

Multimodal marking of information status in unscripted dialogue – lexical form is key

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Background: Spoken **prosody** & co-speech **gesture** highlight important information. **New(er)** information is typically made prominent through **accentuation & gesture presence**, while **given** information is **attenuated** and often deaccented (Baumann & Lorenzen 2024, Baills & Baumann 2025). However, most previous work is based on **scripted** and/or **monologic** speech.

Methods

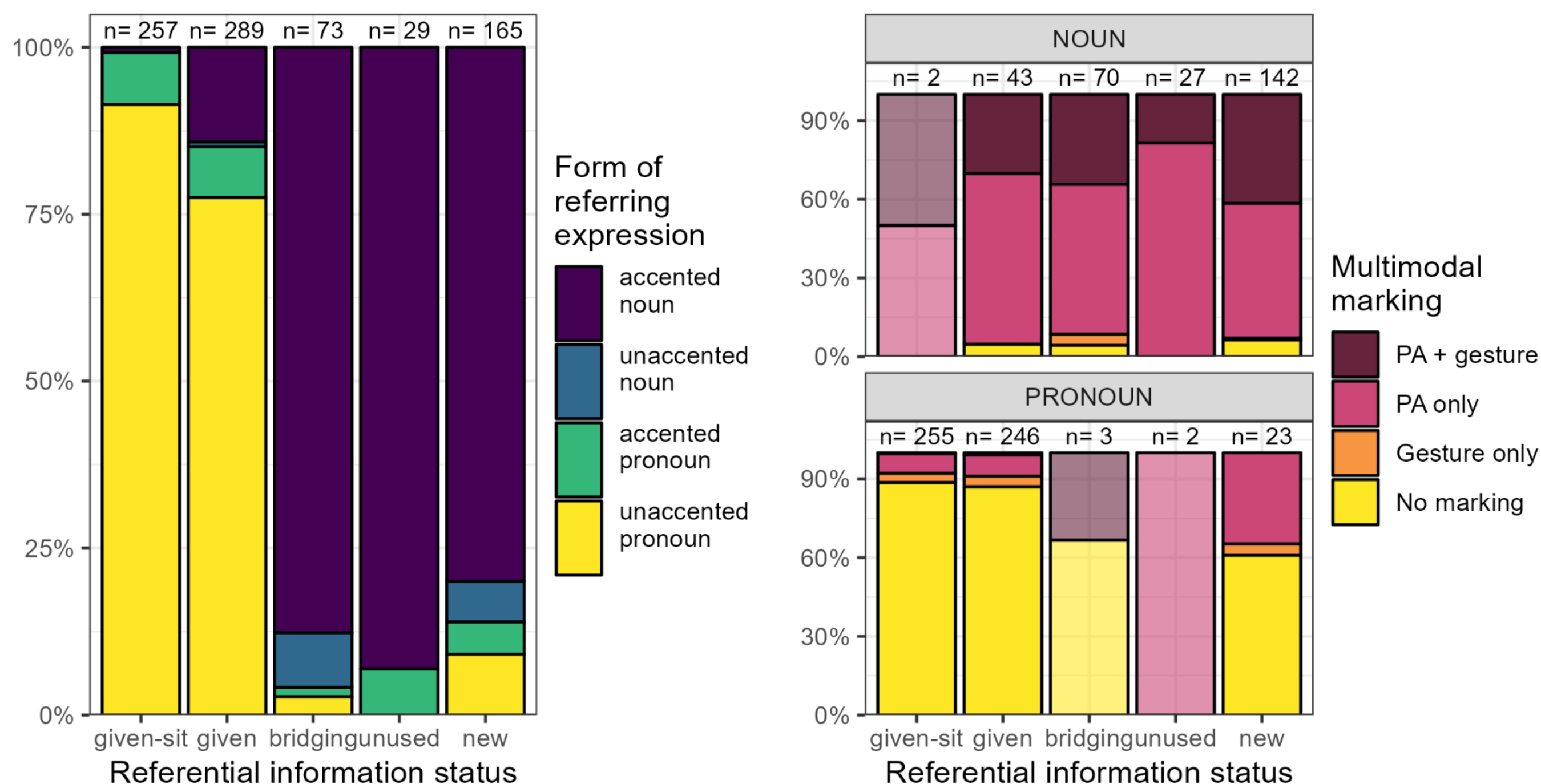
Data: 2 dialogues, 4 female speakers, ~ 2x10 mins unscripted speech (Spaniol et al. 2023)

Dimension	Annotations
Spoken prosody	Pitch accent (PA) type & boundaries (GToBI , Grice et al. 2005)
Hand gestures	Strokes & apices, referentiality (M3D , Rohrer et al. 2025)
Information status (IS)	Referential & lexical IS (RefLex , Baumann & Riester 2013)
Part-of-speech	Automatic POS tagging (Stanza , Qi et al. 2020)

