

## **Units of interaction: ‘Intonation phrases’ or ‘turn constructional phrases’?**

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### **Abstract**

This paper tests the usefulness of the category ‘intonation phrase’ for the analysis of natural conversation. It asks whether the intonation phrase is a relevant unit for participants, and if so, whether it is a prosodic, or indeed an interactional category. The data show that while participants do divide their speech into intonation phrase-like chunks, these chunks are not defined by intonation alone. Instead, participants draw on a variety of interactional modes in their production of speech chunks, which are defined here as building blocks for turns and TCUs. Chunks are shown to be employed as interactional units below the turn, and potentially below the Turn Constructional Unit; therefore the term ‘Turn Constructional Phrase’ is suggested.

### **1. Introduction**

Research on intonation traditionally draws on the notion of a phonological unit that is defined by a coherent pitch movement and/or accentual pattern. This unit has been referred to as tone unit (Crystal 1969; Brazil 1997), tone group (Halliday 1967), intonation-group (Cruttenden 1997), intonation phrase (Wells 2006), intonation unit (Du Bois 1991), rhythm unit (Pike 1945), and breath group (Liebermann 1967). All terms refer to the basic notion of a linguistic unit defined by supra-segmental aspects of speech. To give a general idea of the intonation phrase we could say that it is a spate of talk delivered as one recognisable overall pitch movement. In a standard textbook scenario this pitch movement would contain a pitch accent near the beginning, and another, typically more prominent pitch accent on the final stressed syllable; it would start with a comparatively high pitch onset, which would be followed by gradual declination in overall pitch register and loudness; the last syllable would be lengthened; and the whole phrase would be followed by a brief pause (for a more detailed discussion of intonation phrase structure see section 2). This chapter represents an attempt to test the usefulness of the category of the intonation phrase for the analysis of natural conversation. Before this issue is addressed the phenomenon itself is introduced below with reference to some previous literature.

### **2. The intonation phrase: An introduction**

Among the distinctions that can be made between different definitions of the intonation phrase, one is that between the notion of a holistic intonational phenomenon, and that of a collection of smaller phonological events, such as pitch accents. The first is the perspective adopted by the so-called British school of intonation; the second is that employed in the field of autosegmental-metrical phonology. In this chapter we are mainly interested in the first approach, although our main conclusions hold for both. For reviews of the intonation phrase in autosegmental-metrical phonology see, for example, Ladd (1996:235-251) and Grice (2006).

As many publications in the British school of intonation are aimed not only at linguists, but also at learners of English, a rather prescriptive approach is prevalent in the majority of them (cf. Wells 2006). One of several exceptions is the work of Cruttenden (1997), whose definition of the “intonation-group” is therefore a good example. His internal criteria for defining a stretch of speech as an intonation-group include firstly the existence of at least one stressed syllable; and secondly pitch movement on, to, or from that stressed syllable. Thus, minimally, an intonation-group could consist of a monosyllabic word which is delivered, for example, as a fall from a high pitch onset. External criteria for identifying intonation-groups are those that define potential boundaries. According to Cruttenden, one such criterion is a potential pause following an intonation-group; however, according to Cruttenden, pauses are not obligatory boundary markers and may also occur within a group. Other external criteria include anacrusis, that is, fast delivery of unstressed syllables before the first pitch accent; lengthening of the final syllable; and a potential change in the pitch direction of any unstressed syllables from one intonation-group to the next. Cruttenden concedes, however, that cases remain in which it is difficult to decide where one intonation-group ends, and another one begins, particularly in the analysis of natural conversation (1997:29). Similar definitions of the intonation phrase are formulated by other phonologists of the British school, such as Crystal (1969), Halliday (1967, 1970) and Wells (2006).<sup>1</sup>

Students of naturally occurring conversation have been concerned with intonation phrases primarily from a perspective of transcription, rather than from one of phonological structure. Du Bois (1991) and Du Bois et al. (1993) put forward the transcript notation known as Discourse Transcription (DT), with the “intonation unit” as one of its central categories. Du Bois et al. (1993:47) define it as “a stretch of speech uttered under a single coherent intonation contour”, with potential initial cues of pausing and an upward shift in overall pitch, and a potential final cue of syllable lengthening. Similar to the phonological literature, where form and placement of the main accent – the nucleus – take centre stage, researchers of natural talk have focused primarily on the pitch movement at the end of the intonation phrase. However, discourse analysts who directly address the intonation phrase typically have an interest in discourse function, rather than phonological form. The final pitch movement of an intonation phrase is interpreted in terms of whether it projects *completion* or *continuation* (of a sentence, an idea, or a turn-at-talk). Du Bois et al. (1993:52-53) call this “transitional continuity”. It is marked by transcript notations that refer to functional categories such as “continuing”, “final”, and “appeal”. No prosodic characteristics are specified for these categories. While the authors go on to say that “each category is more or less consistently realized by a specific form” (Du Bois et al. 1993:53), they give preference to a purely functional approach in order to be able to generalise across languages.

