

On the relation between syntactic and phonological clauses

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This talk discusses the syntax–prosody mapping at the clause-level in Japanese. After reviewing previous studies on the syntax–prosody mapping at the phrase and clause levels in Japanese, results of a production experiment that investigates the prosody of embedded (finite) clauses (i.e., clausal complements of matrix verbs) will be presented, and their theoretical implications will be discussed.

For the last decade or so, the notion of clause has become increasingly important in intonational phonology, since two theoretical claims have been made that make reference to the notion of clause, namely, the language-universal prosodic hierarchy (Itô and Mester 2007, 2012, 2013), and the syntax–prosody mapping at the clause-level (Selkirk 2009, 2011). Both claims explicitly assume that there is a (language-universal) correspondence between syntactic clauses and a prosodic domain (i.e., the phonological clause a.k.a. the intonational phrase). In comparison to the syntax–prosody mapping at the level of phrases, however, the mapping relation at the level of clauses is still understudied.

For Japanese in particular, it has long been assumed, following the influential claim by Pierrehumbert and Beckman (1988), that there is no prosodic level above the phrase-level (except the topmost root domain). This assumption is challenged by Kawahara and Shinya (2008), who showed experimentally that coordinated matrix clauses exhibit prosodic properties that are not shared by phonological phrases, and argued accordingly for the existence of the level of phonological clause.

There are remaining questions to be investigated. Even though matrix clauses have been shown to map to phonological clauses, it still remains unknown to what extent embedded clauses are mapped onto prosody as phonological clauses. Although previous studies examining sentences containing relative clauses (e.g., Uyeno et al. 1980, 1981; Kubozono 1993) have shown that the start of the relative clauses is prosodically marked by a high F_0 -peak (and other cues), no distinction has been made between the phonological phrase and clause in these studies. Selkirk (2009) claimed, based on the discussion of embedded *wh*-questions in Fukuoka and Tokyo Japanese, that Japanese embedded clauses are mapped as phonological clauses. After revisiting relevant data and discussions, however, it will be shown that the *wh*-question data do not necessarily provide conclusive evidence for the mapping of embedded clauses onto phonological clauses. Considering the above, it still needs to be examined whether the clause-level mapping can be found at embedded clauses, and if so, which cues are used to prosodically mark them.

By comparing prosodic cues on the target words with different syntactic boundary strengths (no XP boundary, one XP boundary, two XP boundaries, CP boundary), the experiment was specifically designed to examine the prosodic similarities and differences of boundaries at syntactic phrases and clauses. If phonological clause boundaries are marked qualitatively differently from phonological phrase boundaries, we expect to find prosodic cues at clause boundaries that are not present at phrase boundaries. The data will also be compared with Kawahara and Shinya's (2008) results on coordinated matrix clauses. This comparison can reveal differences between matrix and embedded clauses.

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