), who adds another turn-continuation with a relative clause containing further specifications, indicating that he was aiming at a somewhat more specific property of the Onkelz, namely, that they are considered to play rightist rock music. This, however, accounts for the pedagogical, argumentative function of Alex' turn: He alludes to the fact that a rightist attitude involves racism, which would be incompatible with playing a song by a black musician (Coolio).

Collaborative turn-constructions are especially apt for displaying understanding because they create a common cohesive and dependent structure which consists of *ego's* and *alter's* turn. In this way, intersubjectivity is displayed through the production of a shared structure with a collaboratively constructed meaning. Understanding of prior speaker's intention can be displayed by a second speaker through completing the turn in a way he/she assumes the turn to have been intended by the prior speaker (or at least in a way acceptable to him/her), or by formulating its content more explicitly via turn-expansion. In this way, turn-continuations afford first speakers an opportunity to check recipients' understandings.

While completions and continuations build on a prior speaker's formulation and presuppose it, reformulations⁶ replace a prior speaker's words (Heritage & Watson 1979). Reformulations are stronger displays of understanding than other-repetitions or response particles. They do not merely claim understanding, but they demonstrate it by formulating what has been understood using the recipient's own words (Sacks 1992:252ff). Response particles and repetitions can often only be produced aptly by attentively monitoring speakers' turn-construction and the projections for displays of understanding it sets up. Reformulations, in contrast, additionally require that the recipient formulates some interpretation of topical talk and action which goes beyond the wording of the turn-to-be-understood. Reformulations thus allow first speakers to check whether the recipient has arrived at a sufficient understanding of the prior turn(s). Extract 5 is from a broadcast talk-show. The host (HO) asks the guest (GU) if she would have preferred to become minister in the administration of another prime minister (Engholm) of a German federal state rather than the one to which she finally did belong (Momper). The guest reacts hesitantly. The host formulates an inference from her hesitant response.

Extract 5. IDS-AGD Talk on tv 4050.026

- 02 HO: WÄren sie vielleicht lieber ministerin geworden
unter ENGholm?
would you have preferred to become minister under Engholm?
- 03 (0.9)
- 04 GU: °hhh
- 05 HO: als (.) bei MOMper?
rather than with Momper?

6. In order to avoid ambiguities, the term 'formulation' is used for all activities of 'putting meanings into words', while 'reformulation' refers to responsive actions of 'formulating a turn of a prior speaker in the recipient's own words.' 'Reformulation' thus encompasses what is termed 'formulation' in most, but not all CA-literature.

- 06 (2.1)
 07 GU: [hÄtt ich AUCh gekonnt;]
 I could have become that too
 08 HO: [der WIRkte doch am anfang,]
 he looked at the beginning
 09 GU: [dESwegen] ist es schwer zu [SAGen.]=
 therefore it is hard to say
 10 HO: [ja?] [mhm,]
 yes? uhum
 11 GU: =<<p>ja,>
 yes
 12 HO: <<all> also SIE hatten keine> besOndere präferenz.
 so you did not have a particular preference
 13 (0.5)
 14 GU: für MOMper?=
 for Momper?
 15 =nein.
 no

The guest's response is delayed (S04, 06), confirming that the alternative the host mentions in his question was in fact real (S07), adding that she has trouble in deciding in favor of one of the two alternative options (S09). Her displays of dispreference and indetermination are explicitly reformulated by the host, saying: *also SIE hatten keine besOndere präferenz* ('so you did not have a specific preference', S12), which the guest confirms (S14–15). Reformulation (like continuation) is built to show explicit recognition of a prior speaker's implicit intention (Deppermann & Helmer 2013). Still, it simultaneously transforms prior speaker's turn by reinterpreting or recategorizing it, thus suggesting a more or less altered formulation as the relevant gist or upshot (Heritage & Watson 1979), which is retained for future interaction to build on (Drew 2003).

This property becomes clearer when inspecting reformulations which do more than just paraphrase prior turns like in Extract 5. Reformulations can go far beyond what had been expressed in prior turns by making intentions, reasons, innuendo, or other dimensions of meaning explicit which have remained latent in previous turns from the reformulator's point of view. Reformulations expressing such kinds of inference are a practice for displaying understanding to be used if the first speaker has failed to make the upshot of his turn clear enough from the second speaker's point of view. In the continuation of Extract 1, the doctor displays her understanding of the patient by using a reformulation which is clearly not a paraphrase, but an inferential ascription of an unstated intention of the patient.

Extract 6. (= Extract 1 extended) IDS doctor-patient DIDA 1402.5

- 01 DR: SO und weswegen komm sie denn heute HIERher? ((lacht))
 okay and because of what do you come here today? ((laughs))
- 02 PA: ja ich hab eben schon einmal überL↑EGT,
 well I already thought about it
- 03 wegen allgeMEINbefinden könnte man so sagen- (.)
 because of my general condition could be said so
- 04 DR: **sie wollten mal einen-** (--)
 you just wanted a
- 05 PA: <<all> ich ich->
 I I
- 06 DR: **neuen HAUSarzt.** (-)
new family doctor
- 07 PA: erstmal DAS. (-)
that is one thing

With her inferential reformulation (S04/06), the doctor interprets the patient's answer with respect to her initial question (S01) and the overall goal of the medical interview: If the interaction serves to establish the doctor as a new family doctor, then different tasks will need to be accomplished in the medical encounter compared to a situation where only a specific health problem is to be treated.

