

ON THE INTERPLAY OF SYNTAX AND PROSODY IN THE CONSTITUTION OF TURN-CONSTRUCTIONAL UNITS AND TURNS IN CONVERSATION¹

Margret Selting

1. Introduction

In their famous 1974 paper, Sacks, Schegloff & Jefferson posed one of the most fundamental problems for conversationalists to handle and for conversation analysts to explain: The problem of how smooth turn taking, without too much overlap and without too much gap, can be achieved. Their solution is the proposal of "A simplest systematics for the organization of turn-taking for conversation". They propose a mechanism for the organization of turn taking in which a turn-constructional component deals with the construction of units, turn-constructional units, at the end of which the regulation and negotiation of turn allocation for the next such unit becomes relevant. For this to be achieved, points of possible completion of unit-types, so-called 'transition relevance places' (TRPs) are particularly important.

There are various unit-types with which a speaker may set out to construct a turn (...) Unit-types for English include sentential, clausal, phrasal, and lexical constructions (...). Instances of the unit-types so usable allow a projection of the unit-type under way, and what, roughly, it will take for an instance of that unit-type to be completed (Sacks, Schegloff & Jefferson 1974: 702).²

Sacks, Schegloff & Jefferson, when commenting on the structure and recognizability of units, primarily mention and elaborate on their syntactic structure. Nevertheless, the kind of syntax compatible with and suitable for their model of turn-taking is a particular one: "A syntax conceived in terms of its relevance to turn-taking" (ibid.:

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² Later on in their paper, Sacks, Schegloff & Jefferson (1974) continue to point out the relevance of their model as follows: "We have proposed that the allocation of turn-space is organized around the construction of talk IN the turn. That organization appears to key on one main feature of the construction of the talk in a turn - namely, that whatever the units employed for the construction, and whatever the theoretical language employed to describe them, they still have points of possible unit completion, points which are projectable before their occurrence" (ibid.: 720). What matters for turn-taking, are, thus, 'possible completion points' of constructions: "These turn out to be 'possible completion points' of sentences, clauses, phrases, and one-word constructions, (...) and multiples thereof" (ibid.: 721).

721). More detail of the questions and problems that such a syntax has to be able to deal with is given by Schegloff (1979, especially 280ff.). Schegloff's remarks can be seen as the proposal to develop a new model of syntax, an interactionist 'syntax-for-conversation' (ibid.).

At the same time, however, Sacks, Schegloff & Jefferson, while not dealing with it in detail, were well aware of the importance of prosody and intonation to the formation and recognition of units and, possibly, unit types. In their 1974 paper, they comment on the role of intonation as follows:

Clearly, in some understanding of 'sound production' (i.e. phonology, intonation etc.), it is also very important to turn-taking organization. For example, discriminations between *what* as a one-word question and as the start of a sentential (or clausal or phrasal) construction are made not syntactically, but intonationally. When it is further realized that any word can be made into a 'one-word' unit-type, (...) via intonation, then we can appreciate the partial character of the unit-types' description in syntactic terms (ibid.: 721f.)³

In the following, I want to take Sacks, Schegloff & Jefferson's model as the starting point for my own analysis. I want to have a closer look at the specific roles that a few particular linguistic devices and schemata play for the organization of the turn-constructural unit and the turn.⁴ In particular, I want to show

- (1) that and how syntactic structures like the 'possible sentence', as a flexible syntactic schema, can be used for comparatively far-reaching projections,
- (2) that and how intonation, too, is a flexible schema with 'possible contours' that is used to configure, delimit and more locally contextualize the production of turn-constructural units,
- (3) how both syntax and intonation play their own individual roles and interact as resources in the organization and projection of turn-constructural units and turns-at-talk.

A few notes of caution: Firstly, I am trying to deal only with the units that are relevant in Sacks, Schegloff & Jefferson's model, and I am not giving a detailed account of turn-taking itself. Secondly, I am not going to present detailed analyses of single phenomena here to prove one particular point, and I am not going to give detailed warrantings for each single analysis. I am trying to draw together some

³ In recent research, the relevance of prosody for the organization of turn-taking and other sequencing in conversation has been given attention by some researchers in England and Germany, see, e.g., Local, Kelly & Wells (1986); Local, Wells & Sebba (1985); and some of the papers presented in this volume. In particular, work in the German research context is trying to bring together work in CA and John Gumperz' (1982, 1992) work on 'contextualization', for the latter allows a more flexible view of the relation of prosody and other linguistic structuring than other approaches to the study of prosody and intonation (cf. Couper-Kuhlen and Selting 1996).

⁴ For recent work that seems to head in a similar direction see, e.g., Ford, Fox & Thompson (1995).

results and arguments that prior analyses of syntax and prosody have yielded, predominantly those presented in my post-doctoral thesis (Selting 1995a), in order to come closer to a model of how projectability with respect to the construction of turn-constructional units and turns-at-talk might work.

I will use the terms 'schema', or 'construction schema', and 'gestalt' in the following way. With reference to linguistic resources of social interaction, 'construction schema', or simply 'schema', is used in order to denote the way in which a flexible, dynamic, and situationally adaptable linguistic structure is organized. Construction schemata provide knowledge about constitutive entities of a structure which can be expectably linked in more or less tight and in more or less varied ways, their exact relation and enactment being dependent on and open to the task at hand. Schemata are assumed to be cognitively and interactionally relevant.⁵ 'Gestalt' is a particular kind of construction schema that foregrounds the holistic - and yet analytically decomposable or deconstructable - nature of a 'unit'. Linguistic gestalts typically have a beginning, a trajectory, and an end. The initiation of a particular gestalt-type configuration or activity as well as the ongoing emerging production of it, project gestalt closure or completion. As gestalts are flexible schemata, however, this projected completion can be flexibly organized and can be adapted to the task at hand. As I will show, both syntax and prosody provide holistic construction schemata or gestalts that are realized with flexible beginnings and ends as well as flexible details of their internal structure. Irrespective of the flexible and variable details, the actual tokens are recognizable as realizations of a particular holistic schema or gestalt that participants rely on for their orientation in constructing and interpreting turn-constructional units: For instance, the schema of a 'possible sentence' or a particular kind of 'intonation contour'.

With respect to the projection of units, I will differentiate between four kinds of projection: Syntactic projection, which is done by the initiation of syntactic schemata; prosodic projection, which is accomplished by the use of prosodic means of unit and/or turn holding or yielding; semantic projection, which is realized by the use of particular lexical constructions such as *either ... or, first ... second*, etc., or by starting to provide a piece of information that needs to be completed; discourse-pragmatic or sequential projection, which is achieved by the formulation of announcements, prefaces or other kinds of initiation of recognizable activity types which are thus being made expectable. I will show some points of interaction and interdependence between these methods of projection.

