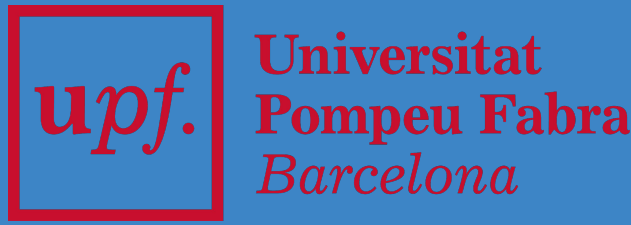


Prosodic and gestural marking of focus types in Catalan and German



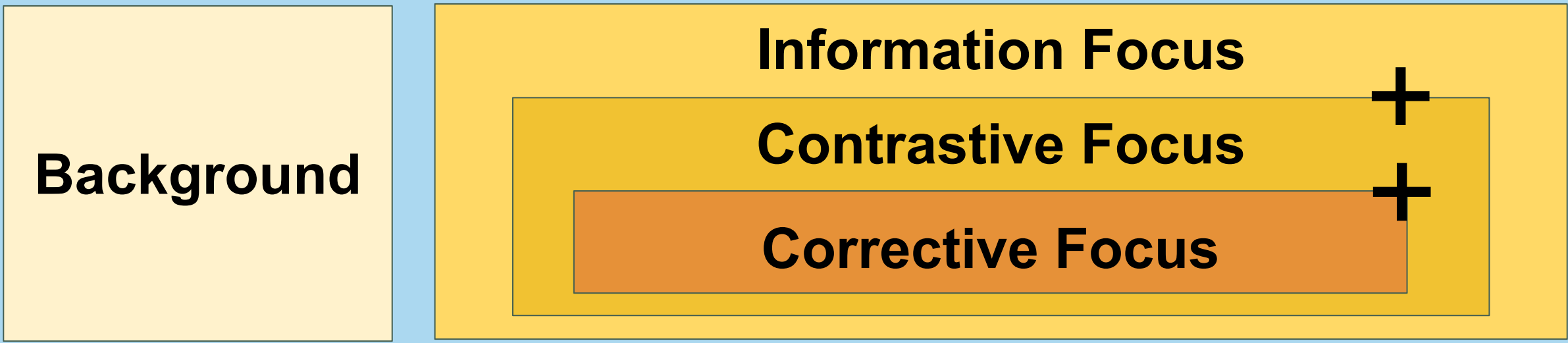
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* Shared first authorship



Focus types

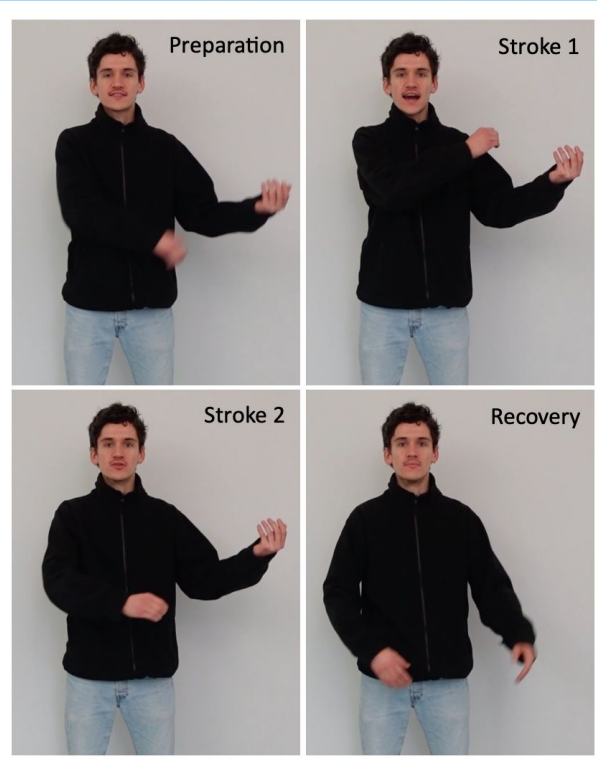
Cognitive domain representing the presence of alternatives that are relevant for the discourse [1,2]

Layers of pragmatic meaning:



Gesture

- Gesture and speech are an integrated system in communication [9,10]
- Gesture prominence ratings as an approach to visual saliency [11]: **multimodal prominence**
- Gestures (performed by hands, head and eyebrows) have been suggested to be involved in focus marking [12,13,14]



Prosody

- Prosodic prominence ratings as an holistic approach to perceived acoustic prominence [3]
- Contrastive and corrective focus have been suggested to receive higher ratings of prosodic prominence across languages ([4] for Catalan; [5,6] for German)
- Differences Catalan and German: rhythm class, de-accentuation patterns [7,8]

Research Question

Are focus types reflected in multimodal prominence in Catalan and German?