Formulating an inference can be a way of checking understanding. But it may also be used to convey some meaning of a prior speaker's turn to him/her or to others which does not seem to be available or even acceptable to the prior speaker. Second speakers take care to display whether they take their reformulation to be intersubjective: They index whether they presume that they are formulating what prior speaker meant to communicate (in the sense of Grice 1989), or whether they are formulating a unilateral inference, i.e., some meaning which the speaker gleans from prior speaker's turn, but which s/he does not take to be intended by prior speaker. Specialized linguistic practices are employed to build formulations so as to show whether the understanding formulated is assumed to be intersubjective or not. Specific discourse markers, connectives and mental verb constructions are used for this purpose. In German, intersubjective formulations are indexed by 2nd person constructions with mental verbs like *wollen* ('to want', cf. Extract 6, S04 *sie wollten* ...) and *meinen* ('to mean'), imputing intentions to prior speaker. Very often, reformulations are prefaced by the discourse markers *also* ('so' like in Extract 5; Deppermann 2011) and *das heißt/will heißen* ('this/that means').

Unilateral, subjective inferences which are not presented as presumably meant and shared by the producer of the turn-to-be-understood are prefaced by the discourse marker *dann* ('then') (Deppermann & Helmer 2013; Helmer 2011). Extract 7 is taken from a controversial talk-show dealing with abortion. Doctor

Horst Theissen (HT), who was sentenced to prison for practicing abortion, argues with the head of the *Zentralkomitee der deutschen Katholiken* (*Central Committee of German Catholics*), Rita Waschbüsch (RW), about whether women who have aborted are likely to be punished.

Extract 7. IDS-AGD, Talk on tv 4050.026

- 01 HT: das hängt lenkt überhaupt nicht von dem thema AB;
this hinges does not divert from the topic
- 02 weil das mir immer VORge[worfen wird?]
because this is what people always reproach me
- 03 KS: [von der Tötung ab.]
from the killing
- 04 RW: [KEIne]
none
- 05 RW: [der frauen wär doch] beSTRAFT worden;
of the women would have been punished
- 06 HT: [WEIL ich,]
because I
- 07 RW: [(wenn sie) (xxx xxx).]
if they xxx xxx
- 08 HT: [in der medIZIN,]
in medicine
- 09 <<all,f>**dann hAm sie keine Ahnung von der medIZIN=**
then you do not have a clue about medicine
- 10 =entsCHULdigen sie bitte;=
I beg your pardon
- 11 =wenn ich ihnen das VORwerfen darf.>
If I may reproach you for this
- 12 HT: [°h <<all> aber] in der medizin> (.)
but in medicine
- 13 RW: [aber-]
but
- 14 HT: sind wir Immer an an TRENNstellen.=
we are always at at cut-off points
- 15 =wir müssen Immer (.)das Eine leben gegen das andre
ABwägen.
we always have to weigh one life against the other

With his *dann*-prefaced turn (S09), HT provides an interpretation of RW's prior turn (S04, 05, 07). HT negatively evaluates RW's turn (S09) and explicitly categorizes his response as a reproach (S11). However, HT does not simply disagree: By using *dann* in S09, HT indexes that he infers his ascription 'you do not have a clue about medicine' to RW from RW's prior turn. Still, by its very design, the

reformulation is not presented as an explication of presumably intersubjective meanings intended by RW. HT categorizes his interpretation as a reproach and neither calls for nor even leaves room for confirmation by RW, who starts to object to it (S13).

Dann-inferences have a somewhat paradoxical status: By using *dann*, speakers suggest that the inference they are formulating is logical and thus intersubjectively valid; simultaneously, they display that they are producing a unilateral, subjective inference which is neither an explication of the prior speaker's meaning nor built to be confirmed by prior speaker. This paradoxical status of *dann*-inferences regarding intersubjectivity allows us to comprehend why they are (frequently, but not exclusively) used in participation frameworks, such as in Extract 7, i.e., where a speaker tries to gain the audience's support against a prior speaker by interpreting his/her words as evidence that the speaker's position is self-defeating or reveals some fatal flaw.

Other practices are used to display subjectivity of unilateral understandings. First-person constructions with receptive mental verbs like *beobachten* ('to observe'), *den Eindruck/das Gefühl haben* ('to have the feeling/the impression'), *spüren* ('to feel'), *denken* ('to think') are used to formulate interpretations on the part of the recipient which are not treated as being intended by prior speaker. These verbs index that the interpretation is a product of subjective operations on the recipient's part, neither claiming epistemic authority nor presuming that they are intersubjectively shared. Such constructions are routinely used, e.g., by psychotherapists to offer interpretations which patients probably did not intend to convey. In Extract 8, the patient (PA) complains about other people being phoney and dishonest. The therapist (TP) interprets the patient's lengthy turn as giving evidence of distrustfulness resulting from bad biographical experiences.