My data base is a corpus of informal conversations between three participants who all speak a variety of North-Western Standard German. Thus my analyses of the details of intonation contours need not be valid for other dialects of German.

⁵ Cf. Gumperz (1984) and Tannen (1979) on the notions of 'schemata' and 'frames'. Although the notion of 'frame' seems to have become more widespread than that of 'schema' recently, to me 'schema' seems to be more appropriate than 'frame' to denote the kind of rather formal linguistic construction devices that I have in mind.

2. Turn-constructional units as fundamentally flexible units: Syntax and prosody in the construction of units

In this section, I will first look at two fundamental resources for the construction of turn-construction units, syntax and prosody, separately, I will then analyse their interaction. For syntax, I will largely restrict myself to units whose syntax can be described in terms of possible sentences or clauses and expansions at their beginnings and ends; other constructions are neglected here. This approach makes necessary another word of caution: Although I will mostly analyse a particular kind of syntactic schema and its possible completion points, it should not be overlooked that the interpretation of these schemata themselves is largely context dependent (see below, cf. also Selting 1995b; Ford, Fox & Thompson 1995).

2.1. *'Possible sentences' or 'possible clauses' as an interactionally relevant resource*

In syntactic theory, the sentence and/or clause is looked upon as the fundamental unit of linguistic description. In general, however, it is difficult to give a precise definition of this entity, especially if it ought to be applicable to and compatible with structures found in talk in conversational interaction (cf. Crystal 1979). The most important problem is that sentences/clauses in grammar books are presented as static structures, the fixed results of a production process that normally has been writing, not speaking (cf. also Auer 1992). In the literature, 'sentence' seems to be used as a superordinate term which refers to simple or complex syntactic units that can be used independently, whereas 'clause' refers to subordinate parts of 'sentences', such as subordinate or conjoined clauses which are syntactically dependent on or closely linked to a superordinate clause together with which it forms a complex sentence.⁶

For many sentences and clauses to be found in natural talk in conversational interaction, these notions also do not pose a problem (although they might not lead us to very interesting questions). What is difficult to deal with, though, are the so-called 'elliptical' or the additional phrases 'before', 'at the beginning and end', 'after' or 'in-between' sentences or clauses. How are they to be analysed? In what ways are they related to the co- and context? As turns are flexible entities which have to allow room for incremental production processes and interactional negotiation, the linguistic structures constituting them should reflect this (Schegloff 1979). So, for a 'syntax-for-conversation', a more flexible notion of the 'sentence' or the 'clause' seems to be more promising. The notion of "'possible completion points' of sentences, clauses, phrases, and one-word constructions" (Sacks, Schegloff & Jefferson 1974: 721 and passim) seems to suggest more flexible entities such as, e.g., the 'possible sentence', 'possible clause' etc. (cf. also Selting 1995b).

Yet, a notion of the possible sentence or clause is not just relevant because

⁶ In general, such constructions that show a finite verb form qualify as sentences, or as a 'Satz' in German grammar. Sentences have been classified further and we learned the traditional notions of declarative, interrogative, imperative, etc. sentences. Complex sentences can consist of one or several subordinate finite, non-finite or verb-less clauses which precede, follow, or are inserted into, the superordinate finite clause (cf., e.g. Quirk & Greenbaum 1978).

the 'sentence' or 'clause' is relevant in grammar books and written language, but because it is relevant for participants in conversational interaction. In order to demonstrate this, we have to show empirically how participants orient to such an entity. To this end, I will present some data extracts. The transcription conventions are listed in the appendix. For the time being, we only need to consider the text lines.

Evidence for the participants' orientation at a notion of the possible sentence or clause can be gained from different kinds of recipient responses to a speaker's production of his or her unit: One kind of evidence comes from cases in which recipients refrain from turn taking as long as the present speaker has not ended a sentence or clause under way, even if the speaker pauses or hesitates after he or she has started and projected the unit to come. See data extract (1): lines 826f.

(1) K4: 824-833

824 Eli: [ich HAB mir keine gedANKn darüber gemacht (...)
M(/ \)
I didn't think about that]

825 Lea: [mhm
\]

826 Eli: zuMAL ich auch ÜBERwiegend studentn hab die: *
<u>M(\ \) <d>
since I also overwhelmingly have students who
((schluckt))
((swallows))

827 Eli: [die also schon ÄLter sind die:: schn ein
<c> \ <f> \ <d>
who are older already who already]

828 Cis: [mhm
\]

829 Lea: [mhm
\]

830 Eli: [studium A:Bgeschlossen ham oder: faMI:lie habm
M(\ \) <d> M(\ \)
<f>
finished one degree or have a family]

831 Lea: [mhm]

832 Eli: [im beRU:F stehn
<d> M(\ \)
are working]

833 Lea: [mhm
\]

In line 826, speaker Eli produces the clause *zuMAL ich auch ÜBERwiegend studentn hab* 'since I also overwhelmingly have students'. She then projects another clause with the relative pronoun *die*: 'Who', after which she stops with a glottal closure and swallows, before she repeats the relative pronoun and then produces some full relative clauses. Although Eli's silence in line 826 is quite long, recipients Cis and Lea do not take over but leave the turn with Eli. - As this kind of turn-holding is

In (2) it is a 'possible sentence' after which Lea produces her reciprocity token *mhm* in line 860, but Cis still adds a further clause without any kind of prosodic break.

(3) K4: 809-812

809 Lea:	[also ich hab NIE n eindruck daß die (...) GRUNDSätzlich
		R(\
810 Eli:		well I never have the impression that they principally
		mhm
		\
		<p>
811 Lea:	[poLItisches denkn oder handeln ABLEhn: ne
		\
812 Eli:		object to political thinking or acting you know
		mhm
		\
		<p>

In extract (3), the first clause, *also ich hab NIE n eindruck* 'well I never have the impression', is not complete; the subordinate clause is an obligatory verb complement here. Nevertheless the recipient's *mhm* is given after the superordinate clause. This fragment thus shows that the recipient does not orient to a larger piece of semantic information comprising both clauses, but to a syntactic unit.

Very frequently, reciprocity tokens are produced in overlap with the tag question *ne*. One such case can be seen in extract (4).

(4) K4: 651-653

651 Lea:	also es GEHT ja immer um die
	F(\
	well it's always about the
652 Lea:	[ZU kunft der german IST istik] _s ne
	\
	future of German you know
653 Cis:	nhn
	\

The frequency of these occurrences shows that the German tag question *ne* does not seem to count as part of the possible sentence.

