INTRODUCTION

Temporality in interaction

Arnulf Deppermann and Susanne Günthner

The authors establish a phenomenological perspective on the temporal constitution of experience and action. Retrospection and projection (i.e. backward as well as forward orientation of everyday action), sequentiality and the sequential organization of activities as well as simultaneity (i.e. participants’ simultaneous coordination) are introduced as key concepts of a temporalized approach to interaction. These concepts are used to capture that every action is produced as an inter-linked step in the succession of adjacent actions, being sensitive to the precise moment where it is produced.

The adoption of a holistic, multimodal and praxeological perspective additionally shows that action in interaction is organized according to several temporal orders simultaneously in operation. Each multimodal resource used in interaction has its own temporal properties.

1. The need for a temporal understanding of linguistic structures

As Paul Hopper (2006) once stated, for most linguists, “the mention of time evokes questions of verb morphology, [...] tense and aspect.” This volume, however, does not address semantic aspects of time, instead it deals with the real-time dimension that all spoken language inhabits. It aims at bringing together a body of research which demonstrates that studies of linguistic structure can gain profound insights once they take the temporality of linguistic production and reception into account and, thus, do justice to the irreducibly temporal nature of the situated use of language.

Various linguists have mentioned the fact that as Jespersen (1924:26) put it “...a sentence does not spring into a speaker’s mind all at once, but it is framed gradually as he goes on speaking”. However, theories of linguistic structure, in general, are still based on a detemporalized notion of ‘language’, reducing “a temporal medium to a fixed, stable, and timeless one” (Hopper 2011:22). Consequently, grammatical features and constructions are still treated as an inventory of forms, instead of studying them in the ongoing temporal flow of time (Auer 2005, 2006).
Only recently and mainly thanks to approaches such as ‘on-line syntax’ (Auer 2009) and ‘emergent grammar’ (Hopper 1987, 1998), studies of language in interaction have begun to look systematically at linguistic structures as they unfold in real time (cf. Auer 2000; Goodwin 2002; Günthner/Hopper 2010; Hopper 2011; Auer & Pfänder 2011).

This volume is dedicated to issues of temporality and language. It addresses questions of how participants handle temporal processes and exigencies in everyday spoken interaction and how grammar – viewed as a dynamic, context-sensitive system – can be adapted to temporal constraints and emerges in the processes of interaction. As language-in-interaction is bodily and temporally situated in the mutual presence of face-to-face interaction, its meaning is inevitably produced and interpreted in time (Schütz & Luckmann 1979:83; Psathas & Waksler 1973).

Thus, the empirical analyses in this volume show how the course of the ongoing production of linguistic structure is shaped by co-participants’ local verbal and non-verbal (re-)actions as well as the opportunities and restrictions provided for by the linguistic structures which are accomplished at a given moment of interaction. The collected papers provide evidence of the sensitivity and adaption of linguistic structures to the collaborative temporal unfolding of an ongoing interactional sequence. Furthermore, they reveal that once temporality and the temporal processes of producing and interpreting language in interactions are taken into account, many new questions of language usage and of the interactive emergence of grammatical phenomena arise. Viewing grammar from a temporal perspective leads to a radical change in the conceptualization of language: Instead of treating grammar as a mental structure, the authors recontextualize grammar in its actual usage in everyday social life. Analyzing linguistic structures “as these unfold in real-time discourse” (Silverstein 1984:182) represents a shift to a new perspective of dealing with language use and thus raises fundamental questions of theory and method.

2. The temporal constitution of experience and action

The key role temporality plays in the accomplishment of both linguistic and interactional structure stems from the fact that it is basic for all human action and experience. Every lived moment is a fleeting, continuously renewing present. It is never self-contained, but an ever-moving, non-locatable, ephemeral point of continuous transition of immediate future and lived present into past (Husserl 1928). There is no sheer, static presence. Lived temporality is characterized by this ever-moving, future-directed now. The lived present is brought about by continuous passive synthesis of impressions, i.e., sensations and perceptions, which become retentions of ongoing experience (Husserl 1928:385–395). This also
includes “protentions” (Husserl 1928) of the immediately impending future in terms of more or less open expectations and possibilities turning to factual experience (Gurwitsch 2010: Part IV). This continuous synthesis accounts for the unity and continuity of experience. Every attempt at grasping the present moment of experience necessarily destroys the identity of it, because it can only be captured as a remembered past moment, which is not identical with the present of the subject reflecting on it (Merleau-Ponty 1945: Part III, Section 1–2). Lived temporality therefore is not to be identified as a series of points in linear, chronological time observed from a “God’s eye” point of view beyond it. Rather, chronological time is perceived with reference to lived temporality. Lived temporality is relevance-structured time. Time figures in actions in terms of expectations, opportunities and exigencies for action. It is experienced as durée (Bergson 1970 [1889]; Schütz 1974:62–70; Schütz & Luckmann 1979:80–87), which is qualitatively structured in terms of temporal units, episodes, and cycles of activities, events, perceptions and experiences.