Extract 8. Psychoanalysis, angepiekt 07:51–08:56

001 PA: es is so <<all> dieses dieses;>
it is like this this

002 (1.0)

003 PA: dieses andern LEUten und sich SELBST was vORMachen;
this fooling other people and oneself

004 <<f>jetzt von andern LEUten> gesehen; (.)
now concerning other people

005 TP: Mhm, =
m_hm

006 PA: =ich sprech jetzt nich von MIR;
I'm not talking about myself

007 sondern von den ANDern.
but about the others

008 Mhm;
m_hm

009 (0.9)

010 PA: das is so-
it is so

011 so un unECHT und unEHRlich.
so phoney and dishonest

012 <<p>un->
and

013 TP: Mhm-
m_hm

014 (0.8)

015 PA: <<t> das MAG ich nicht so gErne.>
I do not like it so much

016 (0.7)

017 PA: °H <<h,f>ich (.) ich weiß nicht ob ALle leute so sind,>
I I do not know if everybody is like this

018 aber-
but

019 (1.6)

020 PA: ich NEHme das höchstwahrscheinlich an.
I assume it's very likely

021 (0.7)

022 TP: <<p>mh->
mh

023 (3.0)

024 TP: ich überLEG mir grade so-
I am just considering

025 (1.5)

026 TP: was sie da so an-
what you in this respect

027 (1.0)

028 TP: ((sighs))

029 (2.7)

030 TP: ja; (.)
yes

031 **mir kommt irgendwie so ins (.) in den sInn als**
erstes wort was sie da an BALLlast,
what somehow comes to my mind as a first try what a burden

032 (1.0)

033 TP: auch H↑Aben;
you have

034 (1.7)

035 TP: sie vermissen die EHRlichkeit-
you miss the honesty

- 036 (2.6)
- 037 TP: <<p>sind da irgendwie ja auch negativ gePRÄGT durch
ihre LEBensgeschichte-
you have somehow been negatively shaped by your life story
- 038 also **wenn ich so** (.) an die-
so **if I like think** of the
- 039 °HH Ehe- (0.7)
marriage
- 040 zEIt- (0.3)
time
- 041 **denke**;
- 042 die SIE gehabt haben> <<pp>und so;=
which you had and so on
- 043 =auch><<p>an diese SCHEIdungssituation **ich denke**,
also of the situation of divorce, **I think**
- 044 °HH da haben sie ja auch_n gutes::
you know you have a good
- 045 ((glottal)) irgendwie-
somehow
- 046 <<:->>häh->>
((laughs))
- 047 n_gutes RECHT hätt ich beinah gesagt misstrauisch
zu!SEIN, !=
every right, I almost said, to be distrustful
- 048 =also irgendwie::-
so somehow
- 049 **denk ich** ham sie auch schlechte erFAHrungen gemacht;
I think you have also had bad experiences
- 050 ja?=
right?
- 051 PA: =JA das hab ich.
yes I definitely have

The therapist uses various practices to display that her interpretations of the patient's turn are subjective. She presents them as results of her ongoing reflection on what the patient has said, connecting them to other knowledge about the patient (cf. Argelander 1991). She embodies thinking by pausing at various points in her turn when no TRP has been reached (S025, 027–029, 032, 034, 036, 039). First-person mental predicates are used to index a subjective perspective and the process of reflecting: *ich überLEG mir grade so-*, 'I am just considering', S024; *mir kommt irgendwie so in den Sinn*, 'what somehow comes to my mind', S031; three instances of *ich denke* ('I think') in S038/41, 042, 049. The understanding displayed by the therapist shifts the focus: While the patient has asserted properties of other persons (*dieses andern IEUten und sich SELBST was vOrmachen*,

‘this fooling other people and oneself’, S003; *unECHT und unEHRlich.*, ‘phoney and dishonest’, S011), the therapist turns to the patient’s biographic experiences (particularly with her former husband, S031–S049) and to an attitude she ascribes to the patient (*misstrauisch*, ‘distrustful’, S047) as motivation for the patient’s statements. The therapist thus displays a specific kind of understanding, motivational understanding, which goes beyond what can be considered to be communicated by the patient, who nevertheless confirms the therapist’s interpretation (S051). Subjective displays of understanding are a way of displaying caution about the interpretations proposed. They neither presume intersubjectivity of interpretations nor epistemic authority or certainty on the part of the speaker. Still, we can see how the therapist nicely combines practices of subjectivation and downgrading certainty of understanding with practices of presupposing intersubjectivity. The latter is mainly indexed by the use of modal particles *ja auch* (S037), *auch* (S049) and the demonstrative article (*diese scheidungssituation*, ‘this situation of divorce’, S043). While the therapist frames her interpretation as a tentative, subjective understanding, she displays that it rests on reasons which are equally available to the patient and that the knowledge mobilized to construct her interpretation is presumably shared, thus suggesting the plausibility of her understanding. The interpretation is presented for consideration by the patient in order to elicit further self-reflexive expansion from her (which, indeed, follows after the extract).

Displaying understanding is not just a matter of displaying the interpretation which a second speaker has arrived at. Second speakers index whether the interpretation formulated is assumed to be intersubjective or rather unilateral and subjective. Assumed intersubjectivity means that the reformulation is framed as having already been communicated in a Gricean sense (Grice 1989) by the prior speaker, i.e., s/he is taken to have implicitly meant what is reformulated by second speaker. Intersubjective reformulations are presented for confirmation, suggesting that the interpretation displayed is part of the *common ground* (Clark & Brennan 1991). In contrast, formulations of unilateral understandings do not project a (strong) expectation of confirmation. Intersubjectivity vs. subjectivity/unilaterality of understandings are not facts to be derived from a comparison of speakers’ and hearers’ mental representations. They are indexed as such by participants and they progressively evolve in a temporal process of reciprocal displays of understanding. While these displays are essentially retrospective in focus, they are deployed progressively, successively working out shared (and non-shared) meanings of retrospective objects of understanding and their import for future action.