Chafe (1980, 1987, 1988, 1993), too, is interested in intonation phrases from a functional perspective. He makes a universalist claim for the function of intonation contours, vaguely defined as falling or non-falling, as signaling sentence completion or incompleteness.<sup>2</sup> Similarly, Gumperz (1993) favours a “basically functional perspective” on transcription. His prosodically defined “informational phrases” are delimited by boundary markers such as pauses and certain unit-final pitch movements, all of which are characterized from the outset as fulfilling certain pragmatic functions, such as signaling definiteness, or uncertainty.

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<sup>1</sup> Reviews of the British school of intonation can be found in Gibbon (1976), Crystal (1969) and Couper-Kuhlen (1986).

<sup>2</sup> In contrast, Szczepek Reed (2004) shows that almost any pitch contour which is part of the overall intonational repertoire of English may co-occur with turn-finality, depending on interactional context.

In their outline of a transcription system for conversation analysis (Gesprächsanalytisches Transkriptionssystem, GAT), Selting et al. (1998) employ the notion of “phrasing units” (“Phrasierungseinheiten”), the boundaries of which are defined by prosodic, syntactic and semantic closure (1998: 101); however, the main criterion is a prosodic one. As in the above approaches, phrase-final punctuation marks are used which, in contrast to the approaches described above, refer to pitch movements, rather than functional categories.

All discourse related approaches have in common a primary interest in how intonation phrases *end*. This interest is due to the role ascribed to prosody for turn-taking<sup>3</sup> and narrative structure<sup>4</sup>. Investigations of these relationships routinely link the prosodic form of phrase endings to notions of continuation and closure.<sup>5</sup> It is therefore possible to argue that for most, if not all discourse related approaches, an interest in intonation phrases as a holistic category, while expressed, takes second place behind a primary interest in phrase *boundaries*, and their prosodic form.

This priority is also present in the most recent investigation into intonation phrases from an interactional linguistic perspective, and the only one not motivated primarily by an interest in transcription. Barth-Weingarten (2007a) asks, much like this chapter does, whether “intonation units” are an aspect of everyday interaction. Barth-Weingarten starts from the assumption that if intonation units exist in natural talk, then the way in which participants design intonation unit endings prosodically is likely to bear similarities to the prosodic design of turn endings. She finds that prosodic strategies that mark turn endings, such as final pitch peaks or valleys, final syllable lengthening and final diminuendo, also occur at the end of potential turn-internal intonation units, albeit in a reduced form. This significant finding is potential first evidence that participants do indeed structure their talk by orienting to a speech unit of intonation phrase-like length and design.

As this section has shown, research from two very different fields of language study employs the notion of a prosodically defined unit. While phonological definitions of the intonation phrase go into extensive detail regarding its phonological structure, discourse oriented definitions are more interested in the forms and functions of its boundaries, and its advantages for transcription. In both approaches, the intonation phrase is very much an analyst’s category. With the exception of Barth-Weingarten 2007a, no attempts have been made so far to verify that it is also a relevant category for conversational participants. The following sections represent one step in the direction of such an attempt. The questions raised and the potential answers suggested are in no way intended to provide final solutions for the problematic interface between prosodic and sequential boundaries, and/or units. Instead, by attempting to present natural language from within a purely descriptive and observational framework they are intended simply to raise awareness of the issues arising from applying a theoretically defined category to talk-in-interaction with its continuously unfolding clusters of inter-reliant features.

With this in mind, the sections below address the following questions: Is the intonation phrase a relevant category for conversational participants themselves; that is, can we find empirical evidence of participant orientation to intonation phrases, both in terms of turn production and turn reception? If so, is it useful from a conversation analytic perspective to regard intonation phrases as an independently prosodic unit? Or are they part of a broader

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<sup>3</sup> Cf. Local et al., 1985; Local et al., 1986; Selting, 1996; Wells and Peppè, 1996; Schegloff (1998), Wells & Macfarlane, 1998; Fox, 2001; Caspers, 2003; Szczepek Reed, 2004.