These fundamental features of the temporal constitution of experience and action are also basic for the accomplishment of action and linguistic structures in interaction.

3. Retrospection and projection

Action in interaction is inevitably temporal practice. Participation in interaction requires online production and understanding of linguistic and pragmatic structure as they unfold in time (Auer 2009). The intersubjectivity of the “we-relationship” in face-to-face interaction is rooted in temporality: It rests on the possibility that subjects mutually synchronize their consciousness by perceiving one another in shared time (Schütz & Luckmann 1979:90–97) from the point of view of the ever-moving, fleeting present. In this process, action and understanding are always oriented both backwards by retrospection and forwards by projection. As Heritage (1984:241ff.) shows, every turn in interaction (and we could add: every part of a turn as well) is at once context-bound and context-renewing. Turns are context-bound in being retrospectively tailored to prior context, i.e., just that interactional moment at which they are produced. Most notably, they are designed by reference to the current participation framework and the immediately prior turn in the interaction (Depperman 2013). Prior context is both a restriction and a resource for building a next turn. It accounts for choices of formulation in action formation. It supplies presuppositions of previously accomplished meanings, linguistic and interactional structures, which can be used as common ground to build on. Furthermore, prior linguistic context provides “structural latencies”
(Auer this volume), which can be built upon for analepsis (cf. also Hopper this volume), or which can be re-indexed by anaphorical means, i.e., pronouns, lexical substitution, (partial) repetition and reformulation. Further, both variation and contrast assume their local indexical functions to a high degree only by retrospective reference to prior talk (Du Bois 2010). Thus, next interactional moves make heavy use of reassembling and recombining resources that prior interaction has provided, supplying the grounds for the self-referential emergence of interactional structure as participants construct interactional sequences (Goodwin 2013). Most of the manifold practices of retrospection and its basic role for producing formulations in interaction only become obvious once we extend the scope of analysis beyond the traditional unit of research in grammar, i.e., beyond the boundaries of the clause (or sentence). Retrospective practices create coherence between current and past activities, and they are indispensable for displaying understanding and accomplishing intersubjectivity (Deppermann this volume). This involves confirming, building on and expanding prior context, but equally includes practices of retraction (Auer 2009), which modify and substitute prior talk by repair (Schedloff et al. 1977) and various kinds of reformulation (specification, generalization, exemplification, etc.; see Güllich & Kotschi 1996; Günthner this volume). While the construction of turns which immediately build on prior talk either does not need to represent its retrospective bases explicitly or can do so with very economical, highly indexical resources (such as pronouns), retrospective recontextualization of non-adjacent prior talk context has to make use of more explicit and effortful means (Deppermann this volume). Practices of back-linking and skip-connecting (Mazeland & Huiskes 2001), quotation (Clift & Holt 2006) and reformulation (Heritage & Watson 1979) are then needed in order to recall prior talk and reinstate its current topical relevance. An inquiry into how people accomplish retrospection in interaction in their formulatory choices shows that it is not simply the amount of physical time having elapsed between current talk and the relevant retrospective context which determines which resources are used for recontextualization. Practices of retrospection are sensitive to qualitative time in terms of ongoing pragmatic relevance and cognitive salience of prior context and of projections (see below), which are still lingering, making newly produced bits of talk understandable as their fulfilment.

While participants' anaphoric practices index more or less precisely the retrospective point of reference that current talk relates to, 'retrospection' may also be understood in a more general fashion. As Bakhtin (1986) pointed out, every current use of a word builds on a discursive history of prior uses of the same word, both on an individual, biographical and on a diachronic, socio-historical scale. "Our speech [...] is filled with others' words [...] The words of others carry with them their own expression, their own evaluative tone, which we assimilate,
reread, and re-accentuate." (Bakhtin 1986:89). Therefore, each occurrence of a word can be associated with its prior contexts of use, with styles and genres and the social milieus, identities of users and goals of interaction they have been tied to, being the most important sources for their connotative meanings. Building on Bakhtin, Hopper (2011) argues that the online construction of emerging grammatical structures in talk is not informed by abstract categorical grammatical knowledge. Rather, speakers use their memory of prior usage, which provides them with knowledge about sedimented, routine ways of speaking (Hopper 1987, 1998; see also Günthner et al. 2014). These are used as constructional bits and pieces to produce grammatical structure by speakers as they go about building up their turns at talk in a manner which is sensitive to the situated contingencies of the interactional moment.

