One of the central questions in conversation analysis is how participants are able to accomplish orderly turn-taking. In projecting transition relevance places (Sacks et al. 1974), at which the floor may legitimately be shifted from one speaker to another, participants rely not only on syntactic cues, but also on prosody (Wennerstrom 2001). Despite its prominent role in utterance interpretation, however, prosody remains comparatively neglected in discourse studies to date. The present analysis aims to address this gap by exploring the role of particular prosodic cues in the synchronization of turn-taking in spontaneous conversation. Prosody is viewed in light of discourse organization, with a focus on how participants employ prosodic cues to negotiate turns and satisfy varying discourse needs and cognitive states. Thus, the principal goals that underlie the analysis are (i) to provide an empirical account of the role of prosody in interaction, (ii) to identify specific prosodic cues relied on when projecting turn completion and (iii) to examine the prosodic realization of instances where turn-taking rules are broken.

The material used consists of three recorded conversations in American English, totalling 47 minutes in length, transcribed using the transcription methods of DuBois et al. (1993). The participants were native speakers of American English, between 22 and 30 years of age. The recording took place in informal settings and the participants were not familiar with the purpose of the recording. The approach taken is based on acoustic analysis, applied to discourse-level data.

The analysis examines the notion of projectability (e.g. Furo 2001, Hutchay and Wooffitt 2008) – an interlocutor’s ability to anticipate when a turn is likely to end. The material shows that participants in conversation choose to take the floor not only on the basis of syntactic completion, but that they also project turn completion onto particular prosodic cues. These cues are perceived by listeners slightly in advance of the end of a turn and they enable participants to anticipate turn-completion before it actually occurs.
In the analyzed material, three most common, instrumentally verifiable prosodic cues have been identified that are perceptually effective as markers of TRPs: pauses, final lengthening and decrease in intensity. The majority of turn-shifts are preceded by at least one of the three cues. The most common of these cues are pauses, occurring in 34% of turn-shifts. However, it is impossible to claim that any pause, or any prosodic cue in general, can be taken as a stable and direct indicator of the speaker's turn intentions. In the present material, participants frequently pause in the middle of a turn, and the presence or absence of pauses is shown to be commonly manipulated for strategic reasons, such as pausing midturn in order to avoid interruption in long TCUs. The second TRP cue is final lengthening, or the lengthening of syllables at the end of an intonation unit. The material shows that final lengthening is found most frequently on the final syllable in the intonation unit, but the effect is also found to spread on the preceding syllable. The third cue involves a decrease in intensity, which is shown to be commonly associated with the giving away of a turn. In many cases, the turn gets quieter and quieter, so the next speaker takes over, which may help to move the conversation forward.

Apart from such legitimate transitions, real-time conversation involves many instances of interruption, where the basic turn-taking rules are broken. The present analysis, however, shows that interruptions are characterized by certain general principles in their phonetic realization and are ultimately related to the rule-set, rather than being simply disruptive or random. On the basis of their motivation and discourse function, three interruption types have been identified: turn-competitive, cooperative and misprojectional. Turn-competitive interruptions occur when one speaker attempts to take the floor while the current speaker has not completed the turn and intends to continue. They can potentially disrupt the flow of interaction and alter the ongoing conversational topic. This type of interruption is shown to be prosodically marked, typically involving a prominent rise in pitch, and sometimes loudness. Cooperative interruptions are essentially non-competitive, mainly uttered to support the main speaker's point, which has a consequent influence on prosody. The pitch height for this type of interruption is significantly lower than for competitive interruption, though usually still raised in order to realize interruption. Finally, the third category of interruptions may be termed misprojectional interruptions. They are distinguished from the other two types as the described communicative, cognitive and emotional motivations are here entirely absent. The interruption is merely the result either of a misinterpretation of a point as a TRP or failure to acknowledge the
beginning of the other speaker's turn (misprojecting TRP points). Their pitch level is typically in line with the average values for the region. Table 1 below shows the average pitch values for the three types. What is worth noting here is the difference in pitch levels of almost 100 Hz between each type, with the actual pitch level depending on the degree of disruption.

<table>
<thead>
<tr>
<th>Type</th>
<th>Average Pitch (Hz)</th>
</tr>
</thead>
<tbody>
<tr>
<td>turn-competitive</td>
<td>407</td>
</tr>
<tr>
<td>cooperative</td>
<td>317</td>
</tr>
<tr>
<td>misprojectional</td>
<td>218</td>
</tr>
</tbody>
</table>

Table 1: Average pitch values (Hz) for the three interruption types

All these findings, both the legitimate prosodic TRP cues and the phonetic realization of interruption, can be situated within a basic model of turn-taking that acknowledges the role of prosody. The contingencies of turn taking are shown to be sensitive to prosodic signals, which work together with syntax and visual cues to mark TRPs. If none of these signals are present, the disruption must be compensated somehow, which can be achieved prosodically, most notably through a rise in pitch level.

To conclude, the analysis has shown that prosody plays a key role in the complex local negotiation of discourse. The three prosodic cues that are identified (pauses, final lengthening and a decrease in intensity) are shown to be significant resources in identifying turn completion and situating one's own participation in conversation. However, interactants can manipulate this prosodic information strategically to achieve particular interactional goals, which points to the fact that prosodic features do not indicate speaker intentions directly and independently. Further, the examination of the prosodic cues in realizing interruptions has also revealed notable systematicity, with pitch levels depending on the level of disruption, thus showing orientation to the turn-taking rules. What emerges from the material is that such elements play a role in the co-construction of interaction, as resources that are fundamentally related to the basic set of conversational rules. A basic model of turn-taking is thus proposed, assuming that if the rules are to be broken, this can be compensated prosodically. At a more general level, the analysis points to the fact that prosodic study derived from spontaneous speech may provide a deeper understanding of both prosody and conversation structure.
References