<sup>4</sup> Cf. Chafe (1980, 1987, 1988, 1993).

<sup>5</sup> Cf. Schegloff (1998), Fox (2001), Wells & Macfarlane (1998).

chunking mechanism that delimitates not only prosodic units, but also, among others, interactional, sequential and syntactic ones?

### 3. Participant orientation to intonation phrases

The vast majority of research on intonation phrases to date involves linguistic introspection, or, if spoken data are used, is based on read-aloud sentences such as those presented in extract (1). It is therefore legitimate to ask whether intonation phrases actually exist in spontaneous talk. However, while participants in naturally-occurring talk may well deliver their speech in intonation phrase-like bursts of speech, it cannot be assumed from the outset that those bursts a) comply with phonological rules of intonation phrase structure, and b) are best described in terms of intonation at all. For these reasons we initially refer to any short bursts of talk below as ‘chunks’, thus avoiding their immediate classification in terms of prosody (by using the term ‘intonation phrase’) or indeed syntax (by using the terms ‘clause’ or ‘sentence’).

In the analyses of extracts from naturally-occurring talk below we first look for evidence that participants orient to speech chunks as holistic entities, and subsequently ask whether those chunks are indeed oriented to as intonation phrases. In approaching this issue we must keep in mind two participant perspectives: that of *production*, i.e. currently speaking participants’ use of chunks and intonation phrases as elements of their turns; and that of reception, that is, next speakers’ treatment of previous stretches of talk as chunks and intonation phrases. In the following we will look at these two perspectives in turn.

#### 3.1 Orientation to speech chunks by currently speaking participants

The first perspective involves a close look at how utterances in naturally-occurring talk are structured by currently speaking participants. Listening to spontaneous speech soon reveals that speakers produce talk on a chunk-by-chunk basis, even if determining where these chunks begin and end is not always straightforward. See, for example, extract (1) below. The example is taken from the Santa Barbara Corpus of Spoken American English. All data for this study have been transcribed according to an adapted version of the GAT transcription system devised by Selting et al. (1998); the conversation is a face-to-face interaction between Lajuan and Cam.<sup>6</sup> Each line in the transcript refers to one holistic chunk.

#### (1) SBC044 He Knows

- 1 Lajuan: i lIstened to my sIster when my nEphew;  
 2(0.3)  
 3 .h started COLLege how she was sAY:ing;  
 4 .hh SHE filled out all o’ his applicAtions for where he was  
     gO:ing: an’;  
 5 .hh SHE did All of these THINGS when hE applied for a  
     SCHOLarship or whatEver -  
 6 .hh SHE filled out Everything and I’m ll:ke;  
 7(0.39)  
 8 hh. I did it by my↑SE:LF;  
 9(0.34)

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<sup>6</sup> The lack of video recordings restricts our analysis to the verbal and prosodic domains. Hence this paper cannot explore the visual cues for participants’ phrasing of discourse, which remain a significant topic for future research.

10 .hh you READ the fOrm;  
 11 (0.14)  
 12 And you flll it OUT.  
 13 (0.41)  
 14 Cam: [well -  
 15 Lajuan: [N:O one dId it for ME:.,  
 16 (0.51)  
 17 .hh you knOw an' I was vEry,  
 18 (0.47)  
 19 mUch -  
 20 (0.39)  
 21 whatEver i NEEDED;  
 22 (0.53)  
 23 .hh i i gOt my mOney from my FA:ther,  
 24 (0.12)  
 25 he paid for ↑SCHOO:L,  
 26 (0.47)  
 27 .hh but -  
 28 (0.13)  
 29 I did everything on my ↑OWN.

In this extract Lajuan can be observed to deliver one chunk of speech at a time. Speech chunks are divided either by pauses (lines 11, 13, 18, 20, 24, 28), in-breaths (lines 4, 5, 6) or both (lines 2-3, 7-10, 16-17, 22-23, 26-27). In some cases, boundaries between chunks may not be what our expectations of individual interactional modes would suggest. For example, the chunk at line 3, *started college how she was saying* is not a syntactic construction; indeed, it spans the end of one construction, *my nephew started college*, and the beginning of another, *how she was saying she filled out all of his applications*.