Turns are context-renewing in adding to and transforming prior context: What a turn does in interaction is not defined by its meaning as a ‘speech act’ in isolation, but by the precise situated and indexical ways it transforms the given interactional context at that moment in ways that are consequential for interactional organization and sense-making. ‘Context’ thus needs to be understood temporally as a reflexive and dynamic notion (cf. Gumperz 1982; Auer 1992): Context is not a container of variables with static values determining interactional practice, but it is continuously renewed, i.e., both reproduced and redefined, by practice itself in the temporal process of the interaction (cf. Heritage & Clayman 2010). A major part of the interactional import of every turn lies in its projective properties. “By projection I mean the fact that an individual action or part of it foreshadows another. In order to understand what is projected, interactants need some kind of knowledge about how actions (or action components) are typically (i.e., qua types) sequenced, i.e. how they follow each other in time.” (Auer 2005:8). Projection operates on various levels of interactional practice, most notably on the levels of grammar, turn-construction (Günthner 2011a; this volume), turn-taking (Pekarek Doehler this volume) and sequencing of actions (Schegloff 2007), but also with regard to lexical co-occurrence, topical development (Maschler this volume), choices of styles and codes and the coordination of various multimodal resources (see below). Local projections established by the production of some turn or turn-component provide a range of expectations about “what comes next?” Projections are basic for the anticipation and coordination of action in interaction (Goodwin 2002): The structure of the emerging turn establishes projections concerning (a) the kind of action the turn is to perform, (b) possible points of turn-completion allowing or calling for turn-transition, and (c), oftentimes, expectations about the next action to be performed by next speakers.

As for point (a). The grammar of many languages allows for “early projection” in action formation (Levinson 2013). Think, e.g., of question-pronouns and
verb-fronted imperative or interrogative syntax, which index from the very beginning of the turn the kind of (or at least a very restricted range of) action(s) the upcoming turn is to perform. This allows recipients to understand its pragmatic import early. Similarly, projector constructions are specialized in enabling topic change, structuring extended descriptive and argumentative multi-unit turns, and securing the floor for the speaker (Pekarek Doehler 2011, this volume; Günthner 2008, 2011a, 2011b).

As for point (b). Emerging syntactic structure, but also, with a narrower scope, prosody enable hearers to “monitor the structure of emerging talk prospectively in order to locate unit completions, upcoming moments where it will be possible for them to take the position of the speaker” (Goodwin 2002:26). The relative smoothness of turn-taking with few delays rests decisively on the capacity of the emerging turn to project possible moments of its completion. This enables recipients to orient prospectively to upcoming transition-relevance places and to prepare their responses accordingly (Schegloff 1996). Grammatical projection of turn-completion lays the foundation for collaborative completions (cf. Lerner 1991, 2004; Auer this volume), because recipients can infer on their behalf which kinds of structures are needed and may be adequate for completing the structure which was recognizably started by what the speaker has already produced.

As for point (c). The most powerful mechanism of projection of next actions is conditional relevance (Schegloff 1968). Conditional relevance describes the expectation that upon the production of some first pair part action of some type A (e.g., a question) by speaker 1 some second pair part action of a matching type B (e.g., an answer) is due as next action by speaker 2. Conditional relevance, thus, accounts for the production of adjacency pairs, which can be said to be the basic building blocks of sequences in interaction and thus of interactional structures in general (Schegloff 2007).

Adjacency pairs are paramount instances of how projection is intrinsically tied to what interactional structures mean: The conversational action performed by a first pair part cannot be described without referring to its projective properties. Projections are almost always more or less schematic (except for ritualized cases such as having to respond by “I will” at a wedding ceremony). Furthermore, they usually do not define just one option for continuation or response, but they allow for a type-defined range of options, which may be more or less restricted dependent on the source of projection. E.g., while polar interrogatives (yes/no-questions) set up a narrow set of type-conforming options, which are obligatory for a response or at least the start of it (Raymond 2003, 2013), wh-questions, especially if they are “telling questions” (Thompson et al. 2015), allow for a wide range of possible kinds of responses that fit. Just as there are linguistic devices to co-refer anaphorically in retrospection, there are linguistic devices which work
cataphorically. Goodwin (1996) terms them ‘prospective indexicals’. They may operate with a narrower temporal scope, like cataphoric pronouns, but they may also have a much more wide-ranging scope such as story prefaces, which project what the climax or moral of a story will be about. While the full meaning of what prospective indexicals refer to is only revealed in subsequent talk, they act as indices to establish expectations about that talk. In this way, they enable recipients to coordinate their interactional participation with what is projected.

4. Sequentiality and simultaneity

The discussion of retrospection and projection leads us to distinguish two aspects in the temporality of activities, which, however, are closely related. On the one hand, there is temporality in terms of the temporal perspectives inherent in turns-at-talk. Retrospection refers to the past in the present, it is the term for how a current structure relates to the interactional past. Projection, in contrast, refers to the future in the present, it captures how a current structure anticipates what the interactional future might be. On the other hand, there is temporality in terms of the temporal ordering of activities, i.e. their beginning, extension, and completion, their timing, their sequential organization and their simultaneous coordination. Also in this case, retrospection and projection are basic principles for interactional ordering: While retrospection concerns how a turn indexes its position with respect to the development of the interactional sequence so far by its design, projection establishes expectations for what is to come next.

