

## **Typological differences and their ramifications for motion encoding: comparing German to English and Greek**

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**Introduction.** Goals of motion and the role of goal preference as a reflector of cross-linguistic differences have recently gained increased attention. Two distinct factors have been reported to determine goal preference, namely the cross-linguistic differences in lexicalization patterns of motion events (see, e.g., Georgakopoulos & Sioupi 2015) and the presence of grammatical viewpoint aspect encoding (see, e.g., Athanasopoulos & Bylund, 2013; Schmiedtová, von Stutterheim, & Carroll, 2011; von Stutterheim & Nüse, 2003). In this talk, we examine the interplay between the lexicalization pattern of a language, on the one hand, and grammatical viewpoint aspect, on the other, and their impact on the linguistic realization of motion Goals, reflecting, thus, the grammatical inclusion of an event endpoint. We analyze data from German, English, and Greek, three languages that differ from each other with respect to at least one property that has been reported to influence the mentioning of Goals (English: aspect, Satellite-framed; German: non-aspect, Satellite-framed; Greek: aspect, Verb-framed).

**Materials and participants.** To gain a more systematic picture of the effect that the two factors have on Goal inclusion as well as the interplay between them, we conducted an experimental study, in which descriptions of motion events were elicited. Sixty native speakers of English, German, and Greek participated in the study. As stimuli, a subset of the clips from von Stutterheim et al. (2012) was used. The critical clips ( $N=10$ ) show everyday motion events directed towards identifiable goals, for example, a man walking towards a car (GOAL NOT REACHED condition). As controls, we used 10 clips that show motion events where the goal is reached (GOAL REACHED condition), for example, a man walking up some stairs and through a church door.

**Results.** To analyze the differences for all verbalizations ( $N=586$ ) across the six group means, we performed an ANOVA. It revealed a significant main effect for CONDITION such that, across the three languages tested, more Goals were mentioned in the GOAL REACHED condition ( $N=250$ ) than in the GOAL NOT REACHED condition ( $N=94$ ),  $t(1)=15.53$ ,  $p < .001$ . Furthermore, an effect of LANGUAGE was observed such that, with the two conditions again taken together, more Goals were included in the descriptions in German ( $N=134$ ) than in Greek ( $N=99$ ),  $t(1)=3.19$ ,  $p < .004$ . The difference between German and English did not reach the conventional level of significance,  $t(1)=2.11$ ,  $p < .08$ , nor did the difference between Greek and English,  $t(1)=1.08$ ,  $p < .52$ . A significant interaction between LANGUAGE and CONDITION was observed,  $F(2, 59) = 9.8$ ,  $p < .001$ . Planned pairwise comparisons for the critical condition indicate a significant difference between German and Greek,  $t(19) = 4.82$ ,  $p < .001$ , as well as English and Greek,  $t(19) = 4.30$ ,  $p < .001$ , with more Goal expressions noted in English ( $N=39$ ) and German ( $N=42$ ) than in Greek ( $N=13$ ). No significant difference was observed between the two Satellite-framed languages.

**Discussion.** This finding is compatible with a view that holds that the lexicalization pattern of a language has a stronger impact on the realization of Goals. This is reflected in the grouping of English and German versus Greek. Our results do not indicate a systematic effect of the presence of aspect on the inclusion of Goals in the event descriptions we elicited.

## References

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