More interestingly for us, not all chunks comply with established phonological rules for intonation phrases. In the first chunk *i listened to my sister when my nephew* (line 1) there is no single pitch accent that stands out as dominant. It is therefore not possible to determine a nucleus. Similarly, lines 5, 15 and 17 contain several pitch accents of the same prominence.<sup>7</sup> Furthermore, the chunk at line 19, *much*, separated from the preceding chunk by a pause (lines 17-18), could be heard by a phonologically trained analyst as continuing a previous intonation phrase: *you know an' i was very (0.47) much*. The final word of the chunk at line 17, *very*, contains slightly rising pitch, whereas *much* remains at the pitch level reached by this rising movement. Thus, *much* carries no independent pitch movement. With regard to phonological intonation phrase structure it is therefore not a candidate for an independent intonation phrase. It is, however, observably separated from the previous chunk by a pause, which is not defined by glottal closure (see below). This shows that the speaker himself is content to implement some degree of separation between the two chunks.<sup>8</sup> While pauses and inbreaths are observable physical actions performed by the speaking participant, the integration of one pitch level into a previous pitch pattern can only be analysed as such in

<sup>7</sup> This is inconsistent only with the British school. Most autosegmental-metrical approaches do not stipulate the primacy of one pitch accent.

<sup>8</sup> *much* is of course also syntactically integrated into the previous chunk. However, this is not a valid criterion for intonation phrase boundaries, as individual words can form independent intonation phrases.

terms of a separate phonological theory. It is therefore an interpretation of the data, rather than an empirical observation. Keeping in mind the conversation analytic aim of a participant perspective and an empirical description of participant actions it is therefore possible to argue that activities such as pausing and breathing are more suitable indicators of speech chunk boundaries than theoretical concepts such as integration and non-integration of pitch movements.

However, as the above example shows, the most frequent resource for chunking is simultaneous patterning of co-occurring interactional modes. Most speech chunks are units in more mode than one: they may be words, clauses, semantico-pragmatic concepts, gestures, gazes, and, of course, intonation phrases, to name only the most obvious. It may be that only in cases where one or more of these modes are not clearly recognizable as a single pattern, as in the case of syntactically incomplete clauses, pauses and inbreaths (and possibly other physical actions) become predominantly relevant as cues for participants' chunking practices. In answer to our question regarding speaking participants' orientation to chunking and intonation phrases we can say that participants appear to regularly divide their talk into shorter chunks. A phonological definition of those chunks as intonation phrases is not always successful.

### 3.2 Orientation to speech chunks by next participants

Next participants' treatment of previously speaking participants' chunks as chunks can be explored by looking for next actions, such as recipient responses, next turn onsets, repair initiations and non-linguistic activities such as coughs and in-breaths at places of potential boundaries. Their treatment of chunks as intonation phrases is much more difficult to show, as we will see below.

The following extract from a radio program broadcast on KSTP Minneapolis and recorded at the Minnesota State Fair during the 1980-ies, shows next speaker actions placed after chunks produced by a first speaker. In (2), interviewee Cathy has won the prize for 'Best Pickle', and is explaining to radio host Joe what makes a winning pickle.

#### (2) KSTP Minnesota state fare

- 1 Cathy: a wInning pIckle is one that is CRI:SP,  
 2 Joe: RIGHT,  
 3 Cathy: VERy flAVourful.,  
 4 Joe: alRIGHT,  
 5 Cathy: .hh and SNAPS when you to-  
 6 (0.28)  
 7 bIte INto it?  
 8 Joe: uHU,  
 9 (0.25)  
 10 Cathy: .hh and is ↑JU:ST EXcellent.

Joe's reciprocity displays at lines 2 and 4 occur after chunks from Cathy that show some features of intonation phrases (final lengthening, coherent overall pitch contour), alongside syntactic and semantico-pragmatic boundaries. In addition, Cathy's suspension of turn-continuation after each chunk shows her to be designing them as separate entities. However, lines 5-8 show that suspension of immediate continuation is not always treated by Joe as a location for reciprocity display: as Cathy aborts her talk at line 5 by breaking off mid-word and keeping her glottis closed, the resulting pause is treated by both participants as an opportunity for self-repair (Schegloff et al. 1977). Following Local and Kelly (1986), who

differentiate between pauses with or without glottal closure, one could argue in this case that the talk at lines 5-7 is treated by both participants as one chunk, which is being repaired in the production process: Cathy's glottal closure shows ongoing phonetic activity rather than 'pausing' from speaking, while Joe's withholding of response tokens during a turn in which he regularly produces them shows his possible orientation to the lack of a chunk-boundary. Regarding intonation phrase structure, Cathy's talk at line 7 could stand alone as an independent intonation phrase, whereas her talk at line 5 could be classed as an aborted one. However, an interpretation of the whole utterance as one intonation phrase is not possible due to the presence of nucleus accents in each (*snaps*, line 5; *in-*, line 7).