We shall now consider issues of temporal order in interaction in more detail.

The basic insight of CA, which distinguishes it from other theories of social action, is that actions are sequentially organized. The point of departure for analyzing what actions are and do is not the individual action – as assumed by Speech Act Theory, (Neo-)Gricean Pragmatics, Relevance Theory and also Social Phenomenology – but action sequences (Atkinson & Heritage 1984; Schegloff 2007). This amounts to a radically temporalized approach to action: Both the design and the meaning of an action are tied to its position in a temporally ordered sequential organization of actions. ‘Sequentiality’ (and ‘sequential organization’) refers to the universal and irreducibly temporal fact that every action is produced as a step in the succession of adjacent actions, being sensitive to the precise moment where it is produced. With CA’s insistence on the sequential context of an action being the most immediate and most important dimension of context both for the production and the analysis of turns at talk, the notion of ‘context’ becomes temporalized and emergent (Schegloff 1992a). Interactional context is thus seen as a reflexive, self-organizing accomplishment by interactants. Social structures
(identities, social relationships and institutions) are revealed to exist as temporal and pragmatic structures, i.e., as “Vollzugswirklichkeit” (“realities by performance”, Bergmann 1985). This aspect of “Vollzugswirklichkeit” is nicely captured by the notion of “doing being X” (see Heritage & Clayman 2010). The existence and relevance of social structures, however, depends on their continuous reproduction and enactment by practical action, which, in turn, confirms and indexically interprets their relevance for current practical interactional tasks and activities.

In contrast to ‘sequentiality’, ‘sequence’ does not refer to just any succession of actions. Sequences are temporally complexes of actions with recognizable beginnings and ends, engendered to deal with some specific joint interactional business, which is schematically projected in the initiation of the sequence (see Schegloff 2007). The adjacency pair is the prototypical basic organizational format of sequences. It can be extended by pre- and post-sequences, which gain their function with respect to the core adjacency pair (Schegloff 2007). The notion of ‘sequence’ again points to how interactional time is qualitatively structured in terms of practical relevancies. These account for what interactants conceive of as boundaries, units, and finished vs. unfinished structures in talk. Sequences rest on generic, type-defined relationships between actions in first, second, third and fourth position vis-à-vis each other, which are constitutive of their pragmatic meaning and the accomplishment of intersubjectivity (Schegloff 1992b; Deppermann this volume). The notion of ‘sequentiality’, on the other hand, leads us to focus on the irreducibly indexical character of the production of action in interaction, and, thus, to the fact that we have to deal with situated contingencies in order to account for its “unique adequacy” (Psathas 1995:17) as a contribution to just this collaborative activity at just this moment of interaction.

Sequentiality also entails that meaning in interaction is a processual phenomenon. It is not to be located at the spot where a turn is produced, and it is not defined by speaker’s prior intentions (Haughli 2008). Interactionally relevant, intersubjective or disputed meanings emerge only via temporally extended sequences of displays of understanding and consecutive negotiation of meaning. It is only by such temporally extended processes that they become part of the interlocutors’ common ground (Clark & Brennan 1991) and consequential for the future of the interaction.

Sequentiality is not the only property of temporal ordering between activities that matters. Timing and simultaneity are equally important. In addition to their sequential relationship, the timing of actions has interactional origins and functions of its own. Precision-timing of speaker-change and turn-transition with transition spaces of less than a second (cf. Jefferson 1988) relies heavily on the projectability of transition relevance places (Sacks et al. 1974). Delays in turn-production may be produced to convey interactional meaning, such as
indexing that a dispreferred action is about to be produced (Pomerantz 1984), but they may also function to coordinate talk with body movements in order to create interactionally shared space with respect to the projected joint activity (Mondada 2009).

In classic mono-modal accounts of conversational structure by CA, which only deal with the vocal-acoustic mode of action, simultaneity essentially surfaced under the guise of overlapping talk (Sacks et al. 1974; Schegloff 2000; Jefferson 2004). It has been shown how the turn-taking machinery provides a mechanism to minimize overlap and how interactants treat overlap as a phenomenon to be resolved (Schegloff 2000; Jefferson 2004). Furthermore, analyses revealed how overlaps are used as resources to convey affiliation and sharedness (Goodwin & Goodwin 1992), to support and complete partners’ turns under construction (Oloff 2009) or to build competition and conflict (Kotthoff 1993).

