

- Selkirk, E. O. 1984. *Phonology and Syntax. The relation between sound and structure*. Cambridge, Mass.: MIT Press.
- Selting, M. 1987a. *Verständigungsprobleme. Eine empirische Analyse am Beispiel der Bürger-Verwaltungs-Kommunikation*. Tübingen: Niemeyer.
- 1987b. Reparaturen und lokale Verstehensprobleme – oder: zur Binnenstruktur von Reparatursequenzen. *Linguistische Berichte*, 108: 128–149.
- 1992a. Prosody in conversational questions. *Journal of Pragmatics*, 17: 315–345.
- 1992b. Intonation as a contextualization device: case studies on the role of prosody, especially intonation, in contextualizing storytelling in conversation. In Auer and di Luzio 1992, pp. 233–258.
1993. Phonologie der Intonation. Probleme bisheriger Modelle und Konsequenzen einer neuen interpretativ-phonologischen Analyse. *Zeitschrift für Sprachwissenschaft*, 11(1): 99–138.
1995. *Prosodie im Gespräch. Aspekte einer interaktionalen Phonologie der Konversation*. Tübingen: Niemeyer.
- Sherzer, J. and A. C. Woodbury (eds.) 1987. *Native American Discourse. Poetics and rhetoric*. Cambridge University Press.
- Silverstein, M. 1976. Shifters, linguistic categories, and cultural description. In K. H. Basso and H. A. Selby (eds.) *Meaning in Anthropology*. Albuquerque: University of New Mexico Press, pp. 11–55.
1992. The indeterminacy of contextualization: when is enough enough? In Auer and di Luzio 1992, pp. 55–76.
- Sweet, H. 1877. *A Handbook of Phonetics*. Oxford: Clarendon.
- Tannen, D. 1984. *Conversational Style*. Norwood, N.J.: Ablex.
1989. *Talking Voices. Repetition, dialogue, and imagery in conversational discourse*. Cambridge University Press.
- Uhmann, S. 1991. *Fokushphonologie. Eine Analyse deutscher Intonationskonturen im Rahmen der nicht-linearen Phonologie*. Tübingen: Niemeyer.
- Vološinov, V. N. 1976. Discourse in life and discourse in art (concerning sociological poetics). In *Freudianism. A marxist critique*, transl. by I. R. Titunik. New York: Academic Press, pp. 93–116.
- Wichman, A. 1991. A study of up-arrows in the Lancaster/IBM spoken English corpus. In S. Johansson and A.-B. Stenström (eds.) *English Computer Corpora. Selected papers and research guide*. Berlin: Mouton de Gruyter, pp. 165–178.
- Wootton, A. J. 1989. Remarks on the methodology of conversation analysis. In D. Roger and P. Bull (eds.) *Conversation: An interdisciplinary perspective*. Clevedon: Multilingual Matters, pp. 238–258.
- Yule, G. 1980. Speakers' topics and major paratones. *Lingua*, 52: 33–47.
- Zimmerman, D. H. and C. West (eds.) 1980. Language and Social Interaction. Special double issue, *Sociological Inquiry*, 50/3–4.

## On the prosody and syntax of turn-continuations

PETER AUER

### 1 Introduction

According to Sacks, Schegloff and Jefferson (1974), smooth turn-taking in conversation is based on participants' recognition of certain stretches of talk as 'turn-constructual units', the completeness of which occasions the possibility of turn-transition. The turn-allocation component of the turn-taking system, assigning turns according to certain ordered options to another or the same speaker, thus depends crucially on the 'visible' production of such turn-constructual units. It is these units that determine turn-transition places.

Sacks, Schegloff and Jefferson remain somewhat vague – as does subsequent conversation analytic research – about the structural bases according to which turn-constructual units are recognized. They seem to conceive of them basically in syntactic terms (as 'sentences' or smaller syntactically independent structures). The notion of syntactic closure is left up to linguists to investigate. At the same time, the role of prosody (intonation) is mentioned in determining turn-constructual units. From research on gaze, it is additionally known that turn-yielding is regularly indicated by speaker-gaze at the recipient as a possible (intended) next speaker.<sup>1</sup> It also seems obvious that semantico-pragmatic aspects of completeness enter into the recognition of turn-constructual units as well. For a non-speaking participant in a conversation to know where speakership may change, i.e. when it may be 'his (or her) turn', it is therefore necessary to monitor on-going speech production together with its accompanying non-verbal activities in a very comprehensive manner, taking into account not only syntax, but



also, minimally, prosody, gaze and the content of the utterance against the background of what is being talked about.

As 'contextualization cues'<sup>2</sup> for the production and recognition of possible turn-transition places, syntactic, prosodic, semantico-pragmatic and visual parameters share the typical characteristics of these cues: in particular, their 'meaning' is not that of decontextualized (transcontextually stable) referential symbols, but rather that of indices which must be interpreted in and specific to, a local environment; they may (and indeed often do) co-occur (i.e. there is often a certain amount of redundant signalling); and their interactive effect cannot be taken back or 'interactionally denied'.<sup>3</sup>

From this it follows that the projection of a turn's possible completion (i.e. of a potential transition relevance place) is a highly interpretative issue; the correlation between syntactic, semantico-pragmatic, prosodic, gestural and other visual cues on the one hand, and the possibility of transition from one speaker's turn to another's on the other, is anything but unequivocal. Syntax, the various components of prosody, gaze, semantico-pragmatics and other possible verbal and non-verbal parameters represent independent resources for signalling that a turn is approaching its end or is terminated. This means (i) that speakers may choose a combination of these parameters (with semantico-pragmatics, syntax and prosody always being present but sometimes 'neutral', i.e. not predictive) for contextualizing turn completion, (ii) that they may use contradictory parameters, and (iii) on the side of the recipient/listener, that monitoring these parameters may lead to inconclusive interpretations. Thus, the recognition of a turn-construction unit is in itself a complex multi-faceted interactional task. (The claim that syntax, intonation, etc. are independent resources for signalling turn transition should of course not be taken to mean that conversationalists are necessarily or usually conscious of these sets of parameters as distinct. Instead, as with all contextualization cues, what may be brought to consciousness is at best the holistic outcome of an interpretative process, the details of which remain completely unconscious.)

The present chapter will deal with syntax and prosody as two of the omnipresent, yet independent signalling resources for contextualizing turn-constructional units. How much can participants rely on syntactic, and how much on prosodic, features in on-going talk

for successful turn-taking? It is difficult to answer this question as long as syntactic and prosodic means indicate termination of some (turn-constructional) unit at the same point in time. More interesting are cases in which the two (sets of) parameters may be 'out of phase'. Here, we will primarily focus on one of these cases, i.e. syntactic expansions of a turn *beyond a possible syntactic completion point* in German conversations.

The analysis requires a conception of syntax which may appear somewhat unusual to those linguists who are used to dealing with syntactic structures as a product of grammatical rules, or as a correlate of semantic structures only. As the above characterization of syntax as a 'contextualization cue' for turn-taking may have indicated already, we are less interested here in syntactic structures as the potential output of some abstract grammatical system, than as communicatively and cognitively real events in time. To underline this approach, we will speak of syntactic *gestalts* instead of syntactic structures. In particular, a 'possible syntactic completion point' will be defined as one in which a syntactic gestalt is closed. The gestalt approach to syntax and the notion of syntax as a contextualization cue are linked to each other in decisive ways. Indeed, syntax can only contextualize turn-completion and turn-yielding because of its projecting potential, which in turn is due to its real-time perception in terms of emergent gestalts. During the emergence of a syntactic gestalt, the chances for predicting (correctly) the not-yet-produced remaining part (and therefore, its termination) continually increase. Thus, the production of a gestalt in time starts with a phase of minimal projectability, implying a high load of perceptual-cognitive work on the part of the recipient and of productive-cognitive work on the part of the speaker, and ends with a phase of maximal projectability in which the speaker profits from the quasi-automatic terminability of already activated patterns and the recipient from the low informational load of the remaining utterance. Syntax as a contextualization cue for turn-taking capitalizes on precisely this feature of the increasing predictability of gestalts in time: while turn completion itself is not predictable, gestalt closure with respect to syntax (usually) is. And since the termination of a turn-constructional unit is regularly made to coincide with the



- (2) SEGLERINNEN  
 A: und ich hab nur heut morgen noch n Arzt geholt  
 -> oder heut mittag,  
 A: and I only got a doctor this morning  
 -> or this afternoon  
 (3) SPATEN 5  
 A: ja der muß früh wieder heim  
 -> weil der hat abns Termine  
 A: yes he has to go home early  
 -> because he's got appointments this evening

In cases of syntactic expansions such as in (1) or (2), the interesting problem is to see if, and under what conditions, syntactic completion is an indicator for potential turn transition. In particular, the following questions may be asked: is an expansion beyond a syntactic closure related to or indicative of a 'problem' in turn-taking? If not, are there prosodic cues that counteract an interpretation of syntactic closure as indicative of a turn-transition place? If so, does the expansion address this problem in any way?

We will first give a syntactic typology of expansions beyond possible syntactic completion in German,<sup>6</sup> then sketch some of the ways in which prosody may be used for contextualizing turn completion and, finally, discuss the relationship of and interaction between the two.

## 2 Syntactic resources for turn-expansion

A context-free, purely syntactic definition of a closed syntactic gestalt is difficult, even impossible, to give. There is a certain temptation to define a minimal syntactic gestalt as consisting of a finite verb plus its obligatory arguments (in full or anaphorically abridged form).<sup>7</sup> However, it is not clear that what is obligatory can be stated in ways which do not recur to semantics or pragmatics (in the sense of the informational structure of a text). Furthermore, a wider conception of syntax seems necessary in order to deal with the structural ellipsis of obligatory constituents, one which goes beyond the limits of the traditional sentence. This can be seen most clearly in question-answer sequences:<sup>8</sup> answers, of course, can (or must) be formulated such that certain rules of ellipsis are applied; these may even prescribe dropping of the finite verb. Nevertheless, they are

closure of syntactic gestalts, the latter may be used as a cue for the first.

A possible syntactic completion point has been reached when a structure has been produced which is syntactically independent from (i.e. does not project into) its following context. (Obviously, such syntactic independence is not to be equated with pragmatic or conversational independence.) Marking such a syntactic completion by a right-hand square bracket ], the syntactic expansions 'x' may be represented as

[ ..... ]<sub>1</sub> x ]<sub>2</sub>.

