
The contribution of head gesture prominence in the multimodal marking of information structure in French and Italian

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Previous research has shown that gestures frequently co-occur with prosody in marking information structure (IS) (e.g., Im & Baumann 2020; Rohrer 2022). Two recent studies (Baills & Baumann 2025; Baills, de Paolis & Baumann 2025) found that expressions referring to *new*, *inferable*, and *contrastive* elements are more often accompanied by a pitch accent alone or by a pitch accent combined with a head gesture compared to expressions referring to *given* elements in French narrative speech. These studies also revealed that common non-canonical syntactic patterns — such as fronting, dislocation, and presentational constructions — also tend to trigger increased multimodal marking, including head gestures, even with *given* information. However, while the presence of head gestures appears to be relevant, it remains an open question whether different degrees of gesture prominence, i.e., visual saliency, contribute to signalling IS distinctions.

Using audiovisual narrative data from 10 French and 10 Italian speakers, this study investigates how a) perceived prominence of head gestures and b) their duration as an important cue to prominence, relate to the multimodal marking of IS in spoken discourse. The narratives were annotated at the levels of information status and contrastive focus, syntactic constructions, prosodic cues, as well as head gesture phases and perceived prominence. Furthermore, stroke durations were extracted automatically. Stroke duration serves as an objective correlate, since more prominent gestures often have longer or more effortful strokes.

The study aims to clarify how visual salience is constructed and to uncover potential cross-linguistic patterns in the timing, frequency, and integration of head gestures within both prosodic and syntactic structure. Our findings will help to specify the visual features that contribute to the construction of meaning and offer methodological insights for gesture annotation in multimodal linguistic research.

References: • Baills F. & S. Baumann (2025). Prosody and head gestures as markers of information status in French as a native and foreign language. *Language & Cognition*, 17, e42 • Baills, F., de Paolis, B.-M. & S. Baumann (2025). The interplay between prosody, gesture, and syntax to signal information structure in French. Oral presentation at the *6th Conference on Phonetics and Phonology in Europe*. UIB, Mallorca, July 2nd. • Im, S. & S. Baumann (2020). Probabilistic relation between co-speech gestures, pitch accents and information status. *Proceedings of the LSA*, 5, 685–697 • Rohrer, P.-L. (2022). *A temporal and pragmatic analysis of gesture-speech association* [PhD dissertation, UPF]. TDX.