Analyses of video-taped multimodal interaction, however, soon made clear that simultaneity of activities is a basic feature of all face-to-face interaction (Goodwin 2000). Participation in face-to-face interaction extends far beyond the vocal-acoustic modality. Talk, gaze, gestures, bodily posture, facial expression, orientation in space, walking and the manipulation of objects have to be coordinated both sequentially and simultaneously in interactional cooperation (see Keevallik this volume, Mondada this volume). Both intra-personal and inter-personal coordination of activities (Deppermann & Schmitt 2007; Deppermann 2014) involve the simultaneous use of multimodal resources of various kinds. There is no ‘floor’ and no turn-taking mechanism used to organize the deployment of all the multimodal resources that participants (not just “speakers”!) use in face-to-face interaction. The pragmatic properties of simultaneous activities mobilizing different multimodal resources therefore cannot be accounted for as “overlap”, even if they are directly related to floor management (Schmitt 2005). The issue of how multimodal simultaneity of activities links up with sequential organization of talk and other multimodal resources still remains largely to be explored (see below).

5. Multimodal temporalities

The use of videotaped data and the adoption of a holistic, constitution-theoretic, multimodal and praxeological perspective reveal that action in interaction is regularly organized according to several temporal orders simultaneously in operation (cf. Goodwin 1981, 2002; Streeck et al. 2011). Each multimodal resource used in interaction has its own temporal properties (see Keevallik this volume, Mondada this volume). It may consist of discrete entities which are produced bit by bit (like words) or which get their shape via suprasegmental, analogical
trajectories (like prosodic contours), it may allow for static configurations (like body postures) or be fleeting in nature (like talk), it may require preparation and retraction phases of varying temporal scope (compare eye movements vs. relocation of the body), it may be produced as punctual, rhythmic or sustained structure. A few examples:

- While the orientation of the lower parts of the body is essential for establishing an enduring f-formation constitutive of a focused encounter (Kendon 1990:209–238) and indexes participants’ primary involvement, more fleeting, interpolated involvements are accomplished by body torque of the head and the trunk (Schegloff 1998).

- Whereas beat gestures are punctual activities to be produced in close synchrony with focal accents in many languages (McNeill 1992), pointing gestures precede the verbal reference forms they are coordinated with in situated acts of referring (Kendon 1972; Schegloff 1984) and they may be held long after their apex is reached and the verbal reference has been formulated.

- While prosodic contours are gestalts emerging from the temporal differences in pitch movement, tied to and constrained by cycles of human respiration, grammatical structures are produced by discrete units open to incrementation and extension across several TCUs and speakers.

All multimodal resources in interaction are sensitive to the basic properties of temporal structuration of praxis by projection and retrospection, sequentiality and simultaneity. Language, however, is unique in making temporality also a referential object. The grammatical categories of tense and aspect and both the various past-oriented narrative genres (Linde 1993; Ochs & Capps 2001; Weinrich 1971) and future-oriented linguistic activities, such as planning, forecasting and announcing, allow for a separation of the there-and-then of the referential plane of the interaction from its pragmatic here-and-now (cf. Bühler 1982). Building on the linguistic achievement of creating a situation-transcendent referential world of talk, other modalities may also participate in the construction of meanings denoting temporally remote events, like gestures in the case of “Deixis am Phantasma” (Bühler 1982; Stukenbrock 2014).

The particular temporal constraints and affordances each modal resource implies are consequential for how different resources are coordinated to produce actions. E.g., the opportunity to freeze gestures can be used to index continuing claim to speakership gesturally if the speaker has lost her turn after overlap (Olof 2013). To produce synchronized multimodal action, participants make use of the temporal logics of the different resources, taking into account the requirements each modality places on attention and perceptibility both intra- and inter-personally. Participants establish projections which cross-cut modalities:
- pointing is used to project next speakers (Mondada 2007, 2013), upcoming verbal reference or an argumentative move (Streeck 2009);
- talk may make not talk, but bodily actions conditionally relevant as in some kinds of requests (Rauniomaa & Keisanen 2012); also, the inverse relationship may hold: gaze, pointing and other non-verbal conduct may act as a question calling for a verbal response (Clark 2012);
- grammatical structures of talk may be used to project body movements, while the pace and the rhythm of the talk itself is adapted to the rhythm of the music, which the (dancing) body should take up (Keevallik 2013, this volume);
- walking back, the resumption of a gesture and re-grasping an object may be used to project the re-opening of a sequence which has been completed (Mondada this volume).

In the case of multiple activities performed simultaneously or in short succession, multiple resources may be employed in parallel. Each resource may preserve its own autonomous temporal organization (like, e.g., talking and driving, Mondada 2012); resources may be coordinated in simultaneous primary and secondary involvements or they may be organized in relationships of insertion, suspension and resumption (Haddington et al. 2013; Haddington et al. 2014). Simultaneous involvement of participants in several interactive activities and/or non-interactive action is performed by systematic patterns of attention-consuming action and less demanding use of other modal resources, e.g., simultaneously monitoring others’ behavior visually or performing some well-rehearsed or iterative manual or verbal routine (Deppermann 2014). The temporal complexities of multimodal interaction are hierarchized in relationships of fore- and back-grounding, of focal and peripheral perception, of conscious action and low-involvement routine activities (Norris 2004:79–111).