It will be noted that possible syntactic completion is not a syntactic category (such as 'sentence'<sup>4</sup>) but a syntactic boundary or *juncture*. It relates to the 'sentence' just like the 'possible turn completion point' as introduced by Sacks and colleagues relates to the 'turn'.<sup>5</sup> Since the structure up to the first syntactic completion point ]<sub>1</sub> and the structure up to the second completion point ]<sub>2</sub> must both be syntagmatically independent, 'x' itself is not a projected continuation of an open syntactic gestalt; instead, it will be heard as a non-projected expansion of an already closed syntactic gestalt, which, in an act of restructuring, is transformed by the hearer/recipient into an element of another gestalt, superimposed on, and incorporating, the previous one.

For practical reasons, the discussion here will be restricted to expansions in size below the level of the clause, particularly to noun or adverbial phrases; clause-level coordination and subordination will be neglected, although they share important characteristics with phrase-level expansions. Falling within the scope of the present chapter are therefore continuations such as (1) or (2), but not (3), where the continuation is an explanatory *because*-phrase.

### (1) MERCEDES 12

- M: dann=zahl=i nominal zehndausend Mark drauf,=  
 (na)=hab=i=n fantastisch (.) h GÄ Tä i (.) gell,  
 F: m:,=  
 M: =absolut neu. -  
 M: in that case I pay another ten thousand marks in addition,=  
 =and I get a fantastic (.) h GTI [a car] (.) you know,  
 F: m:,=  
 M: =absolutely new, -



surely syntactically complete structures. Similar problems are faced in the case of so-called 'verbless sentences'; in German, and presumably in many other languages as well, one can find an array of such structures which do not obey the rules of 'core syntax' (but instead those of one or more 'marginal syntaxes'); see German complete syntactic gestalts such as *ich und CDU wählen!*, *du Esel! Einfahrt freihalten* (Fries 1987).

Therefore, only in a given co-text, it seems, can potentially complete syntactic structures be detected and distinguished from non-complete structures. Syntax – in the sense of a contextualization cue for turn-taking – is a context-sensitive ability to tell ongoing from completed syntactic gestalts.

Given this restriction, it is nevertheless possible and necessary to formulate rules for the production and detection of syntactic gestalts which may be used – in a given context – to decide on the syntactic independence of a given structure. In German, one particularly important syntactic rule which enables speakers to cue completion is the so-called *Satzklammer* ('sentence brace'), which indicates closure (the 'right brace' of a clause coinciding with completion). Subject to this grammatical rule are, first of all, all verb-second clauses (main declarative or w-interrogative clauses) which contain a composite verb form, i.e. an auxiliary or modal finite verb plus an infinitive or past participle, a verb with a separable prefix, or a *Funktionsverbgefüge* (an idiomatic combination of a semantically neutral verb such as *bringen* 'bring' or *kommen* 'come' with a noun, e.g. *in Erfahrung bringen* 'bring into experience, ascertain', *in Betracht kommen* 'come under consideration, be possible', etc.). In these structures, the finite verb represents the left brace, the infinitive, past participle, separable prefix or noun phrase the right brace. The right and left braces enclose the so-called inner-field (*Mittelfeld*), while the front-field (*Vorfeld*) precedes the left brace in declarative (verb-second) clauses (the rules of standard German syntax allow only one argument of the verb to appear in this position) and the end-field (*Nachfeld*) follows the right brace. (In written standard German, there are heavy restrictions on the use of this position in the sentence.) Here are some examples for standard German syntax:

The notion of *Satzklammer* also applies to verb-first sentences such as yes/no-interrogatives. In this case, the left brace (finite verb

|                                 |                  |                              |                                        |                                 |
|---------------------------------|------------------|------------------------------|----------------------------------------|---------------------------------|
| [in gutes Datum]<br>a good date | [kann]<br>can    | [natürlich]<br>of course     | [der sechste März]<br>the 6th of March | [sein]<br>be                    |
| NP                              | V <sub>fin</sub> | AdvbP                        | NP                                     | V <sub>infinitive</sub>         |
| [die]<br>they                   | [ham]<br>have    | [wahrscheinlich]<br>probably | [gestern]<br>yesterday                 | [geschnapselt]<br>schnaps-drunk |
| NP                              | V <sub>fin</sub> | AdvbP                        | AdvbP                                  | V <sub>participle</sub>         |
| [der]<br>he                     | [liegt]<br>lies  | [schon]<br>already           | [den ganzen Tag]<br>all the day        | [flach]<br>on his back          |
| NP                              | V <sub>fin</sub> | AdvbP                        | AdvbP                                  | Prefix                          |
| Vorfeld                         |                  | Mittelfeld                   |                                        |                                 |

form) is sentence-initial (the front-field is empty; e.g. *Liegt er schon den ganzen Tag flach?* 'does he lie on his back all day?' *Kann der 6. März ein gutes Datum sein?* 'Can the 6th of March be a good date?' etc.). Finally, verb-final clauses (e.g. subordinated clauses) display the sentence brace structure as well. Here the left brace is the subordinating conjunction, the right brace the verbal complex (including the finite verb). Declarative sentences with no 'sentence braces' in the traditional sense are more complicated to handle; yet even in such cases, there are a number of reliable, yet flexible and context-sensitive ('pragmatic') rules as to which constituent comes last, and thereby marks gestalt closure.<sup>9</sup>

Given these constraints, it is quite easy in many cases to predict the possible completion of a syntactic gestalt: according to the rules of German syntax, the closure of a syntactic gestalt is very often tied to the occurrence of the right brace. The emergence of syntactic gestalts will therefore be monitored by conversationalists in order to locate possible syntactic completions which might qualify as turn-transition places in German conversations. By the same token, any expansion of a syntactic gestalt beyond such a visible and recognizable closure is of foremost interest for analysing the relationship between syntax, prosody and turn-taking.



Before proceeding, it will be useful to describe these expansions in syntactic terms. It should be kept in mind for the following discussion that, from a purely syntactic point of view, it does not matter if expansions are separated from the gestalt they orient to by some recipient's 'continuer', and that preceding gestalt and expansion may even be produced by different speakers.

In a *first type*, representing the largest group of instances, one constituent which 'ought to' have been placed earlier is produced after the first locatable syntactic closure, i.e. in the post-field of the sentence.<sup>10</sup> (Just where exactly the structure 'ought to' have been produced is sometimes difficult to say. Frequently, there are various possibilities.) Examples are the *de facto* realizations of two of the above-mentioned clauses:

(4) SEGLERINNEN (Square brackets indicate overlap)

B: die ham gestern @ zuviel geschnäpselt. -

-> [wahrscheinlich.

A: [ ja;

B: they had too much schnaps yesterday. -

-> [probably.

A: [ yes,

(5) SEGLERINNEN

A: der liegt also @ fläch

-> schon den ganzen Tag;

A: he's been lying in bed

-> already all day,

@ marks the canonical location of the expanding structure within the sentence frame according to standard written grammar.

It is a matter of dispute whether post-closure continuations of this type should be regarded as altogether normal, as exceptional, as marked or even as ungrammatical in spoken German (the question will be taken up again below). Yet even if one takes the extreme stance that spoken (in contrast to written) German permits post-field constituents without any restraint, there can be no doubt that the sentence adverbial *wahrscheinlich* and the temporal adverbial phrase *schon den ganzen Tag* are produced after a possible syntactic completion in examples (4) and (5), i.e. after the right braces *geschnäpselt* and *fläch*.

In (6), the first example for the German *Satzklammer* above, the issue is different:

(6) AKTIENBERATUNG

M: ich mein n gütes Dátum kann natürlich @ sein, -

-> der sechste März;

M: I mean a good date of course could be, -

-> the sixth of March;

Here, *der sechste März* is an obligatory argument, the subject of the clause, which would not be complete before its production. No possibility for turn transition arises before the complete utterance of this constituent. Although 'debraced', the subject noun phrase is not an expansion of a complete syntactic gestalt, but brings this gestalt to closure. Thus, 'debraced' material is not necessarily indicative of an expansion beyond syntactic closure; it is only so under the proviso that it is not an obligatory argument which is placed in the post-field of the German sentence.

The following two extracts exemplify post-positioned syntactic constituents which 'ought to' have been placed before a closure-marking final element in syntactic contexts slightly different from (4) and (5). In (7), the temporal adverbial phrase *vierzehn Tage* (Alemannic *vierzehn Da:g*) is placed after the right brace of a subordinated *ob*-clause (*if*-clause), i.e. after the verbal complex *mitkam*; in (8), the right 'brace', although that of a main declarative sentence, is a predicative adjective, after which the adverbial *dann* is placed in the post-field:

(7) TÖRN

F: hab=ich=denkt jetzt ruf den an ob der vielleicht (.) jetzt

nächst Woch scho @ mitkam;

-> =vierzehn Da:g;

F: so I thought give him a ring if maybe he can come with us now next week;

-> for a fortnight;

(8) BÖRSIANER

A: jaja. da bin ich @ nich (.) (h)ni(h)ch so kl(h)éinlich

-> [dann;

B: [ ja oke

A: yes yes. I won't be so small-minded about that

-> [then;

B: [ yes o.k.



Again, the stretches of talk indicated – *vierzehn Da:g* and *dann* – are ‘too late’ according to standard German syntax, since a syntactic closure has already been reached.

A *second type* of expansion beyond a syntactic completion point may be called paradigmatic and thereby distinguished from the first type, which could be called syntagmatic. While syntagmatic expansions add (or insert) an additional constituent (in)to a syntactic gestalt, paradigmatic expansions replace a constituent in it. Among these, replacements for pro-forms may be singled out as a group of their own for functional reasons. This (often referred to as ‘right dislocation’)<sup>11</sup> is exemplified by (9); (10) is an instance of repair of a full form (paradigmatically related constituents are underlined with dots):

(9) SPATEN

- K: dú: des dad i ír mogeln;  
 K: hey that I wouldn't do cheat;

(10) SEGLERINNEN

- B: i muß da éhrlich sage i [ hab scho seit zwéi Stunden  
 A: [ ((räuspert sich))  
 B: Mätscheibe; - ganz blöden [Kopf,  
 A: [ ((räuspert sich))  
 B: to tell you the truth I' [ ve had a blackout for two hours. -  
 A: [ ((clears throat))  
 B: real dull feeling in my [ head.  
 A: [ ((clears throat))

Note that in (10), the expansion *ganz blöden Kopf* has case marking for a direct object and therefore visibly fulfils the same syntactic role/function as the constituent it replaces (*Mätscheibe*). This is the decisive cue for differentiating retrospective syntagmatic expansions from the following, third type.