Extracts (5) and (6) present examples in which a constituent which could have been placed within the middle of the sentence is placed after the end of a possible sentence, for reasons of semantic focusing and turn organization (cf. also Auer 1991, 1996; Uhmann 1993):

(5) K5: 440-441

440 Cis:	[=un wir KANN tn uns alle nich AUS] _s mit dem medium] _s ne
	<all> F(\
	and we all didn't know anything about this medium you know
441 Lea:	hm
	\

(6) K5: 418-421

- 418 Cis: [IRgnwann (..) m bröckelte das ausNANder=wie das
 .. F(\ /)
 419 Lea: [at one point it fell apart as it
 jaa
 \/
 420 Cis: [ja OFT so is]_s in (..) solchn (..) zuSAMMnhängn]_s
 M(/ /)
 421 Lea: [often does in such groups
 jaa
 \/]

Syntactically, the sentence in (5) could have been produced as *wir kanntn uns alle mit dem medium nich aus*, an English translation displaying this word order might be 'we all didn't know about this medium anything'; and the clause in (6) could have been produced as *wie das ja oft in solchn zusammenhängn so is* 'as it often in such groups does'. Instead, a constituent is extracted from the middle and is placed, in extract (5), after the split verb construction *kanntn ... aus* (sentence brace) or, in extract (6), after the finite verb *is* as possible ends of possible syntactic sentences or clauses. In both cases, the recipient reacts to the first completion point of the possible sentence and the postponed material, which is more redundant, is not or less focused than the material included in the possible sentence up to its first possible completion point.

In the following extracts (7) through (10), an early start is produced in overlap with the continuation of a possible sentence or clause. In extracts (7) and (8), an early start is produced in overlap with the expectably last trail-off items of the prior speaker's turn.

(7) K4: (cf. also K4: 1177-1179)

- 655 Cis: war das IRgndwas mit äh: (..) die verANTwortung des
 H,R(\ /)
 was that something with the responsibility of the
 656 Cis: [geist (..) GEIsteswissenschaftlers]_s oder so]_s
 /)
 social scientist or so
 657 Lea: [ja s SELBSbewußtsein
 <all>F(\)
 ya th selfconsciousness]

(8) K5:

- 503 Eli: [Zynisch (..) würd ich sagn
 M(\)
 cynical <p I would say p>
 504 Cis: [das is eine DURCHaus reaL(h)ISTische EINSchätzung]_s
 R(/ \)
 that is actually a realistic assessment
 505 Cis: [würd ich mal sagn]_s
)
 I would say]

506 Eli: $\left[\begin{array}{l} \text{SEHR ZYnisch} \\ \text{F}(\backslash \quad \backslash \quad) \\ \text{very cynical} \end{array} \right.$

oder so 'or so' in extract (7) as well as *würd ich mal sagen* 'I would say' in extract (8) can be analysed as turn-final trailing-off phrases.

In extracts (9) and (10), however, early starts are produced in overlap with the beginning and thus projection of a new turn-constructive unit:

(9) K4:

801 Cis: $\left[\begin{array}{l} \text{EINFach nur weil du das nich WILLS]_s \text{ oder} \\ \text{M}(/ \quad \backslash \quad)_s \quad - \\ \text{is it simply because you don't want it or} \end{array} \right.$
 802 Lea: $\left[\begin{array}{l} \text{so wie} \\ \text{the way} \end{array} \right.$
 803 Lea: $\left[\begin{array}{l} \text{die sich verHALtn ne} \\ \text{M}(\backslash \quad /) \\ \text{they behave you know} \end{array} \right.$

In (9), after the clause *EINFach nur weil du das nich WILLS* 'is it simply because you don't want it', which functions as a question here, the speaker Cis produces the word *oder* 'or' as the possible start of a next possible sentence, but drops out almost as soon as the recipient comes in.

(10) K1: 500-501

498 Ida: $\left[\begin{array}{l} \text{da KRISS ja bald EIne daZU} \\ \text{F}(\backslash \quad \backslash \quad) \\ \text{you'll get one more there} \end{array} \right.$
 (...)
 500 Ida: $\left[\begin{array}{l} \text{ICH KENN eine]_s \text{ die (?) } \\ \text{F}(/ \quad \backslash \quad) \\ \text{I know a girl} \quad \text{who} \end{array} \right.$
 501 Nat: $\left[\begin{array}{l} \text{KATrin=} \\ \text{M}(\backslash \quad) \\ \text{<f f>} \end{array} \right.$

In (10), Ida has been telling Nat that another student that she knows (*EIne* 'one') will start working at her job place, but Nat cannot identify the reference of this *EIne*; after a pause Ida has produced the beginning of an identification sequence with the minimal syntactic clause *ICH KENN eine* 'I know a girl' and the beginning of a relative clause *die* 'who' which projects further identification talk. Nat, in order to avoid continued talk by Ida because she now has identified the referred-to person as *KATrin*, comes in exactly at the first possible end of Ida's possible clause or sentence. Again, this shows that for the placement of an early start, it is not the larger piece of semantic information consisting of both the superordinate and the subordinate clauses that the recipient orients to, but a minimal syntactic unit.

From these extracts, it can be seen that the point at which the reciprocity

prosodically these expansions can be organized and packaged very differently: By prosodic integration or independence. I will shortly come back to this point.

While talking about the possible completion points of syntactic constructions such as possible sentences is a good means of showing that participants in interaction do indeed orient to syntax as one kind of flexible construction schema, this might obscure the fact that the perception and interpretation of possible syntactic units is, however, itself highly context dependent. As long as one looks at possible completion points of possible sentences, possible completion seems to be determined syntactically. When one starts looking at other syntactic construction schemata, e.g. so-called 'elliptical' constructions, it becomes clear that possible completion points are not only syntactically but also sequentially dependent and constrained -- the possible completion points of syntactic constructions used for doing, for instance, repair are quite different from those of possible sentences and some other constructions doing other kinds of interactional work. This shows that possible syntactic completion is not only a syntactic but also a contextual notion (cf. also Ford, Fox & Thompson 1995). This issue, however, is not at the center of this paper.

2.2. 'Possible contours' as an interactionally relevant resource

The question now is: How is it achieved that, as I have claimed, syntactic constructions and their expansions can be packaged in one or more than one turn-constructional unit? For the answer to this, we have to turn to a second kind of structuring, the prosodic one. On the prosodic level, intonation contours are used to configure stretches of speech as units, i.e. as holistic melodic *gestalts*. From the beginning of a unit till its end, the continuation of pitch movements that constitute the contour is used as a cohesive signal, primarily the global pitch of the entire unit, in co-occurrence and interplay with pitch accent movements.