6. Temporally produced units and their malleabilities

An on-line-perspective on (linguistic) action reveals that both linguistic and pragmatic units in interaction are temporally emerging structures (Auer 2009). Participants produce recognizable gestalts with beginnings and ends on various levels of interactional practice (prosody, grammar, semantics, TCU, action, sequences, genres). They are not segments which are realized as instantiations of a priori fixed building blocks; rather, they are structures produced on the fleeting interactional occasion (Ford 2004). They may be produced systematically attending to the practical relevancies of just that occasion, without conforming to a pre-fixed pattern transcending the fleeting now (Ford & Fox this volume).
Grammatical and discursive structures in interaction result from processes of synchronized activities of all parties to an interaction (Auer & Pfänder 2011). The production of units in interaction is open to incrementation and interactional negotiation (Auer 2009; Günthner in this volume; Imo this volume). It is led by participants’ sensitivity to the ever-changing contingencies of the interactional situation, which may lead them to alter projected paths of formulation and action as they monitor recipients’ responses (Goodwin 1981; Ford & Fox this volume). Participants do not just instantiate pre-fabricated syntactic units in talk. They construct syntactic structures as they proceed, adapting known syntactic resources creatively to the situated contingencies of action (Auer & Pfänder 2011; Hopper 2011; Ford & Fox this volume). Although points of completion are projected, they are open to revision and may be overridden by extensions of already accomplished structures. Cut-off (Ford & Ford this volume) and retraction (Auer 2009), expansion and incrementation (Auer 1996; Schegloff 1996; Couper-Kuhlen & Ono 2007; Luke et al. 2012; Hopper this volume; Imo this volume), co-construction (Auer this volume), re-opening and re-completion (Selting 2007; Mondada this volume) are ubiquitous phenomena, which attest to the malleability of units in interaction depending on practical contingencies of the emerging interactional situation.

Points of completion of units may be more or less distinct: various levels and parameters by which completion is indexed may converge, yielding clear points of possible completion. If completion, however, is only signaled on one level, but not on others, it may be dubious whether a point of possible completion has already been reached (Selting 2005). E.g., in the prototypical case, completion of a TCU is made evident by syntactic, prosodic and semantic closure (Ford & Thompson 1996). Still, these orders often are not in sync (Auer 2009), and individual prosodic and phonetic parameters may suggest completion to different degrees, thus providing for more or less clear cesura of prosodic boundaries (Barth-Weingarten 2013).

When turning to multimodal interaction, we can see that due to the different temporalities of the modal resources involved, beginnings and completions of units of action are generally not punctual occurrences where changes in all semiotic resources coincide in starting or ending the activity (Keeverlik this volume, Mondada this volume). Rather, beginnings and completions are temporally extended phases, which are accomplished by both sequential and simultaneous coordination of the various resources involved. E.g., the opening of focused, verbal face-to-face interaction as well as the beginning of individual turns in interaction is often anticipated by various kinds of bodily and spatial arrangements, mutual monitoring of availability and establishment of mutual gaze (Mondada 2009; Deppermann et al. 2010; Mondada & Schmitt 2010; Deppermann 2013), a turn may be incremented by a bodily-visual stance display (Ford et al. 2012), the closing of a turn or a sequence involves the temporal coordination of gestures and
objects, turn-completion, gaze-aversion or turning away of the body and walking off (Mondada this volume). Multi-activities may overlap, e.g., when one participant is still involved in one activity with one modality (e.g., talk), while already orienting to another activity with another (e.g., gaze, Schmitt & Deppermann 2010).

7. Granularities of temporality

The above discussion makes clear that temporal structures organize interactional processes at very different levels of granularity. The diachrony and grammaticalization of linguistic structure (Hopper & Traugott 1993), the formation and transfer of cultural traditions and knowledge (Günthner & Luckmann 2001; Tomasello 1999) and the individual acquisition of linguistic, discursive competence and knowledge (Tomasello 2003, 2008) are large-scale processes of structure formation which emerge from interactional practice. Structures which have gained their currency and meaning in socio-historical and biographical time are resources people draw on to construct situated discourse (Bakhtin 1986; Linell 2009). The coordination of meaning-making and understanding in interaction relies on shared interactional histories and the accumulation of common ground in sequences of responsive actions (Clark & Brennan 1991; Clark 1996; Deppermann this volume). Retrospection, projection and the constitution of units operate on various levels, e.g., the structuring of communicative genres and sequences, the design of complex turns and single TCUs, the emergence of grammatical structures (Günthner this volume, Hopper this volume, Imo this volume, Maschler this volume, Pekarek Doehler this volume). In all these different orders of granularity, linguistic and practical structures are resources which are temporally organized and constrained. Time itself is equally used as a resource and as a constraint: incremental production, repetition, extendability, negotiation, and revision as well as short-cutting, eliding, condensing structures and activities are both organizational and meaningful options to achieve collaborative action sensitive to the emerging situated contingencies of interactional participation.