While both the first and the second type of expansion after syntactic completion imply a retrospective orientation (they insert material into the previous structure or replace one of its constituents), the *third type* of expansion lacks this retrospective orientation entirely. Such *continuations* are possible when none of the above-mentioned syntactic boundary cues (right-hand braces) occur. Continuations may appear in various shapes. One is an internal expansion of the constituent which closes the gestalt. Such an expansion, e.g. within a noun phrase, adds material after the

possible completion of this lower-level constituent, which leads to another completion, the completion of the lower-level constituent coinciding with that of the constructional unit. Thus, in example (11) *so von Kuantan hoch* expands/modifies the noun phrase *die Östküste* into a more complex noun phrase and thereby expands the syntactic structure as a whole by continuation:

(11) CHINA 18

- s: ehm (.) un was halt töll is is die Östküste: (.)  
 -> so- (.) d- von Kuantan hó:ch;  
 s: ehm (.) and what is fantastic is the east coast (.)  
 -> like (.) from Kuantan upwards;

Another way to expand a syntactic gestalt non-retrospectively (another type of continuation) is to add parenthetical material which semantically modifies some prior constituent but has no formal syntactic relationship with it (viz., no grammatical agreement). This case of what could be called *asyndetic appositionals* is exemplified in extract (12), where *rund* modifies *Hülse* but is not a postpositioned element that would somehow fit into the preceding syntactic structure *auf der einen Seite is also außen sonne Hülse*, = *Hülse*.<sup>12</sup>

(12) ANTENNENKABEL

- M: des<sup>13</sup> auf der einen Seite is also außen sonne Hülse, =  
 F: =j a,  
 -> M: [ rund,  
 M: that's on the one side is you know outside a kind of sheath, =  
 F: =ye [ ab,  
 -> M: [ round,

Summarizing this section, we may say that there are at least three syntactically different ways to expand a closed syntactic gestalt: syntagmatic-retrospectively, paradigmatic-retrospectively (by right dislocation or repair proper) and syntagmatic-prospective (by continuation). In all of these cases, the expanding structure may be said to suspend and postpone the previous syntactic completion point, incorporating further material into the first gestalt, which is thereby reorganized in terms of a second one, until another possible syntactic completion point is reached.



### 3 Prosodic resources for signalling turn completion and turn-continuation

Is there anything comparable to syntactic expansion in prosody? Does prosody (in particular, intonation) build up gestalts independent from those in syntax? In order to investigate the means by which prosodic expansions might be accomplished, we must ask first if prosodic structures display predictable closure at all. The available research on the role of intonation in conversation is scarce and the terminology underdeveloped. Nevertheless, particularly Selting (1995) for German, and Local and collaborators for some British varieties of English,<sup>14</sup> offer important insights.

According to Selting, prosodic units are defined in the first place by intonation in spoken German. An 'intonation contour' in her sense is made up of one or more accent units, each of which shows falling, rising, level, falling-rising or rising-falling pitch. In the case of several accent units, the sequence is hearably cohesive because the pitch accents integrate into some pattern (i.e. their 'global intonation'), such as globally falling, rising, high, mid or low.<sup>15</sup> The global pattern in combination with loudness and duration often singles out one pitch movement as the most salient one of the contour; such a 'phrasal accent' may be the end-point or the beginning of a globally falling or rising contour, the widest pitch movement, etc. The sequence of accent units may be preceded by one or more unstressed syllables (*Vorlauf*, roughly equal to 'anacrusis' in Anglo-American research on intonation). These are often marked by an intonational upstep or downstep, which sets them off from the last syllables of the previous contour, and they may be spoken with faster tempo than the preceding stretch of talk.

It is not easy to spell out the conditions under which intonation contours in this sense form recognizable gestalts, and, by consequence, to evaluate their potential for making the closure of a prosodic unit predictable. For Selting, contours are such gestalts if they are globally, or at least from some point onwards, steadily falling or rising. Such a prosodic gestalt would reach closure as soon as a 'highest' or 'lowest' pitch accent has occurred. If this is true, we may ask why such a global pattern has a predictable point of closure. One possible explanation would be that interactants have, or develop during the interaction, a feeling for the range in

which global falls or rises take place in a co-participant's speech, provided they are produced in an 'unmarked' key (i.e. excluding the intonational display of 'surprise', 'anger', etc., or of textually/conversationally problematic items such as repairs or contrasts). This range would make it possible for interactants to forecast the termination of a contour by guessing when it will reach its limits. For instance, in example (13), the contour contains three consecutive accent units (the beginnings of which are marked by accented syllables,<sup>16</sup>) which combine into a rising overall pattern. This pattern has reached its climax with the third accent unit; impressionistically, this also seems to be the upper end of the intonational range for that speaker in unmarked key (see dotted line).<sup>16</sup>

(13)



Note that in a prosodic gestalt of this type, the number of non-accented syllables after the final pitch accent is unpredictable; therefore, the right-hand end of the gestalt is undetermined. However, we would be able to predict the first possible point of prosodic closure in such a contour, which would be the occurrence of the 'highest' or 'lowest' pitch protrusion, notwithstanding the possibility of an indeterminate number of further non-accented syllables to follow. Thus, comparable to syntactic gestalts, such an intonational gestalt could be expanded by continuation.

Unfortunately, globally falling or rising contours (particularly those in which the limits of a speaker's range are reached) are relatively infrequent. In other, more complex global contours made up of global rises *and* falls, it is difficult or impossible to predict how many accent units (or syllables) are still to follow. They therefore cannot be said to be gestalts in the sense discussed for syntax in the preceding section, since their predictive value is small. What can be predicted for a prosodic 'gestalt' of this type is not much more than that it must contain at least one (pitch) accent. (Therefore, the hearable beginning of a new contour is incomplete up to the occurrence of the first pitch protrusion.) However, compared to syntax, prosodic structures are not typically suitable for projecting very far into the future. Selting (1995) states that in

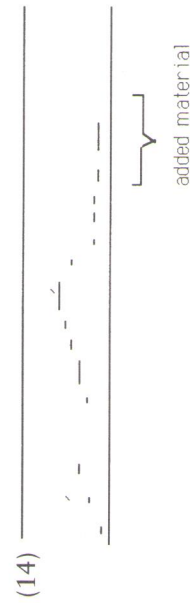


contrast to syntax (where, for instance, the requirement that all obligatory arguments of a verb be present allows relatively far-reaching projections), intonation is basically confined to small-scale predictions, often not beyond the range of a single accent unit (see also Grosjean and Hirt, in press).

It should be noted, however, that precisely this 'disadvantage' is responsible for the easy expandability of intonational contours. In this respect, prosody fares much better than syntax; for while many syntactic structures simply cannot be expanded beyond a syntactic completion point without showing some kind of backwards orientation (see our 'retrospective expansions' of the last section), any material may be included into a potentially closed intonational contour as a prosodic continuation.<sup>17</sup> It will be shown in the following sections how the different possibilities (advantages and disadvantages) of prosodic and syntactic signalling are combined in a 'division of labour' for the construction of turn-construction units.

In order to display some syntactically tagged-on material as part of the preceding intonation contour (*prosodic integration*), or in order to display it as a new prosodic unit (*prosodic exposure*), the following resources are available in conversational German:

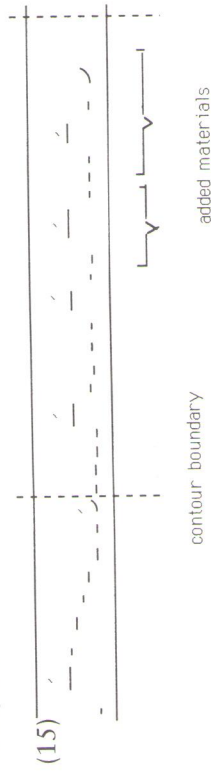
(i) *Integration/exposure by pitch*. Two techniques for smooth continuation must be differentiated. The first is a simple addition of further unstressed syllables to the last accent unit of the contour. Their pitch then will start at the level of the last syllable in the 'old' contour, or slightly below (see example (14)).



Pitch remains at approximately the low level it has reached at the end of the final accent unit before the expansion; the expansion shows only a very slight fall since the 'base line' has almost been reached already. Within such a sequence of unaccented syllables, some may be slightly foregrounded by lengthening or loudness; they

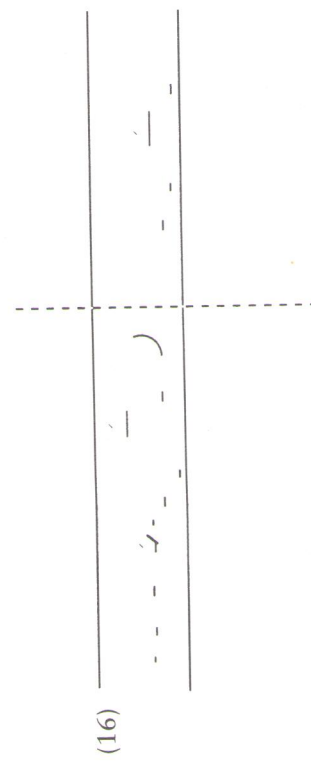
do not bear a pitch accent, however (i.e. they are, in a somewhat misleading but nonetheless widespread turn of phrase, 'destressed').

A second way to expand an existing contour beyond a possible completion point is to add another accent unit, i.e. a (pitch) accent plus non-accented syllables *ad libitum*. This happens, for instance, in example (15). Again, the contour that finally emerges bears no traces whatsoever of an expansion, as long as the segmental level is disregarded.



While in (15) the accent units added are very similar to the previous ones – i.e. the addition works on the principle of repeating existent pitch movements – this is not necessarily so. For instance, a L(ow) pitch accent may be added to a H(igh) pitch accent just as well.