An 'intonation contour' is a prosodic or melodic gestalt that is perceived by recipients and analysts as prosodically cohesive because of its pitch trajectory, and in some cases also its rhythm, and that is delimited from neighbouring contours by boundary signals. A 'boundary signal' involves a prosodic or melodic break and a new onset, constituted by one or more of the following devices: Upstep or downstep at the beginning of a new unit, latching and/or faster anacrustic syllables at the beginning of a new unit, sound stretches or final lengthening at the end of a unit, pauses before the beginning of a new unit. The intonation contour itself can be described in terms of global and local pitch movements.

For an illustration, a few frequently used prototypical pitch contours in Standard German with falling, rising and mid level global pitch and falling and rising local pitch accent movements can be represented as in Figure 1:

97 Cis:	{	((haucht aus)) inner B bel] _s <c> (\) <p> p> ((outbreath)) in the bible NE (/) you know
98 Lea:	}	

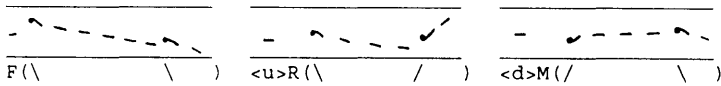


Figure 1: Some prototypical intonation contours in Standard German

'Global pitch movement' refers to the pitch movement of longer stretches of speech, for example entire turn-constructive units. The stretch of speech made to be interpreted as a 'unit' via global pitch is sometimes called an 'intonation unit' in other approaches, and defined as follows: "Roughly speaking, an intonation unit is a stretch of speech uttered under a single coherent intonation contour" (DuBois, Schuetze-Coburn, Cumming & Paolino 1993: 47). In the notation given in Figure 1, the stretch of speech which is configured as a cohesive one is indicated by the round brackets (); in cases of unfinished units, the right bracket may be left open. Global pitch is constituted by the pitch of unaccented syllables in co-occurrence and interplay with the pitch of successive accent peaks or valleys. It can be described and notated in terms of the parameters global pitch direction, such as falling (F) or rising (R), and/or pitch register, such as high (H), mid (M) or low (L), and it is notated before the brackets. Such global pitch movements configure turn-constructive units as internally cohesive, while boundary signals such as upstep (<u>), downstep (<d>) or faster syllables at the beginning of new units (<all>) delimit it from neighbouring turn-constructive units. Global pitch seems to be related to what is known as 'declination' in intonation research, while the boundary signals seem to be related to 'reset' for the start of a new unit.

'Local pitch movement' refers to the pitch movement of component parts of a contour, especially the 'onset' pitch of the unaccented syllables before the first accent of a contour, and the pitch movement in and after accented syllables which is notated inside the round brackets. The 'pitch accent movement' in and after accented syllables is commonly described in terms of falling, rising, level, rising-falling and falling-rising. In my Standard German data, pitch accent movements in general start in the nucleus of the prominent accented syllable and are continued in the subsequent less prominent, unaccented syllables till the beginning of the next accented syllable, till another change in pitch direction, or till the end of the utterance.

The intonation contour is a flexible gestalt that speakers can continue, expand, or come back to after unit-internal pauses, trouble or side-material. In general, 'pitch continuation' is used to signal that what is coming now is the continuation of the prosodically cohesive unit that has been started before. In cases of unit-internal pausing or side-material, the speaker can contextualize such side material as unit-internal. For this, he or she can produce holding devices such as sound-stretches and, most importantly, locally level or slightly rising pitch before, for example, the pause, and he or she can continue with just that pitch, and most often

contour and, in consequence, of a turn-constructural unit, can only be analysed retrospectively.

Syntactic expansions as well as any other continuations of the utterance can be packaged in different prototypical ways: 'Prosodic integration' refers to the co-occurrence of the verbal continuation with a simple continuation of the contour without a melodic or other break, 'prosodic independence' refers to the co-occurrence of the verbal continuation with a new prosodic unit with its own intonation contour which sets it apart from the prior contour and unit by constituting a prosodic break.

Look at extract (12) again which is here presented with a more detailed representation of intonation:

(12) K4: 824-833

824 Eli: *ich HAB mir keine geDANKn darüber gemacht(...)*
M(\)
I didn't think about that

825 Lea: mhm
\

826 Eli: *zuMAL ich auch ÜBERwiegend studentn hab die:**
<u>M(\)
since I also overwhelmingly have students who
((schluckt))
((swallows))

827 Eli: *die also schon ALter sind die:: schn ein*
<c> <f> <d>
who are older already who already

828 Cis: mhm
\

829 Lea: mhm
\

830 Eli: *studium A:Rgeschlossen ham oder faMI:lie habm*
M(\) <d> M(\)
<f >
finished one degree or have a family

831 Lea: mhm
\

832 Eli: *im beRU:F stehn*
<d> M(\)
are working

The first unit, *ich HAB mir keine geDANKn darüber gemacht* 'I didn't think about that', ends with falling pitch. The second unit, *zuMAL ich auch ÜBERwiegend studentn hab* 'since I also overwhelmingly have students', starts with an upstep, thus signalling it as a new unit. At the end of this syntactic clause, now, we have the prosodically integrated continuation of this possible clause with the relative pronoun *die* 'who': Both the end of the possible clause, *studentn hab*, as well as the continuation *die*: Are at the same pitch, there is no prosodic break. After *die*:, however, Eli cuts off with a glottal stop and swallows. For the repetition of the relative pronoun *die*, Eli starts with the same pitch as that where she cut off before and thus signals 'continuation'. The end of this unit, *die also schon ÄLter sind* 'who are older already', is falling, after which for the beginning of the next unit, *die:: schn ein studium A:Bgeschlossen ham* 'who already finished one degree', is delivered as a downstep. The next two units, *oder: faMI:lie habm* 'or have a family' as well as *im beRU:F stehn* 'are working', are again delimited and added through downsteps. Similar to the upstep in line 826, the downsteps in lines 827, 830 and 832 constitute prosodic breaks and contextualize the beginning of prosodically independent (new) contours. These cases thus show how prosodic continuation and integration are differentiated from prosodic independence in constructing turn-constructive units in turns.

The terminal pitch movements, which can be retrospectively reconstructed as the last pitch movements of a unit, are locally falling, rising or level. In general, falling, rising and level local pitch movements start in the last accented syllable and are continued till the end of the unit. In the cases of so-called falling-rising or rising-falling pitch accent movements, the pitch direction after the falling or rising accented syllable changes again to constitute the second, i.e. rising or falling, part of the movement in a later unaccented syllable. In both cases, we find locally falling, rising or level pitch as the last pitch accent movements of possible contours in units which are potentially complete. As I will discuss below, however, not all of these possible contours for possible unit completion are used to signal possible turn completion.

In general, the accented syllable has greater loudness and sometimes also greater length than the following unaccented syllables at the end of the unit.¹⁰ In Standard German, however, I could not auditorily identify specific pitch configurations, such as a specific depth or height of the terminal fall or rise, which is characteristic of unit- or turn-endings. Instead, in a most fundamental sense, every terminal pitch movement and its possible completion can retrospectively be continued and thus made into a non-terminal one, by simply taking up the pitch the speaker has ended with and continuing it. This can even be done after pauses of several second's length.