Hypothesis

From the lowest to the highest multimodal prominence:
Background < Information < Contrastive < Corrective

Semi-spontaneous production study

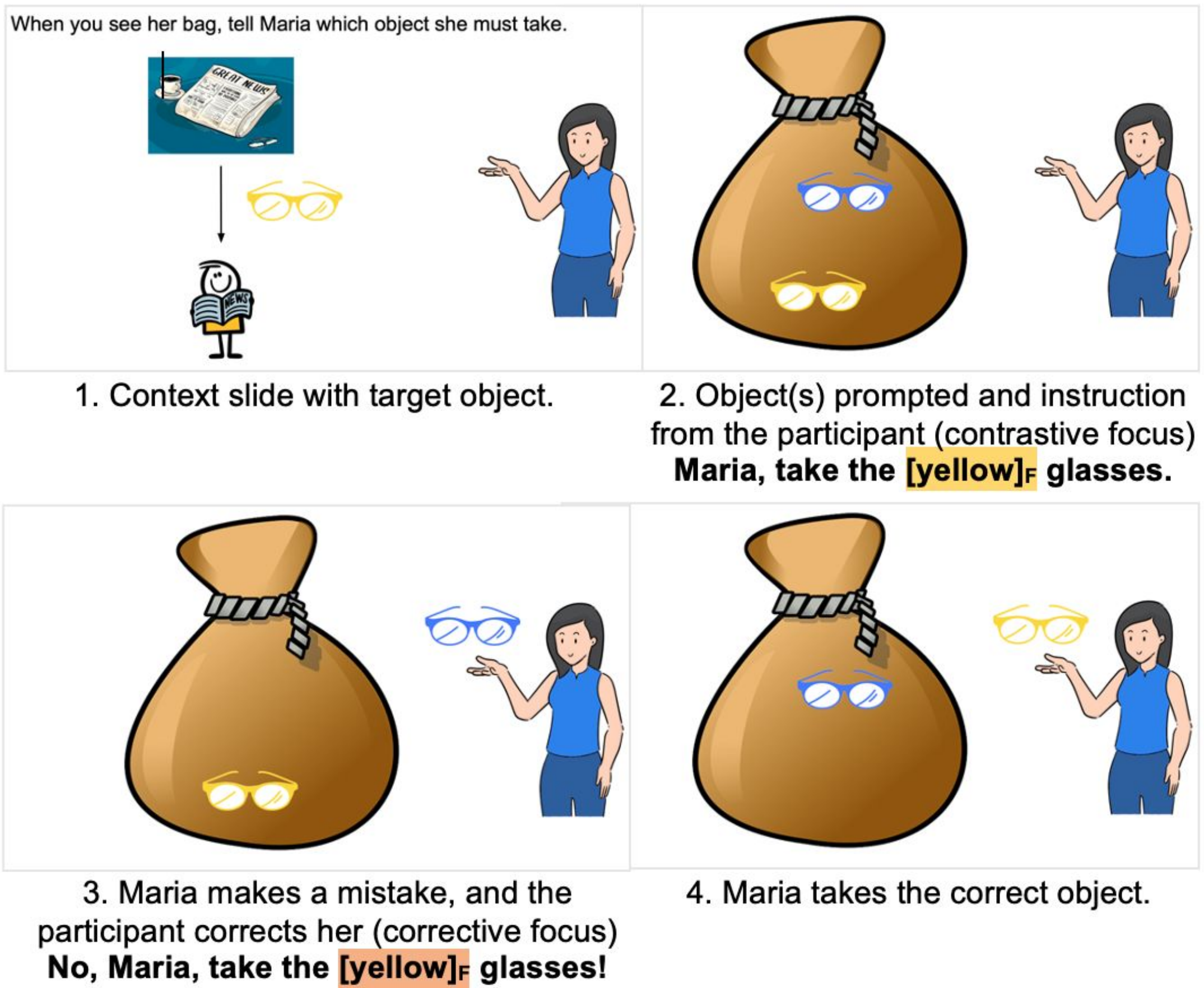
Participants instruct a digital character to take certain objects from a bag, eliciting focus conditions by varying target and competitor items [13]