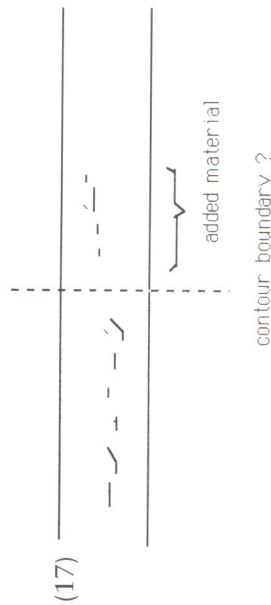
Non-integration into an existing contour, i.e. *prosodic exposure*, can be marked by a pitch jump between the last unaccented syllables of the preceding and the anacrustic syllables of the new contour. For example, in example (16) the jump is downwards on the anacrustic syllables of the added accent unit, when compared to the upward slur on the last syllable in the old unit, which bears a secondary accent (the final word is *Éiscaf  * 'ice parlour').



When the preceding contour ends and/or the added material begins with an accented syllable, it is difficult to judge if a possible



pitch jump is contour-internal or contour-delimiting (see example (17)).



Very extreme pitch jumps of this type may be indicative of a contour boundary but, since pitch jumps occur quite regularly within or between accent sequences as well, this indicator alone is a rather vague one in most varieties of German.<sup>18</sup> In the usual case, other prosodic cues for contour boundaries have to be present in combination with such pitch jumps before or after accented syllables in order to permit a more conclusive interpretation.

(ii) *Integration/exposure by tempo and loudness*. In addition to pitch, integration or exposure of added material may be marked by tempo. If there is a change towards faster tempo, this may be heard as the beginning of a new contour. The same function of exposing or camouflaging boundaries at the segmental level may be taken over by loudness: for smooth integration, loudness will not change or will only decrease gradually through the final part of the (expanded) contour; for exposure, loudness will be increased or diminished abruptly on the anacrustic syllables of the new contour. (It should be kept in mind, however, that both tempo/rate of speech and loudness primarily serve other functions, particularly for information processing: more loudness and reduced tempo/rate of speech may be indicative of 'more central' (more relevant) information, less loudness and faster tempo/rate of speech of 'less central' information.<sup>19</sup> Loudness and tempo seem to link up to contour delimitation only indirectly via these functions.)

(iii) *Integration/exposure by pausing*. The boundary between two contours can further be established by a 'pause'. However, 'pauses' also occur within contours. For a period of perceptual silence to be interpreted as a contour-delimiting device, additional requirements need to be met. In particular, it seems to be necessary

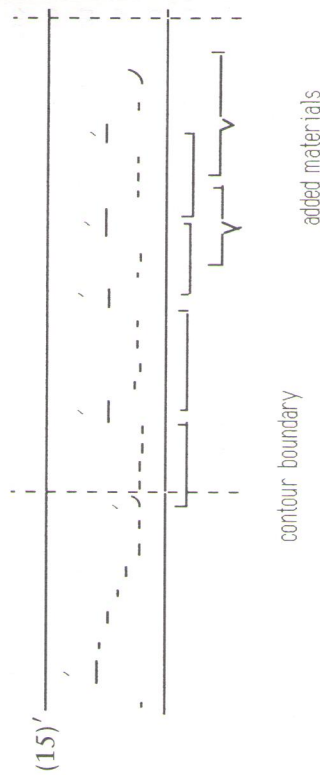
that no articulatory gestures occur during the silence. Local and Kelly (1986) have in fact shown that not interrupting articulatory gestures such as glottal constriction during a pause is an interactionally relevant phenomenon: perceptual silence of this type is oriented to as a 'holding pause', which does not indicate the end of a contour, nor (*a fortiori*) that of a speaker's turn. 'Holding' of a turn during and over a period of perceptual silence can also be signalled by some anticipatory articulation movement on the segment preceding the pause. For instance, French (1988) has shown that non-vocalization of /r/ in British non-rhotic accents ('linking /r/') may be used to indicate that 'something more', i.e. a vowel, is going to follow after the pause. For English, it has also been shown that stress shift may be used as a floor-holding device signalling more to come following a period of silence which might otherwise be heard as contour-terminal.

For a silence to be interpretable as contour-delimiting, the articulatory gesture has to be interrupted entirely and anticipatory articulations must be absent. Of course, so-called filled pauses ('ehms') do not satisfy these requirements. If, on the other hand, additional material is to be integrated into an existing contour, 'pauses', if they occur at all, must be 'holding' or 'filled' pauses.

(iv) *Integration/exposure by rhythm*. According to the conception of rhythm followed here,<sup>20</sup> this implies in the first place integration into an existing isochronous pattern (if existent).<sup>21</sup> A smooth integration of additional material will therefore entail adding a new accent unit such that its stressed syllable is isochronous with the preceding stressed syllables. By contrast, exposure of new material may be achieved by interrupting an existing isochronous pattern. (Again, it should be added that isochronous rhythmic patterns often stretch over more than one intonational contour. The persistence of a rhythmic pattern therefore does not automatically entail that no boundary intervenes. Nevertheless, rhythmic patterns sometimes do begin and end within intonational phrases. The general point is that rhythm, and other prosodic cues such as loudness and tempo, are not foolproof indicators of prosodic boundaries. On the contrary, as with all contextualization cues, their interpretation is in itself context-dependent and, to use a conversation analytic term, dependent on 'local' surroundings.)



In the transcripts, rhythm will be represented by brackets below the intonational contour linking isochronous stresses. (15)', a revised version of (15), shows a rhythmically integrated addition of material.



#### 4 Syntax, prosody and thematic relevance

As the preceding sections have shown, both syntax and prosody offer ways to expand existing structures. In syntax, expansions come either in the shape of progressive expansions (continuations), or in the shape of (paradigmatically or syntagmatically) regressive expansions. In each case, a point of syntactic gestalt closure is suspended and postponed until completion of the expansion. In prosody, 'continuations', i.e. additive expansions of existing contours, may be integrated into preceding talk by adding new syllables to the last accent unit, by adding another accent unit within the contour (without an upstep or downstep), by incorporation into an isochronous rhythmic pattern, and/or by continuing with (approximately) the same loudness and tempo, without a (noticeable) pause.

We will now look at the interplay between syntax and prosody. This is an area in which the positions taken by various schools of linguistic thinking widely diverge. In the older generative approaches to the phonology of intonation, prosodic phrasing is usually derived from syntax, as a kind of shallow 'interpretation' of the information contained in the central syntactic component of grammar. In such an approach, intonation is entirely dependent on syntax. From the discussion in this section, it will become clear that such a position is untenable: we will see that for each syntactic type

of expansion, prosody offers the possibility of either getting it done smoothly (by integrating the added material into the previous contour), or exposing it as an expansion of the already completed turn via packaging in a distinct contour.

A number of more recent theories, e.g. 'Prosodic Phonology', assume instead that syntactic constituents are the basis of prosodic phrasing (e.g. division into intonational contours), but that the prosodic component of grammar is independent enough from syntax to allow combining two (or more) syntactic constituents into one larger prosodic unit when necessary (for instance, when the syntactic units are too small to each form independent intonational contours), thus obliterating syntactic boundaries in prosodic representation.<sup>22</sup> Yet the opposite case is also observed: one syntactic unit may be split into various components by prosodic means, for reasons of emphasis (e.g. A: *what's new?* B: *Susy, is, pregnant!* uttered in three distinct intonational contours: fall-rise, fall-rise, rise-fall); or, prosody may be used for marking the closure of a grammaticalized anacoluthon (e.g. *and if I told her?* with 'question intonation' to indicate that the second part of the conditional is not to follow).

If, then, the independence of prosody from syntax is considerable, the priority of syntax nonetheless cannot be denied either. The discussion in the previous sections suggests a model in which syntax and prosody cooperate in very delicate ways, each of them on the basis of its particular semiotic possibilities. Into this model of a division of labour, syntax brings its capacity to build relatively far-reaching gestalts, the completion of which becomes more and more projectable in time; prosody, particularly intonation, brings in its local flexibility to revise and adjust these gestalts while they are being 'put to speech'. Thus, syntax retains its priority, but prosody/intonation is nevertheless independent from it.

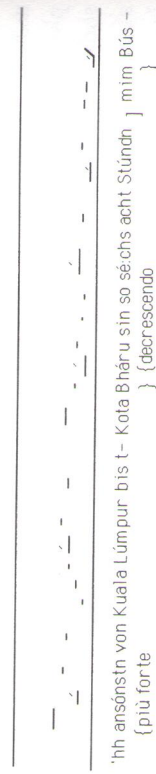
The syntactic expansion types will now be considered in turn with regard to the way in which prosody operates on/packages them. Although all of them may be camouflaged or exposed by prosody, there are certain empirical imbalances between these two possibilities.

When *syntactic continuations* are prosodically integrated into the previous prosodic gestalt, there is no indication of an expansion at all. Although a syntactically defined completion point has been



reached (marked by |), the continuation of the structure is neither a kind of regressive operation on the previous syntactic structure, nor prosodically (the beginning of) a new one.<sup>23</sup>

(18) CHINA 20



*'11/11 apart from that from Kuala Lumpur to Kota Bharu it takes about six or eight hours by bus*

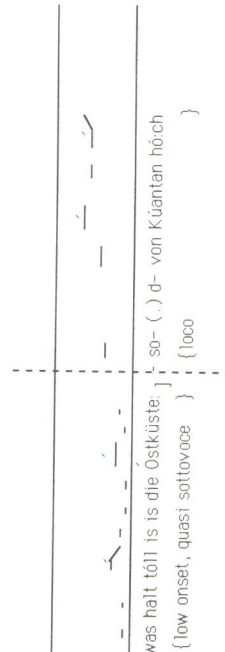
(19) (=13) ALTWEIBERFASNACHT



*there is a horrible horrible atmosphere here in the house*

However, it also happens that syntactic continuations are 'exposed' as expansions by prosody, as in the following two examples:

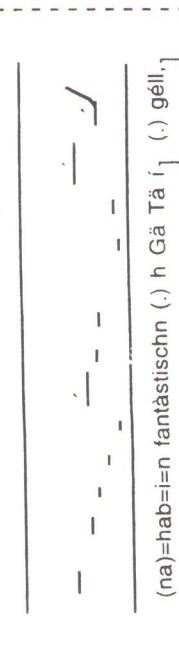
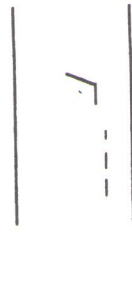
## 20) CHINA 18



*what is fantastic is the east coast - like - from Kuantan upwards*

(21) (=1) MERCEDES

M: dann=zahl=i nomal zehndausend Mark drauf, =


$$F: m :=$$


M: =absolut neu, -

M: in that case I pay another ten thousand marks in addition, =  
=and I get a fantastic (.) b GTI (.) you know,

$$F: \mathcal{M}_+ =$$

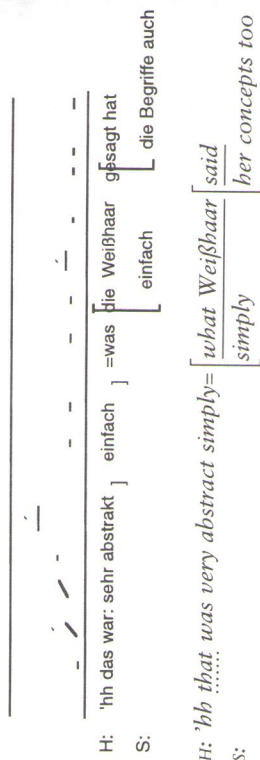
M: =absolutely new, -

On the basis of the available data it seems that asyndetic appositionals are typically 'exposed' by prosody (as in example 21). This seems plausible, for the added section always contains new information about a referent, i.e. it is highly rhematic. For other continuations, both options are equally available.