Extract (14) shows a case in point:

¹⁰ Cf. also the parametrical analysis of the prosody of unit endings and turn taking in varieties of British English in Local, Wells & Sebba (1985), Local, Kelly & Wells (1986) and Wells & Peppe (1996).

(14) K2:306-308

- 306 Ida: [ja wemman das so SPÄT(.) anfangen MUSS zu lern:
 <all all> S(\ \ < f >)
 well if you have to start with it that late
- 307 Ron: [bloß: also mir
 only so I
-
- 308 Ron: [FÄLLT das sehr SCHWER (0.5) (0.5) das spielen
 F(\ \ \ < p p >)
 have a hard time with it the playing
- 309 Nat: [ähn
 \ /
- 310 Ida: [ICH hätte das AUCH gerne gelernt
 F(\ \ \)
 I would have liked to learn it too
- 311 Nat: [WAS is daran SCHWER
 M(\ /)
 what is hard about it

Here, after a discussion of Ron's attitude towards playing the piano, Ron had arguably intended his turn-constructional unit to be complete after *also mir FÄLLT das sehr SCHWER* 'so I have a hard time with it', this being a conclusion that is also presented as such by the use of the particle *also* ('so' or 'consequently'). Yet, in the pause that follows, neither of his recipients takes the floor to contribute a turn of her own. Instead of this, Nat produces *ähn*, a token that starts with the vowel quality of a hesitation signal *äh*, which can be used in order to signal intended turn-taking, but she changes it into a token that resembles more a reciprocity token *nhn*, not taking the turn but leaving it with Ron (cf. Schegloff 1982, 1987). After Nat's production of this token and another pause, Ron now continues and expands his unit. Syntactically, he expands the prior anaphoric pronoun *das* 'it', which in this context is perfectly comprehensible on its own, by providing its full form *das spielen* 'the playing' (see below). Prosodically, he continues the prior unit by taking up and continuing its pitch for two more unaccented syllables. With this continuation of his prior unit, Ron brings his turn to a second point of possible completion and thus offers a new point where a recipient could, and in this case should, come in. This interpretation is confirmed by the fact that after Ron's expansion of his turn, both Ida and Nat simultaneously take the turn, both now displaying their willingness to take over. This example shows how the possible end of a contour can simply be taken up again and expanded and how thus a contour can be used as a flexible resource for unit-construction in conversation.

In summary, units are packaged and delimited via intonation contours. The contour, and especially the global pitch movement, is the parameter that signals the unit as an internally cohesive gestalt. Unit-internally, in cases of pausing or trouble,

level (or slightly rising) pitch is used in co-occurrence with, e.g., sound stretches, in order to project a continuation of the unit to come. Turn-constructural units in most cases end in falling, rising or level local pitch movements; these, however, can always be expanded and thus have fundamentally flexible end points.

Falling, rising and level last pitch movements, although all being possible endings of possible contours that can signal possible endings of single turn-constructural units, do not seem to have the same status with respect to the signalling of possible turn endings. While extracts (7), (10) and (14) presented examples which show that last turn-constructural units in a turn can end with falling or rising pitch accent movements and their tails, level pitch accents typically seem to be used in order to hold the turn and project another unit to come. Since this latter point does not concern the internal organization and delimitation of single turn-constructural units, but rather the relation of syntax and prosody in the organization of entire turns and in particular the prevention of turn-ending, it will be dealt with in the next section.

2.3. The roles of prosody and syntax in the projection or prevention of turn-completion

If syntax and prosody are deployed in co-occurrence for the construction of internally cohesive and delimited turn-constructural units, what specific roles do they play in the projection process which makes it possible to achieve smooth turn taking? What roles do they play in the prevention or projection of unit or turn completion? How do they interact with each other in the construction of single turn constructural units and how do they interact with more 'global' semantic and/or discourse-pragmatic projection in the organization of turn-taking? From the analyses presented so far, the following can be concluded.

Syntactic units such as possible sentences or clauses can of course have variable length. Yet in many cases for a sentence to be possibly complete, all the grammatically projected slots that the chosen verbal element opens up need to be filled. In general, that means that after the beginning of a possible sentence, the recipient can, disturbances and unforeseen trouble notwithstanding, expect at least a particular number of constituents to come. Thus, possible sentences are holistic syntactic entities that speakers can deploy in order to project continuation till at least a first possible completion point. By inserting material into the middle of such a construction, for example adjectives, modifiers, adverbials, particles or parentheses, he or she can postpone possible sentence completion points. So, potentially, the projected unit can become quite long and, as a consequence, syntactic projection can be quite far reaching.

Nevertheless, recipients seem to at least sometimes orient themselves to a minimal syntactic clause, even though the entire piece of expectable semantic information is presented in two clauses, for instance a superordinate and a subordinate one. This shows that at least in some cases participants orient to a rather formal notion of a syntactically possible clause in which the syntactically opened up slots are filled formally or minimally, even if this is not a semantically complete piece of information.

Yet, although, as a result of its expandability, the possible sentence can become quite long, on the level of syntax, there is no means of projecting further

than the end of the possible sentence under way. More far-reaching discourse-pragmatic projection of multi-unit-turns such as stories, descriptions, etc. is done via, e.g., announcements, story prefaces, and/or other ways of initiating recognizable sequential or activity-type specific construction schemata. That means that syntax on its own cannot be used as a turn-holding device beyond the unit under way. But *that* unit can be relatively long and syntactic projection can thus reach quite far.¹¹

In comparison to this, prosodic projection is much more local in scope. It is true that a few holistic global contours such as the so-called 'lecture intonation' in German (von Essen 1964), the 'hat pattern' (Cohen & t'Hart 1967), the 'suspension bridge' (Bolinger 1986), a 'contradiction contour' and a 'surprise/redundancy contour' (Ladd 1980; Bolinger 1986) have been described in the literature.¹² But even if particular pitch contours on their own had such general 'meanings', one has to consider that many of these contours can nevertheless be realized on short items such as single words. For this reason, these contours do not on their own and by themselves seem to qualify as candidates for far-reaching projections.

From the above examples, however, especially from the extracts (7), (10) and (14), it can be seen that the last turn-constructive units of turns end in falling or rising pitch accent movements. There does not seem to be a particular turn-ending pitch, such as a particular height of rise or depth of fall (cf. also Jefferson 1986). As I will now show, however, there is a particular turn-holding pitch, namely (non-low)

¹¹ This might be the reason why in turn-by-turn talk, the sentence seems to be the longest unit deployable without needing to attain special ratified allowances for the floor. In contrast to this, for more far-reaching discourse-pragmatic projection for multi-unit-turns, for instance activities such as story-telling, the floor arguably needs to be secured and ratified via story announcements (Sacks 1971, 1986; Jefferson 1979).

