## Aspectual proficiency predicts motion event categorization

Emanuel Bylund
Stellenbosch University & Stockholm University, mbylund@sun.ac.za

Keywords: Linguistic relativity, Motion events, Bilingualism

Research to date suggests that the grammatical category of imperfective aspect shapes cognitive and perceptual processing of motion endpoints (Athanasopoulos & Bylund, 2013; Flecken et al., 2015; von Stutterheim et al., 2012). Speakers of languages that lack grammaticized distinctions of imperfectivity (e.g., German and Swedish) have been shown to mention, pay more attention to, and categorize motion on the basis of endpoints. Conversely, speakers of aspect languages (e.g., English, Russian, and Spanish) tend to focus on the ongoing phase of motion, thus relegating endpoints to the background. It has been suggested that these crosslinguistic differences obtain because the category of imperfectivity forces speakers to habitually assume an immediate, or zoomed-in, viewing frame of events, according to which endpoints are excluded (Langacker, 2002). Speakers of non-aspectual languages, in contrast, typically assume maximal viewing frames of events, in which endpoints are included.

So far, the evidence from this line of research is mainly of a correlational nature, in the sense that comparisons between different speaker/language groups constitute the primary source of evidence. Capitalizing on the methodological advantages afforded by the study of bilingualism, the present study sets out to probe a direct link between imperfective aspect and endpoint categorization. A group of 80 adult bilinguals with Spanish (+ imperfective aspect) as first language and Swedish (– imperfective aspect) as a second language (with residence in Sweden) took part in the study. A grammaticality judgement test of imperfective contrasts in Spanish was administered to the participants in order to obtain a measure of their proficiency with aspectual distinctions. To assess their cognitive behaviour with motion endpoints, a similarity judgement task was implemented, asking participants to match scenes of motion events with intermediate degree of endpoint orientation (i.e., motion directed towards a potential, but not reached, endpoint) with scenes showing either low degree of endpoint orientation (motion with no endpoint in sight) or high degree of endpoint orientation (motion with reached endpoints). It was predicted that lower proficiency with aspectual contrasts would be associated with an elevated preference for matching intermediate endpoint motion with high-endpoint motion.

Results indeed confirmed such an association, showing that the less proficient the participants were with imperfective contrasts, the more likely they were to exhibit a predilection for high degrees of endpoint orientation in the categorization task. In other words, not detecting the immediate viewing frames conveyed through imperfectivity morphology went hand in hand with a lower preference for adopting immediate viewing frames during event categorization. These findings provide a new type of evidence on the link between grammatical aspect and motion event cognition, strengthening previous findings on the role of aspectual contrasts in event construal. Crucially, the findings also suggest that the experiential variable of bilingualism may modulate language-induced cognitive preferences in the individual.