Among the *regressive*, *paradigmatic expansions*, *right dislocations* behave differently from the rest. As in examples (22) and (23), they seem to be formatted prosodically as 'smooth' more often than not. By integrating them into the previous intonational contour, the speaker gives a kind of cataphoric reading to the pronoun which is elaborated in the expansion (such as the *das* in (22) and the *des* in (23)), although the entity referred to by the pronoun has usually been mentioned in the conversation (just) before.



(24) CHINA 15



dú: des diád i it } mogeln

they that I wouldn't do cheat;  
.....

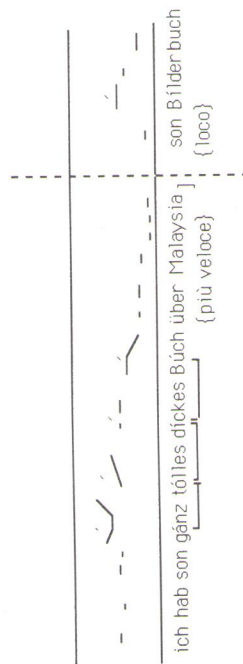
In the case of (22), integration of *was die Weißhaar gesagt hat* into *das war sehr abstrakt einfach* (with an additional possible syntactic completion point: *einfach* is a regressive, syntagmatic expansion) is achieved by the absence of a pitch movement between *einfach* and *was*, and the unchanged tempo and loudness. In (23), a very short expansion (the infinitive *mogeln* 'cheat', substituting for *des* in the prior structure) is – despite its syntactic status – integrated so well into the contour as a sequence of two unstressed syllables after the (originally contour-final) second pitch accent, that exactly the same prosodic shape could be used if *mogeln* were to be replaced by a transitive verb such as *machen* 'do', which would then be the right brace of an entirely 'normal', non-expanded syntactic unit (*des dääd* 'it mache' 'that I wouldn't do').<sup>24</sup>

The other paradigmatically regressive expansions (which are termed *repairs* more properly) behave in just the opposite way: often, they present themselves as prosodically 'exposed', constituting an intonation contour of their own:

there=kind=of are incredibly fantastic beaches (1.0) you know real story-book beaches

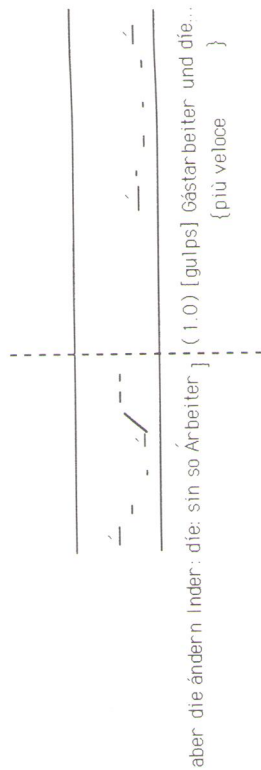
The beginning of the new contour in (24) is marked primarily by a return to average tempo after a stretch of *accelerando*; the pitch of

(24) CHINA 15



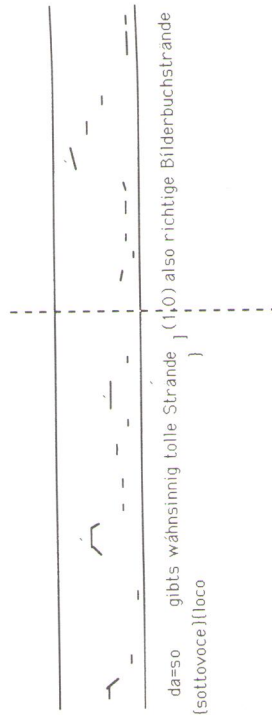
I've got a kind of really wonderful big book about Malaysia a kind of picture book

(25) CHINA 13



but the other Indians they are kind of workers (1.0) guest workers and  
they . . .

(26) CHINA 17



there=kind=of are incredibly fantastic beaches (1.0) you know real story-book beaches

The beginning of the new contour in (24) is marked primarily by a return to average tempo after a stretch of *accelerando*; the pitch of







Since retrospective syntagmatic expansions appear in all possible prosodic packagings with some frequency (integrated/'depressed', integrated/new accent unit, exposed/new contour), they are well suited to show that, pragmatically, these alternatives are not equivalent.

'Destressing' added material down-scales its relevance to thematic or subthematic status, while adding a new accent unit or even intonational contour with a pitch movement of its own attributes more, even rhematic, relevance to the addition. Thus, (29) may be said in a context in which it is not clear what is meant by *geläutet* (i.e. what it was that rang, the telephone, the door-bell, etc.), while a version in which *am Telefon* is added without further pitch movement is only adequate in a 'universe of discourse' in which the speaker can take it for granted that the recipient will know that it could only have been the telephone that rang. In the same way, prosodically independent expansions contextualize their pragmatic status as rhematic information. For instance, in (30), which is the beginning of a narrative, the fact that the teller was 'with Karsten' is new information added in the format of a side-remark, i.e. its status is that of rhematic material. No such interpretation would be possible if *mit dem Karsten* was prosodically integrated into the preceding intonation contour and 'destressed': in this case, prior mentioning of 'Karsten' would be presupposed.

The role of the prosodic packaging of an expansion with respect to its thematic/rhematic status is further supported by the way in which obligatory syntactic arguments are handled (which, as we have seen above, are not expansions, since a possible syntactic completion point has not been reached.) If such obligatory arguments are placed in the end-field, they are uttered in the shape of a new intonation contour as in (32), or they at least constitute a pitch movement of their own (as in example (33)):

- (32) (=15) VERTRETUNG 2
- A: hallo?  
L: Hau:f  
A: ja grüßgott mein Name is Be::mann in Mü:nche:n  
L: grüß=sie Gott Herr Benann=  
A: =ah:: Herr Hauf der Herr:: ahm: (.) Cemann der is nütch  
im Hause gei?

- L: im: Moment nicht würd aber sam=ma in der nechsten  
halb.n Stunde; also=er=wollte=an=und=für=sich schön m  
(.) vormittach da sein; 'th  
A: [ ja; j [ a:  
L: [ a:ber: eh: würd auf  
jeden Fall in Kürze eintreff.n;  
A: i:ich frage aus folgn'dn Gründ=°eh°=mein=Name is Be:männ in  
(acc.) ((loco))  
München:?  
L: ja;=
- 
- wir hatt'n uns amal unterhöit'n wegn=a éventuellen Vertretung in Bäv'ern oder Südbäv'ern
- (A = caller)  
A: hello?  
L: Hau:f  
A: yes good afternoon my name is Beman in Munich  
L: good afternoon Mr Beman=  
A: =ah Mr Hau:f Mr eh:m: (.) Ceman is not in is be?  
L: at the moment he isn't but he will be in half an hour;  
you see actually he wanted to be back in  
the (.) morning; 'th [ yes [ yes  
A: [ but: eh: he will arrive here very soon;  
L: [ but: eh: he will arrive here very soon;  
A: the reason I ask is this is eh = my name is Be:männ in Munich?  
L: yes,=  
A: we once talked about a possible sales representation in Bavaria  
or Southern Bavaria
- (33) (=22/28) CHINA 3  
H: das war sehr absträkt einfach;=  
=was die [ Weißhaar g [esagt hat.  
S: Metapher un Met [°einfach° [die Begriffe auch (mit  
Metonymie° (.) eh (0.5)  
H: Metapher un Met [°einfach° ((clapping noise))  
S: schreiben un=weiblicher=schrei [ben° [°ja°  
H: [ben° [°ja°  
S: °und=solche=Sachen°=un=  
vielleicht=ein [fach, wenn se nicht in der Diskussion  
H: [s=war f:-  
S: drin ist.  
H: °ehm° (0.3)



und es war züwenig festgemacht an Textbeispielen

H: 'bh that was very abstract simply  
 what Weißhaar  
 simply [said  
 the concepts too (with)  
 S: metaphor and me [tonymy and and metonymy (.) eh (0.5)  
 H: yeab ((clapping noise))  
 S: writing and female writ[ing  
 yeab  
 H: and these things and  
 S: maybe simp[ly because she isn't part of this discussion  
 [it was t-  
 H: and it was not tied down enough to text examples

A full noun phrase as an obligatory argument cannot contain presupposed (or subthematic) information. Our interpretation of the effect of prosodic integration or exposure on the thematic/rhematic status of expansions predicts that obligatory arguments in the end-field will not be prosodically integrated and distressed. This is in fact the case.

The findings of this section can be summarized as follows: in principle, every syntactic expansion may be prosodically integrated and thereby 'camouflaged', or 'exposed' by being uttered in a new intonational contour.