¹² More recent work in intonation research proposes a compositional theory of the meaning of intonation in discourse. Pierrehumbert and Hirschberg (1990: 308) give the following summary: "We propose that S (= speaker, M.S.) chooses an intonational contour to convey relationships between (the propositional content of) the current utterance and previous and subsequent utterances - an between the propositional content of) the current utterance and beliefs H (=hearer, M.S.) believes to be mutually held. These relationships are conveyed compositionally via selection of pitch accent, phrase accent, and boundary tone. Pitch accents convey information about the status of discourse referents, modifiers, predicates, and relationships specified by accented lexical items. Phrase accents convey information about the relatedness of intermediate phrases - in particular, whether (the propositional content of) one intermediate phrase is to form part of a larger interpretative unit with another. Boundary tones convey information about the directionality of interpretation for the current intonational phrase - whether it is 'forward-looking' or not. So, not only do different features of an intonational phrase convey different aspects of its meaning, but the meaning conveyed by each feature has scope over a different phonological domain. Together, pitch accents, phrase accents, and boundary tones convey how H should interpret the current utterance structurally - with respect to previous and subsequent utterances - and with respect to what H believes to be mutually believed in the discourse." Cf. also Hirschberg & Ward 1992, 1995.

The problems with this approach are that these interpretations are (a) the result of analyses of, in general, decontextualized sentences or utterances, some arguably 'cleaned' natural data, some manipulated, some invented, which (b) refer to speaker and hearer beliefs, sometimes even called 'private beliefs' that arguably are very hard to warrant, and which (c) are arrived at on the basis of introspective judgements that especially in the case of ascribing intuitive interpretations of meaning to intonational features are notoriously vague and unreliable.

level (or only slightly rising) pitch accent.

At the end of a possible syntactic unit, level pitch accents can be deployed in order to project intended turn-holding for a continuation of the turn, until later a unit ending in falling or rising pitch is produced, then signalling possible turn-ending. See extracts (15) and (16) (cf. Selting 1995a: ch. 2.3.1.1.):

(15) K1: 422-431

422 Nat: aber **KUNST** is aber nich kein gutes ANgebot hier oder
 L,F(\ \ /)
 but there's not much offered in art here is there

423 Ida: (0.5) ES **GE:HT** NEE: (0.3) **NICH** so SONderlich GUT
 F(\ \) M(\) F(\ \)
 it's alright no not so very good

(0.5)

424 Nat: mhm
 -

(1.0)

425 Ida: A:ber ich mach das jetzt hier zu**ENDE** (0.7)
 -> M(- ↑-)
 <f>
 but I'm going to finish this now here

426 Ida: WEIL: eine ausbildung **BRAUCH** der mensch (1.4)
 -> M(- ↑-)
 because everyone needs an education

427 Ida: aso s **HAB** ich mir jetzt so ge**SA:GT** (0.2)
 <all> F(\ \)
 or so I've said to myself now

428 Ida: und: (0.2) ich **KÜM**mer mich da nich **WE**iter drum (0.7)
 -> M(\ \ ↑-)
 and I'm not going to worry about it any more

429 Ida: ich **MACH** das hier zu**ENDE** (0.7)
 -> M(- ↑-)
 < all >
 I'm going to finish this here

430 Ida: un mal **SEHN** was **DANN** kommt (1.0)
 F(\ \)
 and I'll see what happens then

431 Nat: in **WEL**chem semester **BIS** du denn
 R(\ \)
 what semester are you in anyway

On syntactic, semantic and discourse-pragmatic grounds, Ida's turn could be complete after each of the units in lines 425, 426, 427, 428, 429 and 430. They all end after syntactically possible sentences, present semantically complete pieces of information, and no announcement or preface has projected a longer contribution. Yet, the units in lines 425, 426, 428 and 429 are produced with last level pitch accents which the speaker jumped up to from lower pitch prior to these accents. After each of these units, the speaker even leaves quite long pauses without the

563 Cis: [DEM was das ganze nun (.) SAGN sollte
 M(/ \)
 564 Lea: [what the whole was intended to say)
 mhm
 \]

Again, Cis' turn could, on syntactic, semantic and discourse-pragmatic grounds, be complete after line 560. It is a syntactically complete sentence and a semantically complete piece of information, after which in principle Cis' turn could end. Cis' choice of level accent as the last accent of her unit signals turn holding, though, and she continues her turn by producing some other turn-constructional units. So, when the recipients might indeed interpret a unit as a turn-yielding one, prosody can be deployed to signal that the speaker intends to continue her turn beyond the unit under way.¹³ With this device, then, prosody provides resources for the projecting of another unit to come, but in contrast to the discourse-pragmatic projection of multi-unit turns, this is still a local device.

The functioning of prosody, in particular intonation, in Standard German can thus be summarized as follows. Contours ending in falling or rising pitch accent movements can be used to configure a potentially complete turn-constructional unit which under the appropriate circumstances can also be a turn-yielding one. Contours ending in level pitch accent movements, however, project another contour and unit to come. They are thus holding the turn for later units that, by means of contours with falling or rising last pitch accent movements, may later signal turn yielding then. Thus, while contours ending in falling or rising pitch accent movements are possible turn-ending contours, contours ending in level pitch accent movements are not possible turn-ending contours, but turn-holding ones (for more detail see Selting 1995a: ch. 2.3.1.ff.).

With respect to the organization of turn-constructional units and turns, prosody is used as a signalling system that is deployed to locally project and contextualize the relation of items to each other and the present state of the speaker's production process. The 'meaning' of prosody in this process can be glossed as follows. At the possible beginning of a new turn-constructional unit, prosody can signal that new items being now produced are intended as starting a new unit and are not continuing a prior unit. Before unit-internal pausing or trouble, it can signal that the unit under way will be continued ('unit and turn holding'), afterwards it can signal that a unit which was previously underway is now being continued. At the end of a possible syntactic construction, it can either signal that this is indeed a possible ending (which can, however, still be expanded), or that the speaker projects to hold the turn for another unit to come; etc. This kind of projection is arguably much more local in scope than syntactic or discourse-pragmatic projection. It can be conceived of as contextualizing the present state of the speaker's production process.