3.2 Displaying understanding in third position: Intersubjectivity

When a second speaker displays his/her understanding in second position, it is still not certain if intersubjectivity is achieved, because it is not yet settled if the producer of the turn in first position will go along with the understanding displayed. By what is displayed in second position, the speaker of the turn in first position can analyze how this turn was understood by second speaker. Third-positioned turns express second-order understanding, i.e., ‘understandings of understandings’. Simultaneously, they express a stance towards the first-order understandings displayed in second position, i.e., they indicate whether the speaker accepts the understandings in second positions or whether s/he treats them as insufficient or even as misunderstandings. Only if second-order understandings express acceptance of first-order understandings, intersubjectivity can be considered accomplished. The basic three-part sequence of accomplishing intersubjectivity mirrors the fact that intersubjectivity means reciprocity: Intersubjectivity not only requires a response from the partner, but a reciprocal display of interpretations of interpretations. This is necessary in order to make observable that interpretations are shared or at least compatible enough for practical purposes. Intersubjectivity cannot be established on the spot in just one act. It requires time, namely the possibility of looking back at prior actions, and the possibility of producing a next action which displays the results of retrospection.

Just as is the case for turns in second position, this interpretive logic of accomplishing intersubjectivity essentially does not depend on activities specialized in displaying intersubjectivity by the producer of third-positioned turns. Third-positioned turns, when produced by the same party as the turn in first position, are taken by default to express the speaker’s stance on how his/her prior turn was understood by his/her partner. Second-order understanding is tacitly displayed by the immediate performance of an action which was projected by the turn in second position or, in the absence of such projections, by any turn which builds on the semantic and pragmatic relevancies established by the previous turn.

Extract 9. IDS doctor-patient DIDA 1402.01

- 01 DR: was sa:cht ER denn dazu?
and what does he say?
- 02 PA: <<p> naja ich sollte ä zum ARZT gehen ma;>
well I should see a doctor
- 03 DR: ja ja SIcher nich? (-)
yes yes sure right?
- 04 !SO! geht das doch gar nich.
it cannot go on like this

The doctor agrees with the quote reported in the patient's answer, which was a second position (S02) to the doctor's question in first position (S01). Though the doctor does not address the patient's understanding of her question directly, she accepts it by progressive action, building her own turn in third position on the patient's answer. There is a pragmatic implication: By accepting the prior turn as an unproblematic basis for the production of a next turn, a next speaker also accepts the presupposition of the prior turn, namely, the prior speaker's understanding of next speaker's own preceding turn in first position. This kind of ratification can be termed "ratification by progression" (Spranz-Fogasy 1986): A next turn displays acceptance of partners' understandings exactly by not addressing them, but by building on them as common ground to proceed. Again, the preference for progression is at work: Whenever thematic or pragmatic progression is possible, because understanding seems to be secure enough, there is no need for specialized displays of understanding. Progression can then be realized without further notice. In doing so, the speaker reflexively displays that s/he assumes that shared understanding has been achieved to a sufficient degree.

Let us now turn to cases in which first-order understandings are not accepted. To the extent that the speaker of the first-positioned turn cares about intersubjectivity being accomplished, s/he needs to repair misunderstandings whenever s/he perceives one.⁷ If s/he fails to do so, s/he risks having co-participants build future actions and interpretations on that misunderstanding. An accumulation of misunderstandings and ill-based reactions would be impending. It is precisely this temporal dynamics of spreading misunderstandings and the temporal place inhabited by the third position, which makes it "the last structurally provided defense of intersubjectivity" (Schegloff 1992b). The third position is the systematic occasion for correcting misunderstandings, because it is the first place in which a detected misunderstanding can be corrected without being passed on to further talk. Moreover, because third positions are taken as displays of stance towards first-order understandings by default, misunderstandings can be addressed most directly in third-positioned turns and with less effort than is needed in later stretches of talk where recontextualization of the trouble source is required (see 3.3 below).

Misunderstandings are routinely addressed by self-repair of the first position. Self-repair can be preceded by other-repair. In this case the speaker first makes the misunderstanding which s/he attributes to the partner more or less explicit,

7. Participants may not orient to accomplishing intersubjectivity (at least in some of its aspects), because it may not matter for interactional concerns (i.e. in cases of ritual behavior), or it may even interfere with communicative goals, as in cases of strategic interaction (Goffman 1970) or in power-regulated interactions.

negates it and then substitutes it by the correct formulation (Schegloff 1991, 1992b). Prototypically, this is done via antithesis: ‘I don’t mean X, I mean Y’. In my data, however, it is much more common for speakers to restrict themselves to self-repair without rejecting co-participants’ understandings explicitly. An example is Extract 10 from a psychiatric interview, where the patient has talked about photos she had looked at a few days before.