From the point of view of information processing (or thematic relevance), the prosodic treatment of syntactic expansions gives them either rhematic or (sub)thematic value. The distinction between rhematic and (sub)thematic prosodic contextualization does not coincide with that between integration and non-integration, however: while non-integrated expansions are always rhematic, integrated expansions which add a new accent unit to the contour are rhematic as well; only 'distressed' expansions serve to contextualize clearly (sub)thematic information. What counts for the contextualization of rhematic/thematic information, then, is not so much the question of one or two intonational contours (which, as we shall see in the following section, is of primary

importance for turn-taking), but instead the question of whether another pitch accent is added or not.<sup>26</sup>

## 5 Syntax, prosody and turn-taking

Up to this point, we have been concerned with the issue of how prosody either exposes or camouflages an expansion beyond a possible syntactic completion point. We must now become more precise on the role of prosody and syntax (and their interaction) for turn-taking. From the discussion in the preceding section, it would seem that prosody provides (some of) the contextualization cues which help participants bridge the gap between possible syntactic completion and possible turn completion. One model of how this happens would see prosody as a 'filter' between syntax and turn-taking. The filter would be used by participants to decide which possible syntactic completions may be heard as possible turn completions. It would have the effect of confirming or suspending the relevance of syntactic information for turn-taking, by underlining or cancelling the relevance of a syntactic completion point for turn transition. According to the 'filter model', speakers re-phrase syntactic constituents via prosody, and recipients process this prosodic surface information (disregarding syntax) for turn-taking cues.

This model is intuitively plausible and receives some prima facie support from another area in which intonation is important for turn-taking, but which is not the focus of the present chapter: the proposal that the type of pitch movement in the final part of the contour indicates whether a possible syntactic completion point, which also coincides with the end of an intonational contour, is turn-transition relevant. In a non-regional variety of German, good cues for indicating turn closure are global pitch movements that fall either throughout the contour or in its final accent unit to the speaker's 'base-line' (see examples (13), (14)). Level or (slightly) upward moving contours indicate turn-continuation instead (see examples (15), (16), (17))<sup>27</sup> – although certainly not always.<sup>28</sup> The 'filter model' states that it is enough to monitor the contour-final pitch movement to decide if a contour boundary is transition-relevant.



Applied to the problem at hand, i.e. the integration or non-integration of expansions into an existing contour, the 'filter model' leads to the assumption that integrated expansions are heard as suspending and postponing a possible turn-transition relevance, while exposed ones are not, i.e. they imply and define an intervening possible transition place. This is so because the model assumes that prosody 'lets pass' only its own phrasing, and obliterates syntactic boundaries (the |). As a consequence, prosodic integration would result in one turn-constructive unit (equivalent with any other, non-expanded syntactic structure), but prosodic exposure would result in two turn-constructive units. The unit-internal syntactic boundary | would be irrelevant to turn-taking in the first case, and no turn-taking turbulence would be expected around this place. The prosodically exposed syntactic boundary before the expansion in the second case would occasion all those possible turn-taking disturbances which may occur around possible transition places.

Analysis of the data reveals that these predictions are not borne out and that the filter model is not adequate. Although there is a large group of camouflaged expansions which are not 'problematic' with respect to turn-taking in any way (and are thus congruent with the 'filter model' predictions), next turns (or continuers, indicating recipient passes in turn-taking) are also regularly observed to be produced simultaneously with prosodically fully integrated (camouflaged) expansions, where these do not add a further accent unit to the intonational contour. This, as we have argued in the preceding section, happens particularly in the case of the syntagmatic regressive type (*Ausklammerungen*, see note 10), for instance in the following extracts:

## (34) SEGLERINNEN

— — — — —  
 A: könn ma nomal (.) zusamm sprechn ] [morgn  
 B: ] ja: ]

A: *we can talk about that again* [tomorrow  
 B: ] yes ]

## (35) (=8) BÖRSIANER

— — — — —  
 A: da bin ich nich (.) (h)ni(h)ch so kl(h)einlich ] [dann  
 B: ] ja oke ]

A: *yes yes. I won't be so small-minded about that* [then;  
 B: ] yes o.k. ]

## (36) CHINA 7

— — — — —  
 H: das kannst du auch (.) selber anles ] (.) vorher  
 S: ] mitm Stadtführer ]

H: *you can read that by yourself* (.) [beforehand  
 S: ] with a city guide ]

Contrary to the predictions of the 'filter model', these overlaps are evidence for the relevance of syntax and prosody for the production and interpretation of possible turn-transition places. By overlapping material around the final brace (*sprechen, kleinlich* and *anlesen* in the above examples), participants orient to the completion of the syntactic gestalt represented by this brace as indicative



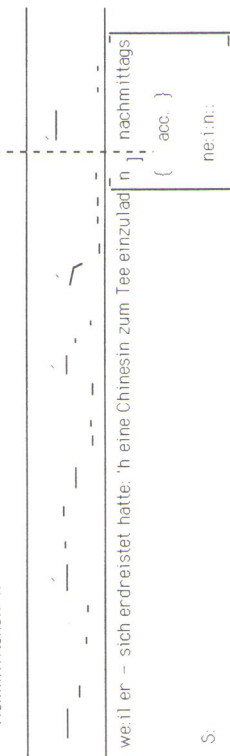
of a possible turn completion. Post-brace material is thereby treated as added to a full syntactic gestalt, and at the same time, to the speaker's turn. (It may be noted that recipients' attention to possible syntactic completion points preceding 'debracing' is also evidence for the continued markedness of this construction, even in spoken German; contrary to the contentions of some grammarians, this construction has not become a regular pattern of spoken German syntax. It still has the status of a syntactic expansion.)

Recipients' monitoring of a possible syntactic completion point and the ensuing simultaneous talk is also related to the issue of rhematic relevance and its contextualization through prosody. By taking over the floor around the first possible syntactic completion point (or by passing it on with a continuer), next speakers display an understanding of the propositional content of the speaker's utterance. Prosodically contextualized non-rhematic, low-relevance expansion matches this: since the recipient has already displayed or signalled understanding, added material has low relevance on the propositional level. Also, if overlap occurs, the reception of the overlapped material may be impeded. A speaker has to take into account that expansions are vulnerable to overlap, even when produced within an intonational contour. By adding low-relevance material without a further accent, a speaker is on the safe side: even if overlap occurs, it will not jeopardize the reception of a central piece of information. By adding high-relevance material, however, s/he runs the risk of the material being 'deleted' by next speaker's talk.<sup>29</sup>

The inherent risk of adding rhematic, high-relevance material in an expansion (with appropriate, non-integrative prosody) leads to a noticeable conversational problem in example (37):

## (37) CHINA 12

H: der eine: 'hh war ma verd'röschn wordn vonner ganzen 'h Hörde: chinesischer Kommilitonen 'h



S: H: one of them [sc., the African students in China] had been beaten up by a whole gang of Chinese fellow students because he - had dared to invite a Chinese woman for tea [a in the afternoon] no

H, the teller of the story about the racist Chinese, runs into trouble here, since the expansion of the main line of her story (Chinese mob beats up a black person who has 'dared to invite a Chinese woman for tea') is focal to the understanding of the gist of the story (i.e. that the invitation was 'in the afternoon', not in the evening, and that there was therefore no violation of decency rules). Recipient S starts her evaluation of the story slightly before the beginning of the expansion (*nachmittags*); although H tries to 'rush through' the possible turn-completion point after *einzuladen* by accelerating on the last (already overlapped) syllable of this word and the first syllable of the following *nachmittags*, this does not prevent S from delivering her emphatic exclamation *ne:i:n:*. Due to its very high onset, the expansion is clearly presented as an intonational contour of its own, thereby displaying its high informational value. Yet it is uttered in competition with the recipient's evaluation of the story, which starts at a point where she has hardly been able to grasp the full relevance of the telling, and which threatens the decodability of the very information that she would need to do so.

Extract (37) exemplifies a speaker's dilemma which, in the specific context of a narrative, is exacerbated by the obligations this genre puts on the recipient. The speaker's dilemma is the following: on the level of turn-taking, it would be appropriate and situationally adequate to package an expansion, if it is to be produced at all,



as low-relevance material as soon as recipient starts simultaneous talk around the possible syntactic completion point. On the level of marking textual relevance, however, an expansion provided with an accent of its own can serve to foreground a phrase in a way that would not have been possible had it been placed within the inner-field of the sentence (cf. the discussion above). In the particular case of the present telling, H has two 'sensational' points to make: one is that the black student invited the Chinese woman for tea (and nothing else); the second is that this invitation was for the afternoon. Had H placed the constituent containing the second information (*nachmittags*) before the verbal complex (*zum Tee einladen*), this double point would have been spoiled and the information about the time of the day downgraded in relevance with respect to the information 'invited for tea'. The dilemma for the speaker then is that there may be contexts in which an expansion would be a very handy instrument for foregrounding information so that two noun phrases have equal rhematic status; but the same technique which is useful on the level of information structuring has its specific risks from the perspective of turn-taking.

What is more, there are structural constraints on the recipient to behave as she does in the present case and thereby thwart her interlocutor's attempts to highlight a second piece of information. These structural constraints are due to the fact that ('sensational') stories should receive an adequate (expressive) evaluation *as soon* as they can be heard as such. In the present instance, this is the case at the possible syntactic completion point which is reached after the teller has produced the first of her two points, i.e. after *einzuladen*. S, being a supportive co-conversationalist, duly makes use of this possible syntactic completion point to deliver her evaluation at this earliest possible moment, starting even slightly before it. This overlap, however, turns out to be a problematic one, threatening to prevent as it does the teller's second sensational revelation from being interactionally successful.