Participants

15 Catalan-Spanish bilinguals (M=21,1; 12f) & 15 German speakers (M=28,8; 9f)

Data coding

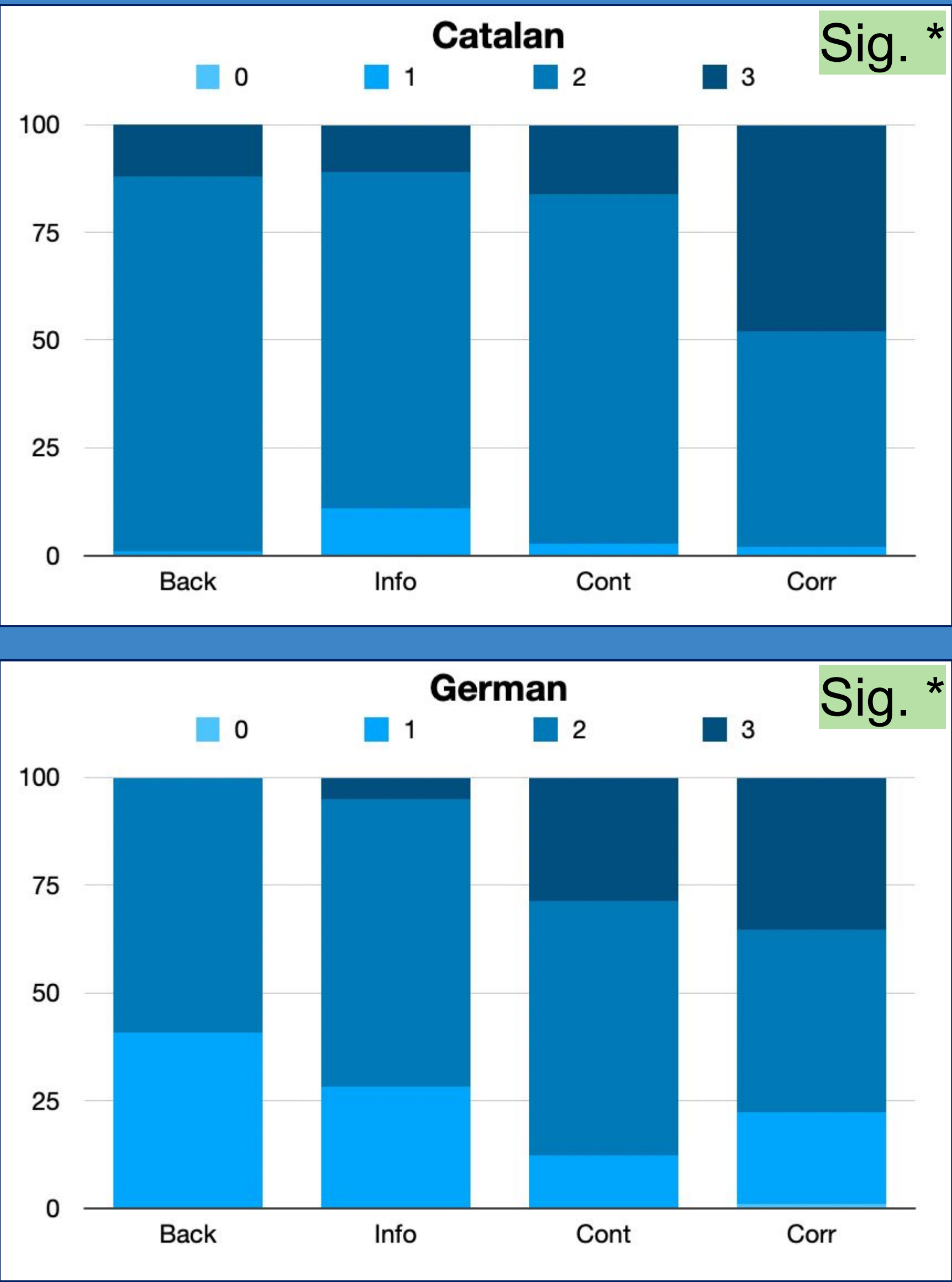
- Annotation of target adjectives in NPs:
 - pitch accentuation (ToBI [15,16], prosodic prominence (DIMA (0-3), [3])
 - gestural presence, and gestural prominence (M3D (0-3), [11])
- Items: 4 conditions x 7 items x 15 participants x 2 lang. = 840 targets (**791 prod.**)
- Spearman correlation tests for significance (testing increase of multimodal prominence with more layers of pragmatic meaning → focus types)



PA presence

Lang.	Cond.	PA
CAT	Back	100%
	Info	100%
	Cont	100%
	Corr	100%
	Sig.	*
GER	Back	100%
	Info	99%
	Cont	100%
	Corr	99%
	Sig.	*