While an observation of next participants' treatment of chunks as chunks can be relatively straightforward, their treatment of chunks as intonation phrases is much more difficult to investigate. In order to show that a next participant treats a chunk specifically as an intonation phrase we would require examples in which next actions are placed after bursts of talk that are not characterised by any linguistic or kinesic units and boundaries other than those postulated for intonation phrases. Proof of such independence would be notoriously elusive, as kinesic boundary markers such as for example hand or foot gestures may escape the camera, and thus the analyst's view. The closest research has come to proving the existence of intonation phrases as an independent prosodic category is in experiments on listeners' agreement on intonation phrase boundaries in de-lexicalised (i.e. unintelligible) spoken language data (de Pijper & Sanderman 1995; Sanderman 1996). Interestingly, this research seems to suggest that inter-listener agreement is most strongly influenced by the presence and length of pauses; other influences being different kinds of pitch discontinuities. However, in contrast to experimental methods, research on naturally-occurring talk would find it impossible to control all relevant parameters, and it is unlikely that these results could be verified for language and language perception during spontaneous conversation.<sup>9</sup>

In answer to our second research question which asked whether intonation phrases should be regarded as independently prosodic categories we can conclude that this is most probably not useful. Instead, the practice of chunking seems to be oriented to by participants as an interactional strategy, employed for the structuring and sequencing of turns. This is consistent with a perspective on the interactional and emergent reality of natural talk in situ. If we take seriously the notion of talk as a multimodal activity it is unlikely that we will find individual modes handled by participants independently of others, as interactants continuously produce and receive clusters of interactional practices for their accomplishment of conversational actions.

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<sup>9</sup> Cf. Hughes & Szczepek Reed (forthcoming, 2010) for an evaluation of experimental methods for research on naturally-occurring talk.

### 3.4 Chunks, turns and TCUs

Orientation by next participants to boundary locations shows in the first instance that some sort of *sequential* boundary has been reached, rather than a specifically prosodic, syntactic, or pragmatic one. And since that sequential boundary is not always treated as a potential turn completion point, we can say that in those cases participants orient to boundaries other than transition relevance places (TRPs). Following on from this, we can ask whether these boundaries actually delimitate some form of interactional *unit*. If so, that unit would have to be described as one below the turn-at-talk, as clearly some of the stretches of talk designed and treated as chunks by participants do not have the potential to be stand-alone turns (e.g. *I listened to my sister when my nephew*, (1), line 1). Furthermore, if chunks are units, they may even have to be described as units below the TCU, depending on our definition of TCUs. For Schegloff (1996), TCUs are potentially turns, and are always followed by a TRP:

These units *can* constitute possibly complete turns; on their possible completion, transition to a next speaker becomes *relevant* (although not necessarily accomplished). (Schegloff 1996:55, emphasis in the original)

In contrast, Selting (2000) argues that only some TCUs make turn transition relevant. Her analysis of syntactic and prosodic resources for turn construction leads her to distinguish between TCUs that are followed by a transition relevance place (TRP), and those that are not. It is not entirely clear whether Selting's notion of turn-internal TCUs overlaps entirely with the chunks of speech we encounter in the example above, or whether they are indeed more global units. However, in making this distinction, Selting is able to retain a definition of the TCU as the smallest interactional unit:

TCUs must be conceived of as the smallest interactionally relevant complete linguistic units in their given context. They end in TRPs, unless particular linguistic and interactional resources are used in order to project and postpone TRPs to the end of larger turns. (Selting 2000:512)

Selting's argument is closely related to the suggestion made by Lerner (1991; 1996), who introduces the notion of 'compound turn constructional unit formats'. They are two-fold structures consisting of a preliminary and a final component, as in the case of an *if X then Y* format. TRPs are located only at the completion of final components, while preliminary component completions allow recipients to project an upcoming final component, and thus an upcoming TRP. Thus, Lerner's preliminary TCU components are interactional units below the turn, which are not delimited by TRPs.