One solution to the problems inherent in high-relevance expansions is to delay them until recipient has finished his or her next activity. In particular, speakers may delay expansions until after continuers; such expansions then have to be contextualized as non-integrative. See example (21), above, and the following (38):

## (38) CHINA 1

H: da=aber=da hab ich also jedenfalls áuch gemerkt,

daß die unheimlich unsicher is über unsere Gefühle ihr gegenüber  
 'hh

S: aha  
 (piano)

H: oder? (.) über unsere Einstellungen  
 (quasi sottovoce)

H: *then but anyway then I also realized that she is terribly unsure about our feelings towards her 'hh*

S: *I see*

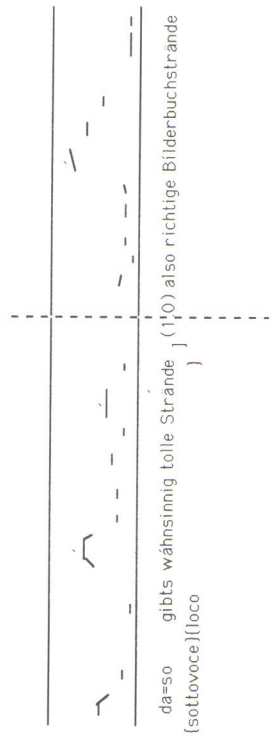
H: *or (.) about our attitudes*

The sequentially different placement of the expansion in (38) reflects a process of constructing conversational meaning which is different from that in (34)–(36), but it also avoids the problems of (37): the speaker elaborates on, repairs, corrects, etc., a piece of information which has already been ratified interactionally by her recipient.<sup>30</sup>

In order to avoid the risk of having high-relevance expansions overlapped, speakers may produce them in an exposed intonational contour and withhold this second contour for some time; in this 'gap', recipients have the possibility of delivering an utterance of their own (as in (38)). If they don't, the expansions will be seen as being due to recipient's delay of a next utterance, possibly indicating some kind of 'problem' with speaker's utterance:



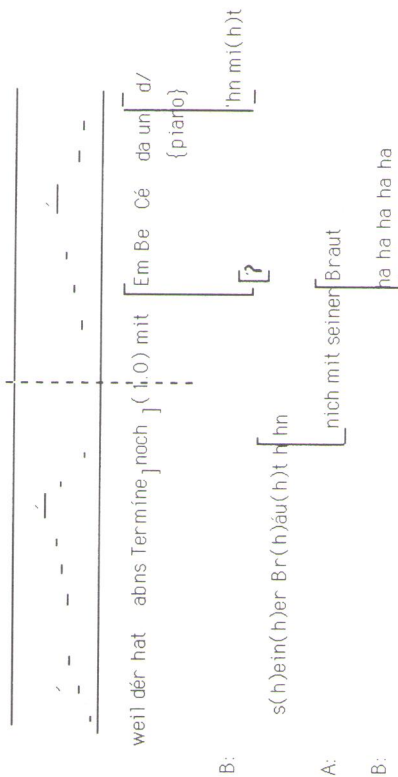
(39) (=26) CHINA 17



there=kind=of are incredibly fantastic beaches (1.0) you know real story-  
book beaches

(40) (=3) SPATEN 5

A: ja der muß früh wieder heim



A: yes he [a co-present colleague of A] has to go home early because he's got appointments this evening still (1.0)

|    |                    |
|----|--------------------|
|    |                    |
| B: | ?                  |
|    | 'bn wi(b)th b(b)is |

girl *b* *bn* *not with his* [girl

B: *ba ha ba ha ba*

The two expansions also *richtige Bilderbuchstrände* and *mit Em Be Cé da* – one a syntactic repair, the other a continuation – are uttered as independent intonational contours. In both cases, the preceding contour is marked as possibly turn-final by a final falling



expansions and exposed high-relevance expansions after an intervening silence, which minimizes the risk of recipient's talk during the expansion itself. More difficult to handle are expansions without such intervening silence and which show pitch movement (i.e. add another accent unit to the contour). In this case, recipient's overlapping of the high-relevance material marked by this prosodic treatment (as in example (37)) cannot be excluded.

## 6 Conclusion

We have tried to outline some of the complex ways in which syntax and prosody contribute to the construction of turns in conversation, focussing on syntactic expansions of an already closed syntactic gestalt. It has been argued that the various types of such expansions can be treated as part of an existing intonational contour or as a new intonational contour, i.e. they can be prosodically 'exposed' or 'camouflaged'. Although these two possibilities are basically available for all types of expansion, there seem to be certain preferences: right dislocations tend to be camouflaged, asyndetic appositionals and repairs in the strictest sense seem to be more often exposed.

On the level of information processing, expansions that contain at least one accent unit have a pragmatic status that is different from camouflaged expansions without further pitch movement: the former present themselves as rhematic, or highly relevant, the latter as (sub)thematic, or of low relevance. This differing pragmatic status and the fact that all expansions are vulnerable to overlap can lead to a conflict. In particular, although there are good pragmatic reasons for foregrounding a constituent by placing it after a possible syntactic completion point and marking it prosodically, the same constituent is in danger of being 'deleted' by simultaneous talk in this position. It has been shown how speakers and recipients can cooperate to achieve a pattern which avoids this conflict. Either the first point of syntactic gestalt closure is interpreted as a 'recognition point' for turn-taking by recipient, after which speaker adds only low-relevance material, contextualized prosodically by the addition of unstressed syllables without further pitch protrusion and deletable by overlap; or, high-relevance (rhematic) material is added as a new intonational contour after a small 'gap', or after a recipient's

continuer, which frames it as a response to the recipient's initial withholding of a next activity.

## Notes

I wish to thank Elizabeth Couper-Kuhlen, Aldo di Luzio, Susanne Günthner, Margret Selting and Susanne Uhmann for their often extensive and helpful comments on previous versions of this chapter.

- 1 See Kendon 1967, 1973; Goodwin 1981; for an early comprehensive treatment see Duncan 1972.
- 2 See Gumperz 1982 as well as various papers in Auer and di Luzio 1992.
- 3 The term is borrowed from Silverstein 1992.
- 4 The notion of a 'sentence' will be avoided; for a discussion of the difficulties associated with this term, see Crystal 1979, Auer 1992.
- 5 See Auer 1992.
- 6 A more detailed discussion on this issue may be found in Auer 1991.
- 7 See the approach to French spoken syntax along these lines in Blanchenveniste, Bilger, Rouget and van den Eynde 1991.
- 8 See Klein 1984.
- 9 Some of these preferences or rules may be found in Heidolph, Flämig and Motsch 1981, 702-764; also see Uhmann 1993 for a discussion.
- 10 Expansions of this type are known as *Ausklammerungen* ('debracing') among German grammarians. 'Debracing' is a well-investigated phenomenon (historically and, somewhat less, synchronically). The interested reader is referred to Lambert 1976 and the more recent work by Zahn 1991 for a more extensive review of research. From an interactional point of view, there is no reason to treat *Ausklammerungen* differently from other types of post-closure expansions (sometimes called *Rechtsheerausstellung*; see Altmann 1981).
- 11 Paradigmatic substitution (replacement) is a syntactic operation and must be strictly separated from the semantic operation performed by it. In particular, it does not imply (error) correction. In fact, 'right dislocations' are never such error corrections, and 'repairs' are so only occasionally. More usually, they are 'elaborations' or 'clarifications'.
- 12 As a syntactically retrospective Type 1 expansion, i.e. an insert before *Hülse, rund* would have to agree with the noun in case and gender ((*eine*) *runde*). Pragmatically it would do the same job, but its syntactic status would be quite different.
- 13 *Des* is an allegro contraction of *das ist*. The whole construction is a syntactic pivot (sometimes called *apo koinu*).
- 14 See Local and Kelly 1986, Local 1992, Local, Wells and Sebba 1985, and in particular Local, Kelly and Wells 1986.
- 15 According to Selting, these five types are frequent and prototypical, but the list is not exhaustive. In fact, the contours found in the data used for



the present investigation show a wider variety of global contours than the five types mentioned.

- 16 Examples in this paragraph are actually encountered intonation contours taken from conversational transcripts. Their segmental basis has been left out so that syntax and semantics will not bias an appreciation of their prosodic shape. The melody may be overlaid by any sequence of syllables, each dot or line conforming to a shorter or longer syllable. (Length iconically represents phonetic duration.) Pitch movements were transcribed auditorily, but checked instrumentally for all transcripts in the extract series 'CHINA'. (For measurement, the Kay Elemetrics model 5500 Signal Analysis Workstation at the Phonogrammarchiv of the University of Zürich was used. My thanks to Elizabeth Couper-Kuhlen for providing me access to this laboratory.)

The scale implicit in this kind of transcription does not correspond directly to numerical fundamental frequency values, but only via a logarithmic transformation. It should be read rather like music, the musical intervals being much closer to human perception of pitch change than differences in Hz values.

- 17 Expansions of prosodic gestalts (intonational contours) are usually of the prospective, syntagmatic type. Retrospective paradigmatic expansions, i.e. repairs on previous contours, may occur as well but seem to be rare.

- 18 Future comparative research will have to decide if (some) varieties of German and English show different prosodic structure with respect to the status of pitch jumps on non-accented syllables in the immediate context of accented ones. Most analyses of English intonation suggest that unaccented syllables within a contour usually follow on from a prior accented syllable; i.e. pitch jumps such as in example (15) are rare. For the German data used in the present study (which are mainly from southern Germany), this does not seem to be the case.

- 19 On the contextualizing functions of tempo/speech rate cf. Uhmman 1992, Barden 1991 and Couper-Kuhlen 1992.

- 20 See Couper-Kuhlen 1993; Auer, Couper-Kuhlen and Müller (to appear).

- 21 A rhythmic pattern is said to be isochronous when at least three stresses (phonetic prominences) follow each other at a pace even enough to be perceived as regular.

- 22 E.g. Nespor and Vogel 1986.

- 23 In this and the following figures, prosodic parameters are placed in curly brackets, with *p* = *piano*, *acc* = *accelerando*, *loco* = return to normal, etc.

- 24 Some analysts of spoken language (e.g. Zimmermann 1964) have interpreted right dislocations as a particularly efficient way of negotiating the fit between speaker's amount of verbalization and recipient's background knowledge. The argument is that by using a pronoun first, speakers can test out if shared background knowledge alone is sufficient.

cient for the recipient in order to achieve propositional understanding, with the result that the dislocated phrase need not be uttered if recipient signals such understanding beforehand. An interactive analysis of right dislocations as recipient-initiated repairs does not seem to be adequate for the German data investigated here, where prosodically independent right dislocations (in the shape of a new contour) are the exception rather than the rule. The data present evidence, then, for a certain degree of grammaticalization of such constructions in present-day spoken German.

- 25 It will be noted that in (26), insertion of the 'repair marker' also encourages the prosodic separation of the two contours.