Extract 10. Psychiatric interview, Corpus “Angstkommunikation” Bielefeld: Frau Lonk

- ((Patient talks about feelings))
- 01 PA: als ich mir die fotos angekuckt hab.
when I looked at the photos
- 02 DR: was für fotos denn?
so what kind of photographs?
- 03 PA: na von <<len> früher> halt.
well from former times
- 04 DR: **!WAS!** für fotos [von früher.]
what kind of photographs from former times
- 05 PA: [ach so:-]
oh I see
- 06 PA: nja das sin (1.8) jetzt grad halt irgendwelche fotos
well these are now just some photos
- 07 <<p> womein PApi und ICH so drauf sind ().>
which show my father and me
- 08 DR: ahA.
I see

The patient answers the question *was für fotos denn?* (S02, ‘so what kind of photographs?’) by giving a temporal specification (*von früher*, ‘from former times’, S03). The doctor then repeats his question in third position with a self-repair (S04): He now puts focal stress on the question pronoun **!WAS!** (‘what’), showing that he wants to know what there is to be seen on the photographs. The patient responds to this self-repair with a change-of-state token (*achso*; Golato 2010), displaying that she has reached a revised understanding of the question (S05). She then supplies information which obviously matches the focus of the doctor’s question, as epitomized by his change-of-state token *aha* (S08), registering new information which is claimed to be understood.

Most third-position turns do not make second-order understanding an explicit issue. Specialized lexico-syntactic means, such as intensional framing and recursive syntax (like “I think you think that I wanted to say that p”), are only very rarely used. Even without such devices, third-positioned turns embody a triadic attribution of understanding: They display how the speaker understands how co-participants have understood what s/he has meant. Third-position turns display

this triadic structure by virtue of their sequential position, even if they only seem to express a simple action/intention when viewed out of context, attending only to their linguistic structure. Without context, ‘what kind of photos from former times?’ does not seem to be more than a question. Philosophers such as Grice (1989), Habermas (1985), and Schiffer (1972) have claimed that the triadic ascription of meaning (“I think that you think that I mean p by saying X”) is constitutive of intersubjectivity. We can now see how this triadic structure of ascription is temporally achieved in interaction by displaying understandings in sequences of three turn-positions. These three positions are produced alternately by interactional partners and are systematically related to one another. The three levels of ascription which are recursively and simultaneously present in the triadic attribution (“I think that you think that I mean p by saying X”) are successively brought about by sequential interaction: The first position expresses the initial speaker’s meaning (“I mean p by saying X”), the second position displays a first-order understanding (“I think you mean p by saying X”), the third position displays a second-order understanding (“I think that you think that I mean p by saying X”). Intersubjectivity thus is a temporal and procedural fact. Understanding, and more so the intersubjectivity of meanings, are not established in one go; rather they are temporally emergent symbolic structures requiring a collaborative sequence of actions. Three basic features of talk-in-interaction provide the infrastructure for the successive and recursive accomplishment of intersubjectivity:

- Temporality and sequentiality of interaction (cf. Schegloff 2007): one action follows the other;
- interactivity by virtue of locally managed, conversational turn-taking (cf. Sacks et al. 1974): participants are provided with the possibility of responding and re-responding locally to one another;
- the principle of local coherence, which serves as a default rule of interpretation: Understand any subsequent turn as a display of understanding of the prior turn, independently of any explicit display, unless its producer clearly indicates that it should not be interpreted that way (cf. Sacks et al. 1974:728).

These three basic features of talk-in-interaction explain why understanding in interaction is something completely different from understanding texts. Notions such as ‘reader-text-interaction’ are misleading, because texts do not respond actively to readers’ interpretations, at least as long as there is no interaction between writers and readers.

Many turns in talk-in-interaction realize all three positions relevant for understanding at once. Let us return to Extract 10: *WAS für fotos von früher* (S04; ‘what kind of photographs from former times?’) is at the same time

- a first-positioned action: the doctor asks what can be seen on the photographs;
- a second-positioned turn displaying first-order understanding: he displays that he has understood that the patient talked about photographs from former times in S01/S03;
- a third-positioned turn displaying second-order understanding: the doctor displays that the patient's response in S03 did not meet the focus of his prior question in S02, i.e., he did not request temporal information, but wanted to know about the subjects of the pictures.

So, this turn is indexical in three ways: It is simultaneously an action to be understood, a display of first-order understanding and a display of second-order understanding. The role inhabited by turns in the temporal organisation of understanding is thus a systematic source of indexicality of meaning in interaction.

Four clarifications have to be added to this picture of the sequential organization of understanding and intersubjectivity.

a. All understanding displays, in whatever position they may occur, have the recursive potential to become an object of understanding and subsequent negotiation themselves. So, second-order understandings do not just take a stance on first-order understandings. They may become another first-positioned object of meaning negotiation in subsequent talk, just as first-order understandings may do. E.g., participants may negotiate if some display of understanding really exhibits a misunderstanding or not; participants may treat third-position repair as being incredible or in need of clarification, etc.

b. Actions which are second-, third- or fourth-positioned with respect to an action-to-be-understood need not necessarily be produced as adjacent next turns. Several second-positioned turns may be produced by different participants in multi-party interaction. Intervening activities which do not display an understanding of the adjacent prior action may occur. Whether an action is a second, third or fourth position with respect to an action-to-be-understood is thus not determined by temporal succession alone, but by responsive relationships. Still, of course, there is a preference to hear an adjacent turn as responsive whenever feasible, and speakers have to resort to specialized practices when producing non-adjacent responses (see 3.4).

c. Intersubjectivity becomes established observably and accountably only by interaction. The triadic ascription of meaning in which intersubjectivity is rooted only becomes factual (but still negotiable, defeasible and, again, interpretable) by responses and re-responses. Still, already when producing a turn, speakers *presume* that their turn's meaning is intersubjective. As Husserl (1929) and Schütz (1932) have suggested, a speaker's idealization that the meaning of a turn to be

produced is at least potentially intersubjective is an indispensable precondition for the production of any turn – the very act of communicating presupposes trust in the recipient’s potential of understanding. Otherwise, it would be futile.