8. The papers in this volume

The collected contributions are based on presentations and discussions at the panel on “Temporality in Interaction” organized by the editors at the 12th International Pragmatics Conference, 3–8 July 2011, in Manchester/United Kingdom. Its aim was to focus on the various facets and questions concerning temporality in interaction. The aim of this volume is to discuss ways of dealing with grammar as it unfolds
moment-by-moment in everyday usage. Thus, the collected papers highlight a number of issues regarding the detailed study of language unfolding dynamically in the course of interacting. They all share an interactional perspective on language use, bringing it to bear on structures in six languages (English, Estonian, French, German, Hebrew and Swedish). Given the complexity of the topic “Temporality in Interaction”, the volume will not provide a fully developed theory. Rather, it aims at highlighting a hitherto neglected but highly relevant property of language-in-interaction: the moment-by-moment unfolding of linguistics structures and verbal action in close coordination between the participants.

The volume is divided into three sections:

Section I “Mechanisms of temporality in interaction” focuses on the basic mechanisms of temporality in interaction, i.e., projection, retrospection, structural latencies, and expansion.

Peter Auer’s paper “The temporality of language in interaction: Projection and latency” addresses the question of how utterances in conversational talk are “synchronized”. On the basis of an on-line approach to grammar, Auer focuses on two basic principles of the dialogical emergence of sentences in interaction: projection and latency. Whereas projection enables participants to foreshadow possible continuation of the ongoing syntactic ‘gestalt’; latency connects the structure of a new utterance to that of previous, already complete syntactic gestalts. Both conversational phenomena, which can easily be observed in everyday interaction, are temporal processes in interaction: They are elementary features for the synchronization of participants’ minds in the online emergence of syntax.

Arnulf Deppermann shows how “Retrospection and understanding in interaction” build on the temporal relationships between consecutive turns in sequences of social interaction. In contrast to texts as products, social interaction inevitably unfolds as a temporal process. Temporality and interactivity provide for infrastructural resources of displaying understanding and accomplishing intersubjectivity, which build on the temporal succession of turns and the exchange of the roles of speaker and hearer. Deppermann discusses how the individual positions that turns inhabit in this temporal infrastructure of interaction provide for the reflexivity and economy of the negotiation of understanding, which mostly can do without explicit displays. Deppermann discusses when and how linguistic devices (in German) which are specialized in exhibiting particular kinds and facets of understanding become relevant in interaction and how they draw on the temporal infrastructure of unfolding interactional sequences which they reflexively help to organize.

The paper by Cecilia Ford and Barbara Fox on “Ephemerai practices: At the far end of emergence” deals with ways in which sedimented grammatical and interactional practices can be exploited by speakers to achieve highly local,
contingent, and time-specific grammatical practices. Ford and Fox analyze the construction of a single extended turn at talk in detail, demonstrating how the speaker, in moment-to-moment interaction with her recipients, creates and puts into use an emergent grammatical pattern, which supports her in formulating an extended and disaffiliating action. The emergent grammatical practice – uses of *I*, and repairs of utterances begun with *I* – is employed by the speaker to guide her recipients in orienting to the organization of her unfolding turn. In providing a detailed exemplar of the ephemeral nature of some grammatical practices, this paper contributes to an understanding of temporality and the emergence of turn-constructional practices.

Section II “Temporally-structured constructions – a temporal perspective on syntactic constructions” focuses on syntactic constructions in English, French, German and Hebrew from a temporal perspective.

In his article on “Temporality and the emergence of a construction: A discourse approach to sluicing”, Paul Hopper investigates how the syntactic phenomenon of sluices is constructed and used in American English conversations. In previous accounts based on fabricated examples, sluices appeared as bi-clausal structures, the sluice itself building on an immediately preceding clause which is elided in the sluice. In contrast, Hopper shows that sluices are not tightly knit constructions; rather they are produced as interactionally motivated, free-standing units which may stand in very flexible and sometimes loose and rather remote relationships to the syntactic structures which provide for their semantic completion. He points out how the understanding of sluices is not syntactically determined by and to be provided for by reduction analysis, but inevitably rests on pragmatic processes. The temporal position of sluices turns out to be decisive for the work they are doing: While pre-sluices preempt anticipated courses of interaction, post-sluices are topical closing devices, resuming contents which have already been pre-formulated in the ongoing sequence.