- 26 In this context, the explanation given by Uhmman 1993 for the occurrence of expansions in spoken German is of interest. She argues that accented expansions always have 'narrow focus' while the same constituent placed in the central field of a German sentence would be open to a reading of either 'narrow' or, more likely, 'wide focus'. In this sense, putting a stressed constituent in the post-field of a sentence would serve to exclude the latter interpretation. However, wide and narrow focus for the interpretation of a constituent in the central field are alternatives only as long as there is just one 'sentence stress' in the contour. Thus, the utterance

*eine Chinesin zum Tee einzuladen, nachmittags*

has two foci, the second of which is identical with the expansion. The alternative version

*eine Chinesin nachmittags zum Tee einzuladen*

is indeed ambiguous between a narrow focus (*zum Tee*) and a wide one (presumably the whole subordinated clause). However, if both *nachmittags* and *Tee* receive a pitch accent, as is perfectly possible in spoken German, both are independent rhematic pieces of information just as in the expanded version, and each of them defines one focus constituent:

*eine Chinesin nachmittags zum Tee einzuladen*

Thus, Uhmman's explanation rests on the questionable assumption that a prosodic contour may contain only one 'sentence accent'.

- 27 I believe that the so-called progredient intonation contours of German (slightly bent upward) cannot be differentiated unambiguously from 'questioning intonations', i.e. upward contours implying turn completion, without taking into account syntax and content. (In fact, I know from syntax that, in (17), a question is implied, while the upward contours in (15) and (16) are not turn-final. From the contours alone, however, no such information can be taken.) It seems that only level and base-line fall contours are good indicators for turn (in)completion.



- 28 See Cutler and Pearson 1986, who show that intonation alone is not sufficient to cue turn completion in English discourse.
- 29 The recurrence of simultaneous talk around syntactic completions postponed by syntactic expansions may also shed some light on the definition of 'recognition points'. (In Jefferson's terms, the transition between the 'old' syntactic structure and its expansion is a 'recognitional terminal overlap', see Jefferson 1980.) Close inspection of the internal grammatical and prosodic context of such recognition points reveals that one structurally defined locus for which this categorization is justified is precisely that of a possible syntactic (but not prosodic) completion.
- 30 Some of the interactional details of such 'delayed' repairs or expansions are also investigated in Schegloff 1992.
- 31 In (40), the final adverbial *noch* is itself an expansion of the prosodically integrated type (*Ausklammerung*).
- 32 It will be noted that the silence around the first transition-relevant gestalt closure (a 'gap' in the terminology of Sacks, Schegloff and Jefferson 1974) is not transformed into a 'pause' (i.e. an intra-turn event) by the expansion, as has been claimed occasionally in the literature, at least not into a 'pause' as usually produced within a turn-constructive unit (e.g. Bergmann 1982). Since the passage before the expansion shows none of the features preparing a holding silence (see above), the transition relevance of such a silence remains visible.

## References

- Altmann, H. 1981. *Formen der 'Herausstellung' im Deutschen*. Tübingen: Niemeyer.
- Auer, P. 1991. Vom Ende deutscher Sätze. *Zeitschrift für Germanistische Linguistik*, 19(2): 139–157.
1992. The neverending sentence: rightward expansion in spoken language. In M. Kontra and T. Váradi (eds.) *Studies in Spoken Languages: English, German, Finno-Ugric*. Budapest: Linguistics Institute/Hungarian Academy of Sciences, pp. 41–59.
- Auer, P. and A. di Luzio (eds.) 1992. *The Contextualization of Language*. Amsterdam and Philadelphia: Benjamins.
- Auer, P., E. Couper-Kuhlen and F. Müller (to appear). *Language in Time: the rhythm and tempo of spoken interaction*.
- Barden, B. 1991. Sprechgeschwindigkeit und thematische Struktur. *KonRl Working Paper* 15, Dept. of Linguistics, University of Konstanz.
- Bergmann, J. 1982. Schweigephase im Gespräch. Aspekte ihrer interaktiven Organisation. In H. G. Soeffner (ed.) *Beiträge zu einer empirischen Sprachsoziologie*. Tübingen: Narr, pp. 143–184.
- Blanche-Benveniste, C., M. Bilger, C. Rouget and K. van den Eynde 1991. *Le français parlé*. Paris: Centre National de la Recherche Scientifique.

- Couper-Kuhlen, E. 1992. Contextualizing discourse: the prosody of interactive repair. In P. Auer and A. di Luzio 1992, pp. 337–364.
1993. *English Speech Rhythm. Form and function in everyday verbal interaction*. Amsterdam and Philadelphia: Benjamins.
- Crystal, D. 1979. Neglected grammatical factors in conversational English. In S. Greenbaum, G. Leech and J. Svartvik (eds.) *Studies in English Linguistics*. London: Longman, pp. 153–166.
- Cutler, A. and M. Pearson 1986. On the analysis of prosodic turn-taking cues. In C. Johns-Lewis (ed.) *Intonation in Discourse*. San Diego: College Hill Press Inc., pp. 130–155.
- Duncan, S. 1972. Some signals and rules for taking speaking turns in conversation. *Journal of Personality and Social Psychology*, 23(2): 283–292.
- French, P. 1988. Word final /r/ in a Northern English accent: an interactional account of variable production. In P. Auer and A. di Luzio (eds.) *Variation and Convergence*. Berlin: de Gruyter, pp. 124–132.
- Fries, N. 1987. Zu einer Randgrammatik des Deutschen. In J. Meibauer (ed.) *Satzmodus zwischen Grammatik und Pragmatik*. Tübingen: Niemeyer, pp. 75–95.
- Goodwin, C. 1981. *Conversational Organization*. New York: Academic Press.
- Grosjean, F. and C. Hirt (in press). Using prosody to predict the end of sentences in English and French: Normal and brain-damaged subjects. *Language and Cognitive Processes*.
- Gumperz, J. J. 1982. *Discourse Strategies*. Cambridge University Press.
- Heidolph, K. E., W. Flämig and W. Motsch (eds.) 1981. *Grundzüge einer deutschen Grammatik*. Berlin: Akademie-Verlag.
- Jefferson, G. 1980. Notes on some orderlinesses of overlap onset. In V. d'Urso and P. Leonardi (eds.) *Discourse Analysis and Natural Rhetorics*. Padova: Cleup Editore, pp. 11–38.
- Kendon, A. 1967. Some functions of gaze-direction in social interaction. *Acta Psychologica*, 26: 22–63.
1973. The role of visible behavior in the organization of face-to-face interaction. In M. v. Cranach and I. Vine (eds.) *Social Communication and Movement. Studies of interaction and expression in man and chimpanzee*. London and New York: Academic Press, pp. 29–74.
- Klein, W. 1984. Bühler Ellipse. In C. F. Graumann and T. Herrmann (eds.) *Karl Buhlers Axiomatik*. Frankfurt: Klostermann, pp. 117–141.
- Lambert, P. 1976. *Ausklammerung in Modern Standard German*. Hamburg: Buske.
- Local, J. K. 1992. Continuing and restarting. In P. Auer and A. di Luzio 1992, pp. 272–296.
- Local, J. K. and J. Kelly 1986. Projection and 'silences': notes on phonetic and conversational structure. *Human Studies*, 9: 185–204.



- Local, J. K., J. Kelly and W. H. G. Wells 1986. Towards a phonology of conversation: turn-taking in Tyneside English. *Journal of Linguistics*, 22: 411–437.
- Local, J. K., W. H. G. Wells and M. Sebba 1985. Phonology for conversation: phonetic aspects of turn delimitation in London Jamaican. *Journal of Pragmatics*, 9: 309–330.
- Nespor, M. and I. Vogel 1986. *Prosodic Phonology*. Dordrecht: Foris.
- Sacks, H., E. A. Schegloff and G. Jefferson 1974. A simplest systematics for the organization of turn-taking for conversation. *Language*, 50: 696–735. Revised and enlarged version in J. Schenkein (ed.) 1978, *Studies in the Organization of Conversational Interaction*. New York: Academic Press, pp. 7–55.
- Schegloff, E. A. 1992. Repair after next turn. The last structurally provided defence of intersubjectivity in conversation. *American Journal of Sociology*, 97: 1295–1345.
- Selting, M. 1995. *Prosodie im Gespräch. Aspekte einer interaktionalen Phonologie der Konversation*. Tübingen: Niemeyer.
- Silverstein, M. 1992. The indeterminacy of contextualization: when is enough enough? In P. Auer and A. di Luzio 1992, pp. 55–76.
- Uhmann, S. 1992. Contextualizing relevance: on some forms and functions of speech rate changes in everyday conversation. In P. Auer and A. di Luzio 1992, pp. 297–336.
1993. Das Mittelfeld im Gespräch. In M. Reis (ed.) *Wortstellung und Informationsstruktur*. Tübingen: Niemeyer, pp. 313–354.
- Zahn, G. 1991. *Beobachtungen zur Ausklammerung und Nachfeldbesetzung in Gesprochenem Deutsch*. Erlangen: Palm & Enke.
- Zimmermann, H. 1964. *Zu einer Typologie des spontanen Gesprächs*. Bern: Francke.

## Ending up in Ulster: prosody and turn-taking in English dialects

BILL WELLS AND SUE PEPPE

### 1 Introduction

Although great strides have been made recently in the phonetic analysis of prosodic features as a result of technological developments, the advances in phonological analysis have arguably been less impressive, at least with respect to the phonology of intonation systems. This is evident if one considers a traditional concern of phonologists: the comparison of related languages or dialects. A great deal of work has been done on comparative phonology at the segmental level, and a good deal also on comparing lexical tone, stress and accent, yet there is strikingly little published research that systematically compares the intonational systems of related languages, dialects or accents. For example, in John Wells' compendious study of English accents, intonation is given little space (Wells 1982). Cruttenden (1986) notes that, although there have been scattered individual studies of different accents, these have not been used as a basis for systematic comparative work. This is somewhat surprising, given the increasing recognition, within the world of speech technology as well as more traditional applications of linguistics, that prosodic features of intonation are centrally involved in the comprehension of speech and the management of conversational interaction. Surely the ability to handle dialectal prosodic variation will be a *sine qua non* of a successful speech recognition system, and, one would hope, of an acceptable speech synthesis system too.

This omission is not happenstance, but derives from a general unwillingness on the part of linguists to treat 'intonation' with due phonological respect. In particular, there has been a failure to