d. If a speaker accepts second-order understandings in third position or if s/he self-repairs, this does not necessarily reveal which meaning the speaker originally intended when producing the turn in first position (Hinnenkamp 1998). Speakers may have many other motives for accepting or repairing second-order understandings apart from (not) having been understood correctly, e.g., suitability of an interpretation for the business of ensuing talk, avoiding conflict, gaining the partner’s affiliation, sufficiency of an incorrect or imprecise interpretation for all practical purposes, etc. Moreover, speakers are not self-transparent beings. They are not always able to remember correctly what they had intended when producing the prior turn, nor do they necessarily have fully explicit and conscious intentions when producing an action (cf. Merleau-Ponty 1962). Ratified understandings are collaborative, interactional products. By their constitution, they are not interactional realizations of autonomous, a priori speaker meanings which only have to be grasped correctly by the recipient.

The three-position sequence discussed in this section is the minimal sequence for accomplishing intersubjectivity in the unproblematic case. In other words: If and only if the speaker of the turn in first position produces a third-positioned turn which can be taken to display acceptance of the understanding the partner displayed in second position, then intersubjectivity can be assumed (cf. Extract 9). Of course, this accomplishment holds only until further notice, i.e., it can always turn out that understandings did not match sufficiently, or that inferences are drawn which are unexpected or rejected, etc. Meaning can always be renegotiated.

3.3 Displaying understanding in fourth position: Restoring intersubjectivity

While three positions are minimally required for the accomplishment of understanding in the unproblematic case, four or five positions are minimally required to restore intersubjectivity after troubles in understanding. Immediate restoration of troubled intersubjectivity involves third-position repair (Schegloff 1991, 1992b). Third-position repair retracts the interactional sequence (cf. Auer this volume): It cancels out the time which has elapsed since the production of the repairable, i.e., the turn in first position. Actions based on the problematic object of understanding which have occurred in the meantime are removed from the common ground and are discarded as not relevant for future action. Having produced a third position repair, the speaker cannot automatically assume that everything is

clear now. Repair calls for a response which displays its success in terms of accomplishing intersubjectivity. In structural terms, third position repair is also a next turn repair initiator: In fourth position, the partner is expected to show that s/he has come to a revised understanding. Third position repair therefore repairs the whole sequence of first and second position. Change-of-state tokens such as *oh* in English (Heritage 1984, 2006), *achso*, *ahja*, *oh* in German (Golato 2010; Golato & Betz 2008; Imo 2009) are discourse particles specialized in displaying revised understandings with respect to the resolution of an understanding problem. In order to not only claim but also to demonstrate understanding, the newly gained interpretation may be formulated (additionally) or an appropriately revised conditionally relevant second pair part has to be produced.

The minimal sequence of restoring troubled intersubjectivity can take on two different shapes, depending on who identifies the problem: (a) the recipient of a turn displays trouble of understanding, (b) the producer of a turn does not accept the way his/her recipient interprets the turn.

a. A turn in first position engenders an understanding problem displayed in second position. This display of trouble makes self-repair from the producer of the first turn relevant. Third-position self-repair is designed to solve this problem, with the successful solution being evidenced by an understanding display in fourth position. Schematically, the sequence runs like this:

- 1 A: Turn to be understood
- 2 B: Display of trouble of understanding (Next turn repair initiation)
- 3 A: Third-position repair
- 4 B: Display of revised understanding

A case of this is Extract 2, reproduced as Extract 11 below, from a call-center interaction. The agent displays that he does not understand what the client means by categorizing the software company as a ‘pharmacy’ (“apotheke”).

Extract 11. Callcenter out-bound_15_00.02.18–00.02.25

- 098 Client: firma eins is dazu auch noch ne apoTHEke;
moreover the company is also a pharmacy
- 099 MUSS man mal sagen;
one has to say this
- 100 (0.4)
- 101 Agent: was HEISST apotheke,
what do you mean by pharmacy?
- 102 Client: TEUer-
expensive
- 103 (0.3)

104 Agent: TEUer-
expensive
105 (0.3)
106 Agent: Ahja;
oh I see

1 Client: Turn to be understood: *firma is dazu auch noch ne apoTHEke*; (S098)
2 Agent: Display of trouble of understanding (Next turn repair initiation): *was HEISSt apotheke*, (S101)
3 Client: Third-position repair: *teuer-* (S102)
4 Agent: Display of revised understanding (repeat and change-of-state token): *TEUer- (0.3) Ahja*; (S104–106)

b. A sequence involving five positions is minimally needed if trouble is indicated in third position, i.e., the producer of the turn in first position does not accept the understanding the partner displayed in second position. Thus, in contrast to case (a), third-position repair is self-initiated, and the speaker repairs the (alleged) misunderstanding by his/her interlocutor. The producer of the understanding display in second position then claims or demonstrates revised understanding. Still, in order to achieve intersubjectivity observably, the producer of the first-positioned turn now needs to index whether s/he treats the uptake of his/her third-position repair as a display of adequate understanding. Schematically, the sequence runs like this:

1 A: Turn to be understood
2 B: Display of understanding
3 A: Third-position repair (Rejection of understanding display
from second position)
4 B: Display of revised understanding
5 A: Acceptance of revised understanding

This is what happens in Extract 10, reproduced as Extract 12 below. In the psychiatric interview, the doctor self-repairs his question, thereby showing that the patient's answer was not sufficient.