Yet, in contrast to syntax, which as I said above, cannot be used to project

¹³ The precise interaction of prosodic and syntactic projection with more far-reaching semantic-pragmatic projection such as in storytelling that in many cases seem to make such holding devices superfluous is largely neglected here.

a unit beyond the current one, prosodic cues can be used to project continuation and turn-holding beyond the unit under way. Apart from the prosodic devices that signal unit-internal holding, cohesion and delimitation, i.e. the devices analysed above, there is, indeed, a pitch configuration that uniformly signals and locally projects non-ending of a turn: (Non-low) level (or slightly rising) pitch accents which sound as if held in suspension. - Note the similarity of this unit-transcending holding device to the level pitch that was described above as a unit-internal holding device.

From all this, it follows that in Standard German turn-endings are not projected by a specific ending intonation, but projected turn ending can only be defined negatively: Projected turn endings are points at which (a) a possible syntactic construction and, if relevant, a possible activity-type specific semantic or discourse-pragmatic unit and (b) a prosodic unit, i.e. an intonation contour, are potentially complete, and (c) there are no holding devices being used (Selting 1995a: 195).

This corroborates Sacks, Schegloff & Jefferson's (1974) model that turn-yielding at the end of a turn-constructural unit is indeed treated as the unmarked case, whereas turn-holding is treated as the marked case which may make relevant specific holding devices, when there is no superordinate semantic or discourse-pragmatic projection for particular activity types such as story telling.

But the picture is not complete yet. There is one further structure that seems to allow even more precise anticipation of possible sentence and unit completion (points) than we have reconstructed so far: Accentuation, or more precisely: The 'possible last accent' of a unit.

2.4. The 'possible last accent' of a unit

In general, the accentability of items in sentences is a very complex phenomenon that is exactly at the crossroads between phonology, syntax and interaction. I can only hint at the most important principles here.

Accentuation of syllables and words has the effect of semantic 'focussing'. For this reason, the accentability of items in sentences is determined by the intended meaning that the speaker wants to express. In German, it is the interplay of syntactic structure, word order, semantic weight of a constituent, and accentuation that play a role in signalling the so-called focus-background structure of sentences and turn-constructural units (cf. Jacobs 1988; Uhmann 1991; Selting 1995a: chapter 2.2.2.2.). Quite a few turn-constructural units have two accents, many have more than that (cf. Bolinger 1986, 1989; Uhmann 1991; etc.). - The principles that regulate accent placement in detail are beyond the scope of the current paper. - I deal here with the relevance of the 'possible last accent' of a turn-constructural unit for speakers and recipients; that is, the last prominent syllable in which the terminal local pitch accent movement starts.

According to Schegloff (1987), a syllable with a pitch peak and raised amplitude (loudness) near the end of a turn-constructural unit can open the 'transition relevance space'. Schegloff (1987: 106f.) states:

the developing grammatical structure of an utterance in the course of its production is potentially compatible with alternative points of possible completion. Pitch peaks, and their

suppression, are one means by which speakers can indicate which syntactically possible completions are built to be completions on this occasion, and which not. A pitch peak thus can project intended turn completion at the next grammatically possible completion point. In doing so, it can also open the 'transition relevance space' (Sacks et al., 1974, p. 703 et passim), the stretch of time in which transition from current to next speaker is properly done. It is after such pitch peaks that intending-next-speakers who aim to get an early start begin their next turns. It is such pitch peaks which speakers suppress to show their parsing interlocutors that imminent syntactically possible completions are not designed to be actual completions. It is such pitch peaks after which speakers may increase the pace of their talk in an effort to 'rush through' into the next turn component. Such a pitch peak can, then, mark the imminent completion of a turn, and the appropriate place for a next turn, and its speaker, to start.

In my data, such a pattern is also attested. For instance when speakers start turn holding devices such as their 'rush through' into the next unit after the last accent of the prior unit. See extract (18):

(18) K2: 382-384

- 382 Ron: un dann HAB ich (.) m: allerdings auch noch während der
 < all >F(\
 and then still during time of school
- 383 SCHULzeit angefangn (.) äh: (0.9) in einer
 \
 I started in a
- 384 BÄND zu spieln=da ham wa so KANtrirock gemacht
 /) - F(\ /)
 <all all>
 band to play we did some country rock there

In (18), line 384, Ron starts faster speech rate in the last word of his first unit, quickly goes into the next unit and maintains fast speech rate right until the first accent of his second unit. As Schegloff (1982) shows, and as also extract (19) demonstrates, this rush through can be used as a device to secure one's turn before then pausing within the next unit:

(19) K2: 425-426

- 425 Ron: öhm: (0.8) bin ich an ein GOSpelchor rangekomm=
 F[H(/ -)
 <all
 öhm then I got into a group of gospel singers
- 426 =un hab (0.6) dann DA: (0.4) MITgesungen (0.7)
 <c> <c> M(/ -)
 all > <c>
 and I then joined in there

In (19), the speaker Ron starts increasing his speech rate within the last syllable of his first unit in line 425 and then quickly adds his next unit in line 426, still maintaining faster speech rate for the first two words of this unit, before he then

(23) K5: 470-473

- 469 Cis: =also **GAR** nich mehr: (.) ((knurrt)) so dieses dieses (.)
 F(\
 well not at all any more ((growls)) well this this
- 470 **ER**ste konzept was wir hattn war halt
 F(/
 <all all all
 first concept that we had was
- 471 Cis: [daß wir (.) bestimmte n: markante SZENen: so (.)
 \
- 772 Lea: [all all>
 that we certain important episodes so mhm
 \
- 473 Cis: ähm (.) über ne ne **RAHM**enhandlung
 /
 ehm via a a framing action
- 474 dann so immer so **VOR**stelln wolltn
 \)
 <all all>
 then so wanted to so present

A possible unit here could have been *daß wir bestimmte n: markante SZEN: so vorstelln wolln* 'that we certain important episodes wanted to present', with all the rest of the actual unit not being produced at all. If this had been the speaker's choice, the accent in *SZEN*: Could have been the last one and the recipient would have given her *mhm* after the last accent of this unit. In fact, however, speaker Cis continues and produces another two accents before the end of her unit. Cases like this show that, here too, in order to be precise we ought to talk about 'possible last accents' of a unit as a relevant locus for the recipient to react.

(24) K1: 736-738 (('der' = the reputation of a particular university))

- 736 Ida: [also der is **NICH** besonders (...) renomMIERT
 F(\ \)
 well it isn't particularly hm renowned mhm
 \
- 737 Nat: [hm mhm
 \
- 738 Ron: [hm
 \

Here, Nat's evaluation with respect to the reputation of a university could very well end after the first part of her unit, i.e. after *also der is NICH besonders* 'well it isn't particularly'. And it is here that Nat places her first reciprocity token *hm*. Ida continues her unit, however, by adding the accented adjective *renomMIERT* 'renowned' and thus retrospectively turns the possible last accent in the word *NICH* into a non-last one.