Wolfgang Imo’s paper on “Temporality and syntactic structure: Utterance-final intensifiers in spoken German” provides an analysis of post-positioned evaluations and modifications, combining temporal and dialogical explanations to achieve a full explanation of their forms and functions in everyday spoken German interaction. In his empirical analysis of expansions positioned in the right verb brace in German syntax, he shows that speakers often provide adjectives, adverbs or short phrases after the right verb brace, which – canonically speaking – should have been placed before it. These “expansions” include post-positioned evaluations and modalizations. Imo argues that the structure of these post-positioned evaluations and modalizations make a strong case in favor of viewing grammar as basically structured by temporal and dialogic means.
On the basis of audio- and video-recorded social interactions, Simona Pekarek Doehler’s contribution “Grammar, projection and turn-organization: (il) y a NP ‘there is NP’ as a projector construction in French talk-in-interaction” addresses projector constructions in French. Focusing on projection as a basis for clause combining as well as the organization of actions, this study explores speakers’ use of the French construction il y a NP ‘there is NP’, commonly considered to be a presentation cleft. By looking at its moment-to-moment unfolding, the analysis shows how the il y a NP-construction is used to manage multi-unit turns, turn-taking and sequence organization. This provides evidence for the routinization of the il y a NP-piece as a ‘projector construction’. Visual data show how the projection arising from the grammatical construction can be prolonged by means of gesture.

Susanne Günthner’s article “A temporally oriented perspective on connectors in interactions: und zwar (‘namely/in fact’) constructions in everyday German conversations” focuses on the real-time processing of a connector-construction (und zwar-‘namely/in fact’)-patterns in German talk-in-interaction. She argues that temporality is a prevailing aspect of the formal, functional, and sequential characteristics of und zwar-constructions: In using und zwar, speakers orient backwards by linking their current utterance to prior ones. At the same time, und zwar also functions as a projecting strategy for anticipating upcoming activities. In everyday German interactions, und zwar is used as a resource in tying following segments back to past (self or other performed) activities, and at the same time, indicating the kind of relationship (i.e. specification, explanation or illustration) between the prior and the following activity. Due to their tying force and thus, their joining potential in referring back to prior talk as well as projecting not only “more to come” but also contextualizing “what to expect” (i.e. specification/explanation/ illustration of past actions), und zwar-‘namely/in fact’-constructions are a recognizable pattern used specifically for the management of temporality in discourse.

In her article on “Word order in time: Emergent Hebrew (N_s)V/VN_s syntax”, Yael Maschler analyses temporal implications of subject-predicate word order in the verbal clauses of spoken Hebrew discourse. Her study of Hebrew narratives reveals that the word order (N_s)V in spoken Hebrew is rather fixed. However, there is a tendency for speakers to use VN_s-constructions for specific interactional functions, i.e., introducing a protagonist/referent, indexing a major shift in the flow of the narrative, and ending a complication episode or presenting the climax of the story. As her data reveal, (N_s)V/VN_s alternation involves deploying the contrast between compact syntactic structures whose components are strongly foreshadowed from the very start (VN_s) and syntactic structures whose initial elements carry weak syntactic projection, allowing a multitude of possibilities for continuation (N_s,V). Maschler argues that the organization of contrasts between projections
of varying strengths, along with the motivation to enhance involvement at key moments in narration have sedimented into an emergent Hebrew grammar of subject-predicate word order.

Section III “Temporality meets multimodality” concentrates on the mutual adjustment and interrelation of verbal and bodily actions in the process of interaction.

Leelo Keevallik’s contribution “Coordinating the temporalities of talk and dance” studies the interrelationship of vocal and bodily behavior in the multi-layered activity of dance teaching. It reveals how talk is adjusted to the rhythm and character of the dance on the one hand, and how dance and grammar work together. Keevallik shows how the dancing teachers make use of specialized grammar that is capable of incorporating embodied demonstrations. The temporalities of talk and performance are mutually adjusted and intertwined in the teachers’ actions, resulting in inherently multimodal patterns of sense-making. The analysis questions the analytic boundary between grammar and the body by showing how projection cross-cuts various interactive modalities.

In her paper on “Multimodal completions” Lorenza Mondada argues that the construction and completion of units in talk-in-interaction is not solely a matter of verbal practices. In their organization of social action, participants produce multimodal gestalts by the coordinated use of various multimodal resources brought into play in action formation and the completion of trajectories of action. Mondada specifically shows how the retraction of gestures and objects and body movements turning away from previously constituted interactional space are coordinated with talk in providing for the completion of turns which are used to close sequences and sometimes even whole encounters. Her analyses show how units in interaction are not accomplished as sequentially organized segments following a single linear order. Units are shown to be holistic praxeological phenomena, which are accomplished by interlocking multimodal resources, which stand to each other in both sequential and simultaneous relationships of establishment, fulfillment, suspension and revision of projections. Each multimodal resource provides for its own temporal trajectories, thereby contributing to holistic gestalts by enabling and constraining, supporting and complementing the interactional work other modal resources perform.

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