

Prosodic disambiguation of the deontic – epistemic dimension

Daniel Klenovšak

Otto-Friedrich-Universität Bamberg

An increasing number of studies suggest grammaticalization of intonation contours in the domain of epistemic meaning (Šafářová 2005; Krause 2007; Gravano et al. 2008; Borràs-Comes et al. 2011; Roseano et al. 2016), i.e. the intonational coding of speaker (un-)certainty. While still scarce, some work has also been done on the prosodic coding of information source, i.e. evidentiality (Vanrell et al. 2014; Roseano et al. 2016).

Assuming the universality of these phenomena, intonational languages like German should exhibit similar strategies for marking epistemic-evidential meaning. This question is addressed empirically on the basis of a spoken corpus of German (*IDS, Datenbank für Gesprochenes Deutsch (DGD)*). Focusing on the prosodic structure of German modal verb phrases, this paper will present preliminary results and discuss their relevance for further research. This work focuses on the prosodic realization of German modal verbs. A verb is classified as such if it allows a second interpretation (usually epistemic) besides root modality (see Leiss 2009: 6). Given this inherent ambiguity of modal verbs, it is plausible to ask whether this ambiguity is dissolved by prosodic means.

In a first attempt, the modal verb *sollen* is examined, which is generally agreed to have epistemic-evidential meaning (see e.g. Droessiger 2012; Zeman 2013). In the corpus, 55 out of 2550 instances of *sollen*-phrases have a clear epistemic-evidential interpretation. These were phonetically analyzed using Praat (Boersma & Weenink 2016) and their intonation contours were contrasted with the prosodic structure of their deontic counterparts, e.g.:

(1) *Er soll ein guter Lehrer sein.*

which could be read as

- a. He is said to be a good teacher. (evidential interpretation)
- b. He is required to be a good teacher. (deontic expectancy)

The results show that intonation does serve to disambiguate different readings, which underscores its relevance in marking grammatical modality. Follow-up perception studies are currently being planned in order to substantiate the grammaticalized status of prosodic contours as a disambiguation strategy.

References

- Boersma, P. & Weenink, D. (2016). Praat: doing phonetics by computer [Computer program]. Version 6.0.19, retrieved 13 June 2016 from <http://www.praat.org/>

- Borràs-Comes, J., Roseano, P., Vanrell, M. D. M., Chen, A., & Prieto, P. (2011). Perceiving uncertainty: facial gestures, intonation, and lexical choice. *Proceedings of GESPIN*.
- Droessiger, G. (2012). Zur epistemischen Lesart der Modalverben im Sprachgebrauch des Deutschen. *Žmogus ir žodis. Svetimosios kalbos*.12 (3), pp. 12-18.
- Gravano, A., Benus, S., Hirschberg, J., German, E. S., & Ward, G. (2008). The effect of contour type and epistemic modality on the assessment of speaker certainty. *Proceedings of Speech Prosody*, pp. 401-404.
- Krause, M. (2007). *Epistemische Modalität: zur Interaktion lexikalischer und prosodischer Marker; dargestellt am Beispiel des Russischen und des Bosnisch-Kroatisch-Serbischen*. Wiesbaden: Otto Harrassowitz Verlag.
- Leiss, E. (2009). Drei Spielarten der Epistemizität, drei Spielarten der Evidentialität und drei Spielarten des Wissens. In: *Modalität: Epistemik und Evidentialität bei Modalverb, Adverb, Modalpartikel und Modus*. Tübingen: Stauffenburg, pp. 3-24.
- Roseano, P., González, M., Borràs-Comes, J., & Prieto, P. (2016). Communicating epistemic stance: How speech and gesture patterns reflect epistemicity and evidentiality. *Discourse Processes*, 53 (3), pp. 135-174.
- Šafárová, M. (2005). The semantics of rising intonation in interrogatives and declaratives. *Proceedings of SuB9*, pp. 355-369.
- Vanrell, M. D. M., Armstrong, M. E., & Prieto, P. (2014). The role of prosody in the encoding of evidentiality in Catalan. *Proceedings of Speech Prosody 2014*, pp. 1022-1025.
- Zeman, S. (2013). Zur Diachronie der Modalverben: *sollen* zwischen Temporalität, Modalität und Evidentialität. In: *Funktionen von Modalität*, Berlin/New York: de Gruyter, pp. 335-366.