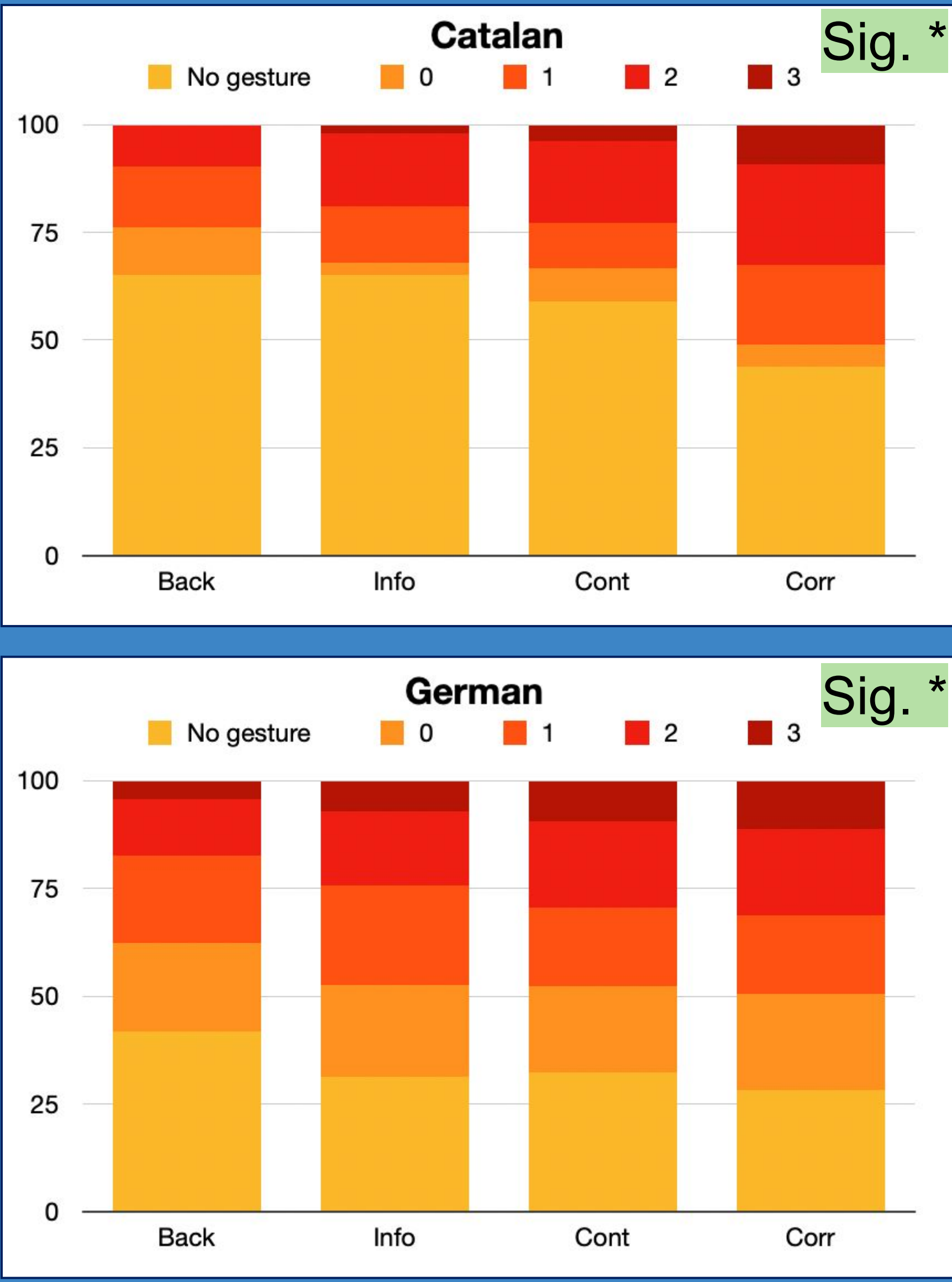
Prosodic Prominence



Gesture presence

Lang.	Cond.	Hand	Head	Eyeb.
CAT	Back	19,8%	9,5%	20%
	Info	18,8%	25%	28%
	Cont	26,7%	27,4%	20%
	Corr	34,7%	38,1%	32%
	Significance	*	*	-
GER	Back	17,9%	15,6%	18,5%
	Info	29,1%	28,9%	27,8%
	Cont	29,8%	31,6%	38,9%
	Corr	23,2%	23,9%	4,8%
	Significance	-	*	-

Gestural Prominence



Discussion & Conclusion

- Presence of pitch accents and gestures are not stable markers of focus types (only presence of head movements in both languages, and hand strokes in Catalan)
- Ratings of perceived multimodal prominence (assessed separately for prosody and gesture) significantly increase across focus types in both languages
- Corrective focus stands out in Catalan, while in German Contrastive and Corrective focus behave similarly

This suggests an integrated behaviour of prosody and gesture in focus marking

References