Extract 12. Psychiatric interview, Corpus "Angstkommunikation" Bielefeld: Frau Lonk

02 DR: was für FOTOS denn?
so what kind of photographs?
03 PA: na von <<len> FRÜher> halt.
well from former times
04 DR: !WAS! für fotos [von früher.]
WHAT kind of photographs from former times
05 PA: [ach so: -]
oh I see

- 06 DR: **nja das sin (1.8) jetz grad halt irgendwelche fotos
well these are now just some photos**
- 07 <<p> wo mein PApi und ICH so drauf sind ().>
 which show my father and me
- 08 DR: **ahA.
I see**

- 1 DR: Turn to be understood: *was für FOTOS denn?* (S02).
- 2 PA: Display of understanding: *na von <<len> FRÜher> halt* (S03) – patient interprets doctor’s question about the kind of photographs temporally.
- 3 DR: Third-position repair (Rejection of understanding displayed in second position): *!WAS! für fotos von früher.* (S04) – doctor makes clear that he wants to have more precise information about the subject of the photographs, in addition to or irrespective of their age.
- 4 PA: Display of revised understanding: Patient first produces a change of state token *ach SO:-* (S05), claiming that she now understands correctly. Since the doctor’s self-repair projects a revised answer from the patient, she adds a demonstration of revised understanding: She now gives an answer which makes reference to the persons shown on the photographs (*nja das sin (1.8) jetz grad halt irgendwelche fotos <<p> wo mein PApi und ICH so drauf sind ().>*, S06–07).
- 5 DR: Acceptance of display of revised understanding: *ahA.* (S08) – doctor displays that the revised answer is news to him which he takes to be sufficient. Intersubjectivity is thus restored. The accomplishment of mutual understanding is both a precondition for and implicated in practical cooperation, i.e., in the successful achievement of a joint project (here: answering a question).

The four- and five-position sequences for restoring intersubjectivity are systematic extensions of the unproblematic case: Again, the fundamental three-part sequence of accomplishing intersubjectivity has to come full circle.

- Third-position repair either solves an understanding problem indexed in second position; this second position amounts to a new first position, i.e., the solution is in need of being ratified as the solution sought for.
- Alternatively, if third-position repair is self-initiated, the repair itself amounts to a new first position. Then the producer of the turn in third position has to display whether the uptake of repair in fourth position displays adequately revised understanding.

3.4 Displaying understanding of non-adjacent actions

Understanding is always open to revisions. If some observable grounding has occurred, this does not mean that the interpretation necessarily stays fixed. Participants may revise their interpretations. They often do so without displaying changes (to the producers of actions-to-be-understood). Revised understandings may leave a trace by informing future actions and responses; however, they do so without explicit displays of how and why which understandings have changed. But, of course, participants may also wish to display understandings concerning non-adjacent actions, be it that they have revised their initial understanding or that they did not or could not respond to them immediately.

In 3.1–3.3, we have seen how displays of understanding are ‘parasitic’ on the temporal structure of interaction and its sequential properties. Economy and efficiency of understanding displays rest on the fact that the turn-to-be understood is still salient and cognitively available as the point of reference for consecutive displays of understanding and, pragmatically, that recipients’ displays are required in order to accomplish intersubjectivity. Things become more complicated if there are competing, i.e., several salient and possibly relevant objects of understanding, such as turns and other actions by several participants or different parts of a lengthy turn of one participant. The task may also become more difficult if a display of understanding refers back to an action which occurred prior to the discourse topic treated last, or to episodes of joint action preceding the current one. In cases of competing and remote objects of understanding, speakers need to recontextualize the object of understanding through more explicit means than just addressing its producer and presupposing it or co-referring to it pronominally. Several practices are used to recontextualize such objects of understanding: Quotation, reformulation, and condensed categorical anaphoric co-reference to prior talk, often aided by verbs of communication whose reference may be grounded temporally, locally and in other ways. For reasons of space, this will be illustrated with just one example. In Extract 13 (which is an extract from Extract 8), the therapist first responds to the patient’s prior turn by formulating an association. Only after doing this does she clarify which object of understanding in the patient’s lengthy turn her association refers to.

Extract 13. Psychoanalysis, angepiekt 07:51–08:56

010 PA: das is so-
it is so
011 so un unECHT und unEHRlich.
so phoney and dishonest
(...)

- 024 TP: ich überLEG mir grade so-
I am just considering
- 025 (1.5)
- 026 TP: was sie da sO an-
what you in this respect
- 027 (1.0)
- 028 TP: ((sighs))
- 029 (2.7)
- 030 TP: ja; (.)
yes
- 031 mir kommt irgendwie so ins (.) in den sInn als
erstes wort was sie da an BALLast,
it comes to my mind as a first try what a burden you
have
- 032 (1.0)
- 033 TP: auch H↑Aben;
- 034 (1.7)
- 035 TP: **sie vermissen die EHRlichkeit-**
you miss the honesty
- 036 (2.6)
- 037 TP: <<p>sind da irgendwie ja auch negativ geprägt durch
ihre lEbensgeschichte-
you have been negatively shaped by your life story
- 038 also wenn ich sO (.) an die-
so if I like think of the
- 039 °HH Ehe- (0.65)
marriage
- 040 zEIt- (0.3)
time
- 041 denke;
- 042 die SIE gehabt haben> <<pp>und so;=
which you had and so on