The 'possible last accent' of a unit is also the point after which recipients place their early starts: This can be seen in extracts (25) and (26):

(25) K1: 874-878

874 Nat: ICH würd **AU** nich fahrn wenn ich so:
 M(/ \)
 I wouldn't drive home either if I

875 **LEU**te hier hätte mit deman was am wochenende
 R(/ \)
 <all all
 had people here with whom at the weekends one

876 Nat: [MACHN könnte oder so
 / \)
 all all >
 could go out or so

877 Ida: [nee **DANN**: wär ja alles: (.) in **ORD**nung=
 \ M(/ \)
 no in that case everything would be fine

(26) K1: 53-54

53 Nat: [WARS du inner **ER**sten sitzung da
 H,R(\ /)

54 Ida: [were you there in the first meeting
 NEE da war ich nich mit **BEI**
 F(\ \)
 <p p >
 no then I wasn't there

In all these cases, speakers start turn holding and recipients place their reactions after the possible last accent of the speaker's turn.¹⁵ This accent thus seems indeed to be treated as the beginning of the transition relevance space in which either the speaker starts turn-holding devices, such as 'rush through' or 'holding intonation' (see above), or the speaker produces possible terminal intonation contours and speaker and recipients negotiate turn allocation for the next turn. This shows that the possible last accent is indeed a local point which participants orient to for their own reactions.

Yet, how does the recipient know which of the accents will be the possible last one? In the recipient's view, he or she can only estimate this by tacitly

¹⁵ I have not dealt here with cases in which tokens of *mhm* are given early in the unit, for instance in order to acknowledge a topic shift. If however, such an early token is given, the recipient often provides another *mhm* at or near the end of the unit. Cf. K6: 446-450.

K6: 446-450

446 Cis: [also wenn **WEIGL** über: irriga**REI** oder: siss**U** spricht
 M(/ /)
 so when Weigl talks about Irigaray or Sixous

447 Lea: [*mhm*
 \

448 Cis: so dann: **FIND**ich das auch immer etwas da**NEB**m
 \ /)
 so then I always think that's beside the point

449 Cis: [muß ich sagn ne . . aso ...
 /)

450 Lea: [I must say you know
 mhm
 \

'calculating' the position of the accent in relation to the progress of the emerging possible sentence or other syntactic construction so far. In those passages of speech where speakers have established a salient and recognizable rhythm, this rhythm might help the recipient to estimate the position of the next and then possibly last rhythmic beat in a unit (cf. Couper-Kuhlen 1993; Auer & Couper-Kuhlen 1994). So again, the participants seem to orient themselves primarily to the possible syntactic construction as the more globally projecting structure and to take prosodic structures as additional local points of orientation in order to estimate the possible end of the turn constructional unit. (For more detail on these points and the usability of the last accent unit as a resource, see Selting 1995a: chapter 2.3.1.3.)

5. Conclusions

The evidence presented here shows that for the signalling of a turn-constructional unit as an internally cohesive unit, and for the signalling of the division of the stretch of speech into turn-constructional units, the co-occurrence of syntax and prosody is relevant. Besides possible syntactic schemata and their possible expansions we saw possible intonation contours as relevant for unit production. The 'possible sentence' with its 'possible expansions' as well as the 'possible contour' are flexible entities and cognitively and interactionally relevant orientation and construction schemata that participants can make use of as a resource in conversational interaction.

In analysing the role of linguistic schemata for the organization and projection of turn-constructional units and their ends, both syntax and prosody have to be studied in their interplay. Participants use and orient to syntax as the more far-reaching projection, but syntactic units are locally contextualized by prosody. Both syntactic as well as prosodic units must be conceived of as flexible schemata that participants adapt to the exigencies of the situation. In the projection of turn-constructional units, both play their own individual and complementary roles.

Yet, when talking about a more global projecting power of syntax and a more local contextualizing power of prosody, this does not mean that the two resources can be ranked in a hierarchy in such a way that syntax plays the more important role or 'comes first', and prosody plays a less important role or 'comes second'. If it is true that the different prosodic packaging of syntactic material is, as I have tried to show, interactionally meaningful and relevant, then prosody has differentiating power and it may in some cases be the decisive cue. If researchers claim not to need to refer to prosody for their descriptions and accounts of conversational interaction, this may be so because in many cases a particular prosody is presupposed and taken for granted in interpretations and descriptions of contributions to conversational interaction. If, however, our goal is to isolate the "ultimate behavioral material" (Goffman, as cited by Streeck 1989: 204) that we use in our construction of interaction, or to "describe the practices of constructing and interpreting turns" (Ford, Fox & Thompson 1995), our task is to isolate each individual device and to describe their contribution and interplay for our processes of understanding and interpretation in interaction.

Appendix: Transcription conventionsTranscription symbols in the text line of transcripts:

aber DA kam	primary accented syllable of a unit
aber DA kam	secondary accented syllable of a unit
S icher	extra strong/loud accent
si:cher	lengthening of a sound
s:i:ch:er:	lengthening of an entire word
(.)	brief pause of up to ca 0.5 secs.
(..)	each dot ca 0.5 secs. pause, here ca 1 sec
(0.8)	pause timed in tenths of a second
((lacht))	para- and/or non-linguistic events
(? er kommt ?)	uncertain transcription
a(l)so	doubtful sound within a word
*	glottal stop
=	latching
[ich gehe	simultaneous talk, overlapping utterances
jaha	

Transcription symbols in the prosody line(s) of transcripts:

<u>Global pitch direction:</u> (noted before the left "(" parenthesis)	
F,R,H,M,L()	notation of the global pitch direction before the accent sequence delimited by parentheses: F=falling, R=rising, H=high, M=mid, L=low (Parentheses are usually noted before the first accent and at the end of the cohesive unit; left open in cases of unfinished units.)
H,F()	combination of global characterizations
[() ()]	combined contours with only weak or no boundaries between units with different global pitch directions (e.g. 'paratones')

Accent (proto)types or unaccented local pitch movements in and after accented and/or unaccented syllables:

\	falling
/	rising
-	level
\/	falling-rising
/\	rising-falling

Accent modifications:

↑\, ↓/, ↑-	locally larger pitch movements than in surrounding accents, higher or lower accent peaks than usual, or jump to higher level pitch
_	falling to very low pitch
...	sequence of unaccented syllables

(Outside the parentheses, local pitch movements function as 'pre-head' ("Vorlauf") or unstressed pitch movements after the accent sequence.)

Local pitch parameters used as boundary or continuation signals:

<u>	upstep
<d>	downstep
<c>	continuing pitch

Other prosodic parameters which are used with local or global extension, the extension is indicated by the position of the < >:

<f>	forte, loud
<l>	lento, slow
<p>	piano, low
<all>	allegro, fast
<dim>	diminuendo, decreasing loudness

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