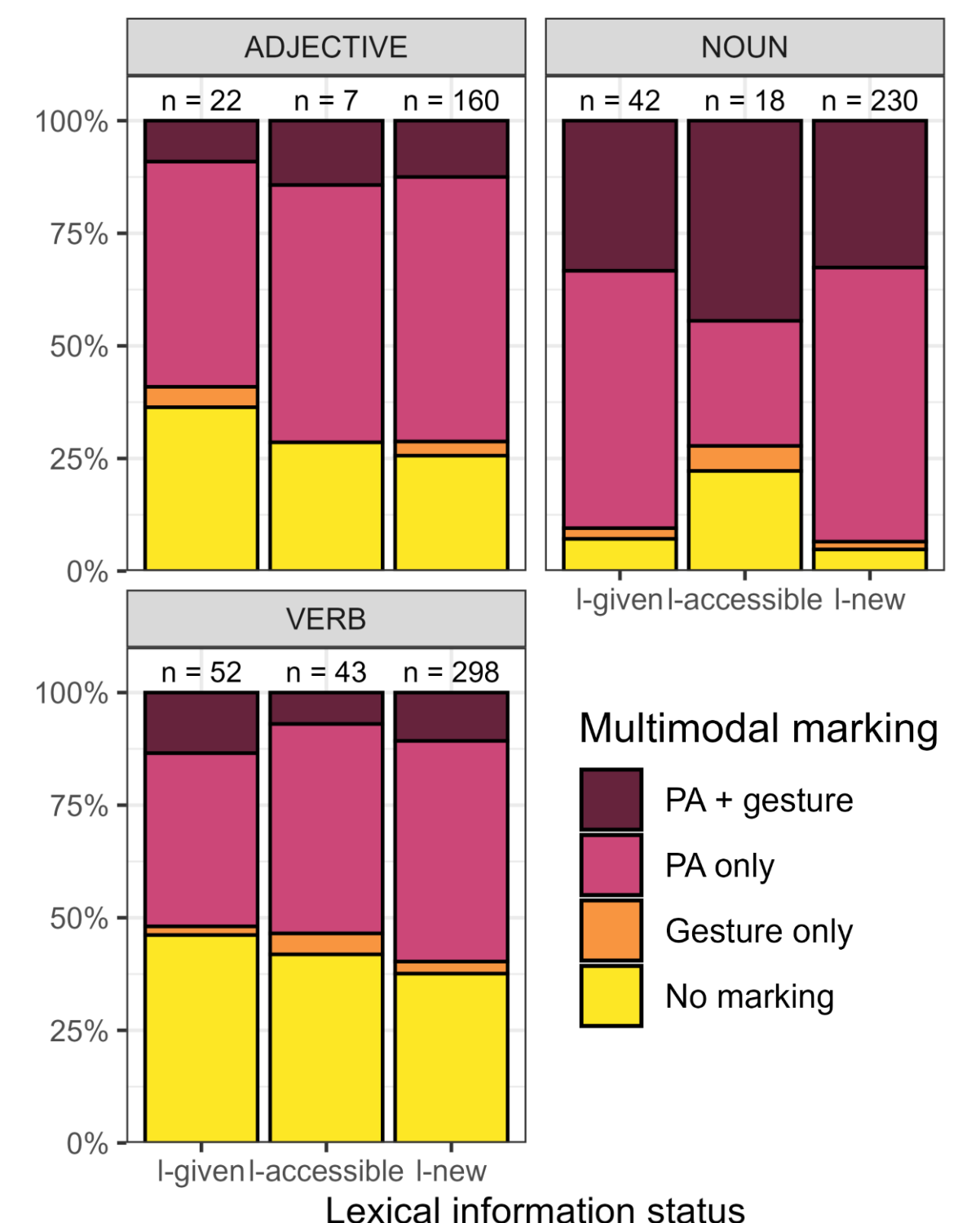


Sp2-ort [1355]	wir	haben	ja	auch	dann	so	ähnliche	Sachen	gemacht	wie	irgendwie	den	TMS	oder	so	Sachen
Ref IS [559]	r-g						r-new-0	r-new					r-unused			r-new
Lex IS [607]							l-new	l-new	l-new				l-new			l-given
Sp2-GTo [441]			H*				L+H*		^H*					L+H*		L+H*
Apex_2 [135]									A				A			

Referential IS marking



Lexical IS marking



Conclusions

- Referential **givenness** is expressed via **pronouns**, which are rarely accented or accompanied by gestures
 - In **unscripted** speech, speakers generally do not rely on purely **prosodic** means to mark IS (in contrast to findings by Baumann & Lorenzen 2024, Baumann & Riester 2013 on scripted speech)
- **Gesture occurrence** is mostly determined by **lexical form** rather than **function** (N > ADJ/V > PRON)

References: F. Baills & S. Baumann, Prosody and head gestures as markers of information status in French as a native and foreign language. In: N. Esteve-Gibert, P. Prieto, & S. Shattuck-Hufnagel (Eds.), Special issue on 'Multimodal Prosody: Speech and Gesture in Interaction'. *Language & Cognition* 17, e42, 1–28, 2025. S. Baumann & J. Lorenzen, Boosting or inhibiting - how semantic-pragmatic and syntactic cues affect prosodic prominence relations in German. *PLOS ONE* 19(4). e0299746, 2024. S. Baumann & A. Riester, Coreference, lexical givenness and prosody in German. *Lingua* 136. 16–37, 2013. M. Grice, S. Baumann & R. Benz Müller, German Intonation in Autosegmental-Metrical Phonology. In S.-A. Jun (ed.). *Prosodic Typology: The Phonology of Intonation and Phrasing*. Oxford: OUP. 55–83, 2005. M. Spaniol, A. Janz, S. Wehrle, K. Vogeley & M. Grice, Multimodal signalling: the interplay of oral and visual feedback in conversation. *Proc. ICPHS 2023*, 4110–4114, 2023. P. Qi, Y. Zhang, Y. Zhang, J. Bolton & C. D. Manning, Stanza: A Python Natural Language Processing Toolkit for Many Human Languages. *Proc. ACL 2020: System Demonstrations*, 2020. P. Rohrer, U. Tütüncübası, J. Florit-Pons, I. Vilà-Giménez, N. Esteve-Gibert, A. Ren-Mitchell, S. Shattuck-Hufnagel & P. Prieto, Multidimensional Labeling of Gesture in Communication: the M3D Proposal, *Corpus Pragmatics* 9, 411–433, 2025.