The therapist states that the patient has a burden (S031). Obviously enough, this statement is related to the patient's lengthy multi-unit turn, but the therapist does not make clear what the burden is nor how it is connected to what the patient has talked about. Only after this does the therapist establish definite co-reference by reformulating the gist of the patient's turn as *sie vermissen die EHRlichkeit-* ('you miss the honesty', S035). Here the object of understanding is explicitly recontextualized with a descriptive clause involving full lexical (as opposed to pronominal or analeptic) anaphoric co-reference. By describing the object of understanding, the therapist provides it with an interpretation, which she takes as the point of departure for formulating further inferences. The therapist indexes that these inferences themselves are informed by understandings of talk by the patient prior to the

current encounter (*wenn ich so an die Ehezeit denke die Sie gehabt haben*, ‘if I think about the time of the marriage you had’, S038–041). This recontextualization involves explicit reference to the previous discourse topic as well.

The temporal organization of interaction in terms of adjacency and cognitive availability provides for mutual salience and unambiguousness of the object-of-understanding being referred to if it is located in the immediately preceding turn. By this, the temporal structure of interaction facilitates and requires continuous displays of understanding in line with the preference for progressivity in interaction, i.e., displays of understanding that are short, in-built, presuppositional, implicit and pronominal. If retrospective adjacency is missing or insufficient (as in the case of competing potential foci), a trade-off between time and explicitness makes itself felt: More explicit linguistic means for topical co-reference and action formation are needed in order to recontextualize the objects-to-be-understood recognizably.

4. Conclusion

The aim of this paper has been to show that and how the organization of understanding in interaction is thoroughly informed by retrospection, which unfolds sequentially. Understanding in interaction is not just a receptive activity by hearers. Understanding displays are required and routinely expected in order to accomplish intersubjectivity in the interaction itself, between the producer of the actions-to-be-understood and his/her co-interactants. Displays of understanding actively contribute to shaping the future course of the interaction, establishing a basis for and projecting ensuing joint action. The minimal, sequential organisation of talk-in-interaction exhibits a structure of first position ‘action-to-be understood’, second position ‘display of understanding’, and third position ‘display of second-order understanding’, which is the basis for accomplishing intersubjectivity. Minimal extensions of this sequence occasioned by problems of understanding and activities to restore intersubjectivity lead to four or five-position sequences. Understanding in interaction is thus temporally structured in three ways: It unfolds over time, it refers back to prior talk retrospectively, and it is prospectively oriented to future understandings to be displayed.

Practices of displaying understanding are adapted to the temporal contingencies of retrospection and sequentiality in interaction. These practices implicitly presuppose and build on the workings and properties of temporality and interaction, namely, adjacency, mutual salience, speaker-change and the default expectation of local coherence between turns. Displays of understanding therefore are often implicit and “silent”, built into the design of progressive action, reflexively

enabling and accounting for it. Understanding is a prerequisite for action, but action is in focus – it ranks higher than understanding as a member's concern.

The paper has given an overview of a range of specialized practices for displaying understanding: response tokens, other-repetition, turn-completions and turn-continuations, discourse particles and connectives, mental and communicative verbs, reformulations and formulations of inferences, self- and other-repair (initiation) and practices of anaphoric recontextualization. These practices are used to display aspects and kinds of understanding differing in terms of

- understanding vs. revised understanding vs. not understanding vs. attributing misunderstanding to the partner,
- first- vs. second-order understanding,
- presumed intersubjectivity vs. unilaterality and subjectivity of understanding,
- certainty vs. uncertainty of understanding,
- receipting information vs. sufficient understanding for current purposes,
- retrospective availability and distance of actions-to-be-understood.

Of course, there are still other relevant dimensions not treated in this paper, e.g., practices displaying differing degrees of precision of understanding, dealing with different objects of understanding (e.g., emotions, professional knowledge, allusions), etc. In sum, there is a 'positionally-sensitive grammar' (Schegloff 1996) of understanding (cf. Deppermann 2013), which accounts for an important part of grammaticized linguistic practices in every language.

This paper has focused exclusively on verbal displays of understanding. This picture is incomplete, because in face-to-face-interaction understanding is also displayed via other multimodal means which make understandings visibly available (Koschman 2011). Most importantly, visible action allows recipients to display understandings whenever they arise, simultaneously coordinated with an on-going action-to-be-understood (Mondada 2011). Thus, an inquiry into the temporal properties of multimodal interaction is required to complement the picture of the temporalities of understanding in interaction drawn in this paper.

Understanding in interaction consists of a continuous elaboration of actions and descriptive meanings. Discursive action gets constituted incrementally, step-by-step, thus involving elaborations and negotiations, which again become objects of displays of understanding. This paper has focused on how interactionally organized retrospection figures in understanding. Still, understanding also has a prospective temporal dimension, which is equally important. This already became evident when dealing with the expectation that displays of understanding should be produced in a next-positioned turn. Actions are designed to be understood. To achieve this, participants take conditions into account which influence their addressees' (and other recipients') probable or possible understandings. Practices

of recipient design thus anticipate future understandings by recipients. Still, sources for recipient design are largely retrospective, because the speaker builds on what s/he already knows about the recipient.

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