Data such as those above show that the boundaries which participants design through the use of various interactional resources, and which next participants may orient to through recipient responses are clearly boundaries other than TRPs. Whether they delimitate some kind of 'unit'; and whether those units are TCUs, or smaller units, is open to discussion.

However, what is most relevant from a conversation analytic perspective is participants' chunking of talk, rather than their phrasing in the phonological domain. Rather than using a term such as 'intonation phrase', it is therefore more appropriate to use a term such as 'chunk', 'spate', or, given the possibility that chunks may be used as building blocks for turns and potentially even TCUs, a term such as 'turn constructional phrase' (TCP).

#### 4. Conclusion

As talk-in-interaction unfolds on a moment-by-moment basis, participants routinely divide their own speech into chunks, and orient to others' chunks as entities with beginnings and ends. As a result, emerging turns-at-talk are produced step by step, chunk by chunk. However, defining chunks in terms of any single linguistic category is not straightforward. Firstly, chunks may well be intonation phrases, as well as syntactic clauses, as well as sequential increments, etc. Secondly, the data frequently show instances of unconventional chunking in separate modes (incomplete or ill-formed syntactic constructions; aborted intonation phrases; intonation phrases with more than one primary pitch accent). Thus, the thought process presented here leads us to conclude that it is not helpful to define speech chunks as intonation phrases, if one is interested in the analysis of talk-in-interaction. While from a phonological perspective it may be appropriate to analyse isolated stretches of spoken language, and identify patterns along the lines of tonality, tonicity and tone, in naturally-occurring conversation these patterns interact with such a wide variety of other interactional modes that a separate analysis of them as *intonation* phrases does not reflect the reality of language produced for talk-in-interaction.<sup>10</sup>

Furthermore, a transcription practice which divides talk into 'intonation phrases' is problematic, because the kinds of chunks that are oriented to by participants are not defined purely on intonational, or even prosodic grounds; and because established definitions of the intonation phrase may stand in the way of a conversation analytic investigation into their defining features in naturally-occurring talk. Instead, participants produce and treat chunks as multi-layered interactional events.

This concept of chunks as interactional, rather than intonational units is in line with those discourse analysts who have used intonation phrases as functional categories in their transcript notations. Their primary interest in discourse functions, particularly their focus on what the end of an intonation phrase signifies in terms of speaker continuity, is at the heart of talk-in-interaction, and prosody-in-interaction research. Furthermore, an approach to chunks as interactional, rather than purely phonological phenomena allows analysts to focus on the prosodic design of chunks without having to reconcile them with a pre-supposed intonation phrase structure.

Based on the above suggestions that a) participants divide their talk into chunks smaller than turns, and possibly smaller than TCUs; and b) intonation is not the only feature oriented to in the production of these chunks, we suggest the term 'turn constructional phrase' (TCP) as one that denotes the nature of speech chunks as an interactional, rather than a purely prosodic category. A tentative definition of a TCP could be as a 'building block' for turns and TCUs, if we agree that the TCU is defined as a potential turn. The main interactional feature of a TCP is that it is designed by its speaker, and treated by other participants as a separate, but potentially turn-internal entity. From a perspective of speech production, the most typical way of designing TCPs as separate entities is simultaneous patterning of interactional modes in combination with released pauses, that is, pauses that are not the result of glottal closure (Local and Kelly, 1986), and/or in-breaths. From a recipient perspective, the most obvious

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<sup>10</sup> From a phonological perspective, the fact that an intonation phrase is also characterised by non-prosodic features is not necessarily problematic. Many phonological approaches consider intonation in close relation with other linguistic systems, typically syntax, focus and/or information structure (Halliday 1970; Heusinger 1999; Gussenhoven 1984; Rooth 1992; Selkirk 1984, 1995; Wells 2006). The problem from an empirical perspective arises from the clearly defined structure of intonation phrases; and the clearly defined form of their alignment with non-prosodic features.

ways of treating another participant's TCP as a separate entity, particularly while a turn is in progress, is display of reciprocity at TCP completion points, including refraining from uptake, placement of minimal response tokens, and non-linguistic actions such as breaths and coughs; and onset of turn-competitive talk or overlap. These are only first suggestions, and are likely to be more clearly defined by future research.

