Perceived event duration is modulated by grammatical aspect - Findings from Dutch

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We investigate the effect of grammatical aspect marking in Dutch sentences, on speakers' perceived duration of highly familiar events and actions. Dutch is interesting, as use of progressive aspect is optional in event descriptions. We distinguish two 'layers' of event duration, 'inherent' versus 'finite' duration: In Experiment 1 we established the 'inherent' duration of events. After giving familiarity ratings for a large set of different events and actions, participants (N=30) were asked to estimate the inherent duration of these events, described by bare verb phrases (e.g., 'to boil an egg'), resulting in a selection of highly familiar events, divided in three duration categories, i.e., long, medium and short. These were used for the manipulation of aspect (Experiment 2). A different group of participants (N=30) dragged a slider across the computer screen to estimate the ('finite') duration of randomized progressive and non-progressive event descriptions (N=156). For example: *Paul is een smsje aan het typen* (progressive verb form) vs. *Paul typt een smsje* (non-progressive verb form) - 'Paul is writing vs. writes a text message'.

Findings show a complex interaction between aspect marking and inherent event duration: the progressive form extends perceived duration estimations for short events ('to open a bottle'), but it shortens the perceived duration of inherently long events ('to repair a bicycle'), when compared to the same events, described in sentences without the progressive verb form. This may differ from English, as findings show that, overall, the perceived duration of an event is prolonged given progressive verb forms (using different methods, e.g., Magliano & Schleich, 2000). In Dutch, world-knowledge about a specific event plays a role for the interpretation of aspect, and the zooming in on an intermediate phase modulates a person's mental model about an event. Our findings thus support the view that grammatical aspect affects situation models and influences event representations (Bergen & Wheeler, 2010). Furthermore, our 'drag-the-slider-technique' shows how spatial tasks can be informative about people's thinking about time (Casasanto & Boroditsky,2008).

Bergen, B. & Wheeler, K. (2010). Grammatical aspect and mental simulation. Brain and Language 112, 150-158.
Casasanto, D. & Boroditsky, L. (2008). Time in the mind: Using space to think about time. Cognition 106, 579 -593.

Magliano, J. & Schleich, M. (2000). Verb aspect and situation models. *Discourse processes, 29 (2),* 83-112.