However, the same claim made by Schegloff (1996) for TCUs below possibly holds for the chunks of talk we refer to here as TCPs:

What sorts of entities (described in grammatical or other terms) will be used and treated as turn-constructional units is determined by those who *use* the language (broadly understood – that is, to include gesture, facial expression, when/where relevant), not those who study it academically. Calls for formal definitions of a TCU – beyond their status as units which can constitute possibly complete turns as above – are therefore bound to be disappointed, but empirical inquiries to explore such issues should be expected to yield interesting results. (Schegloff 1996:115, emphasis in the original)

An interaction-based definition such as the one we propose here avoids the numerous difficulties analysts have faced over the issue of intonation phrase boundaries: if participants are not clearly demarcating boundaries, we as analysts should be careful to assume their existence. The definition also allows for the wide variety of internal structures of TCPs in terms of syntax, information structure, pragmatic concepts, action and prosody. Focusing on what participants treat as unproblematic units, rather than on pre-established definitions on what those units should be can guard against analytical dangers identified by Ford (2004):

While working toward a precise account for units, interactionally oriented linguists run the risk of foregrounding the discreteness of units and backgrounding their constant and functionally crucial malleability. (Ford 2004:29-30)

And:

The drive to define units may cause us to miss systematic practices that make conversation work for participants in real contexts of use. (Ford 2004:38)

Ford (2004) argues that rigid definitions of units and their boundary features have little use for an analysis of talk-in-interaction. While a practice of defining the exact characteristics of units is the norm in approaches to linguistics where language is studied as a system outside the interactional context, analysts of language in conversation “need to hold loosely (their) conceptions of structure, rule, and unit” (Ford, 2004: 48), and keep in mind the flexibility of language as a resource for dealing with constantly emerging contingencies:

(Interactants') skill in the production of (a) turn unit lies not in an ability to unilaterally plan and execute it, without a hitch, but rather in (their) artful production of a unit on the fly. (Their) skill is in producing a coherent unit through resources and practices that are systematically adapted for the management of contingencies. (Ford 2004:30).

An analytical mindset that identifies boundaries only where participants orient to them must include instances in which the potential for boundaries is made interactionally relevant. Past research has identified a number of practices in which participants exploit the notion of

boundaries by producing talk that is noticeably designed as suppressing them, such as the ‘rush-through’ mentioned in Schegloff (1982; 1998) and the ‘abrupt-join’ described by Local and Walker (2004). The interactional work invested into suppressing these boundaries clearly shows participant orientation to their potential relevance and occurrence.

In the description and analysis of conversation we have so far worked with the turn constructional unit as the smallest interactional unit. And indeed, TCUs are designed and treated by participants as separate entities of talk, frequently held together by a complete syntactic structure, an overarching prosodic pattern, a coherent semantico-pragmatic concept, and a clearly identifiable social action. However, in many cases, TCUs are made up of two or more shorter chunks of talk which in themselves are not potential turns, and which are clearly part of a larger unfolding pattern. These chunks of talk can be oriented to by participants as entities in their own right. As the term ‘intonation phrase’ neither describes the multi-layered nature of these smaller entities, nor their role for turn construction, one option is to refer to them as ‘turn constructional phrases’. Defined as building blocks for turns and TCUs, and identified by participant orientation to their boundaries, they facilitate a deeper understanding of the structure of conversation without imposed restrictions on their nature and characteristics. Future research into the structure of turns will show how participants employ these smaller entities, what role they play in the accomplishment of conversational actions, and what they tell us about participants’ perspectives on boundaries and unit-formation in interaction.

## Appendix

Transcription Conventions (adapted from Selting *et al.* 1998)

### Pauses and lengthening

- (.) micro-pause
- (2.85) measured pause
- ::: lengthening

### Accents

- ACcent primary pitch accent
- Accent secondary pitch accent

### Phrase-final pitch movements

- ? rise-to-high
- , rise-to-mid
- level
- ; fall-to-mid
- . fall-to-low

### Pitch step-up/step down

- ↑ pitch step-up
- ↓ pitch step-down

### Change of pitch register

- <<l> > low pitch register
- <<h> > high pitch register

Volume and tempo changes

<<f> > forte  
 <<p> > piano  
 <<all> > allegro  
 <<len> > lento

Breathing

.h, .hh, .hhh in-breath

h, hh, hhh

out-breath

Other conventions

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[

overlapping

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