**IF YOU WANT A QUICK HUG, MAKE IT COUNT:**

**HOW GRAMMAR AFFECTS ESTIMATED EVENT DURATIONS**

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En route from a speaker’s intended meaning to the listener’s interpretation, several factors of linguistic encoding can exert their influence on shades of meaning that are transported. One of these factors is the choice of syntactic structure. For example, in line with the Number Asymmetry hypothesis (Barner & Snedeker, 2006), a previous study has found that using count syntax (*to do climbs*), but not mass syntax (*to do climbing*), affects how events are quantified; and that punctive events are more readily quantified by counting over individual subevents than durative events (Barner, Wagner & Snedeker, 2008). We ask whether expressing an event using a verb versus a noun in mass/count syntax affects how people judge its duration. The Number Asymmetry hypothesis would predict that it would. However, if lexical items (e.g., *hug*) are ontologically linked to the same event structure, it should not make a difference whether they appear in verb or noun syntax (Harley, 2003).

**Predictions:** We used punctive verbs (*hug*) and durative verbs (*advise*, *talk*) in either a transitive frame (*John hugged Mary*) or in a ditransitive light verb construction with the bounded verb *give* (*John gave a hug to Mary*). The ditransitive frame introduces a distinction between count syntax (*give a hug/talk*) and mass syntax (*give advice*). We expected count syntax to force event individuation in punctive verbs, such that, when asked about event duration, people should judge the same event to be shorter in the ditransitive than in the transitive frame. For durative verbs, the same pattern was predicted for mass syntax, but not count syntax: Since there are no distinctive subevents that can be counted, applying count syntax to durative verbs should not lead to differences in duration. Instead, it should open the door to different event construals, orthogonal to changes in temporal structure.

**STUDY 1: Event Similarity.** We asked 100 English native speakers to rate event similarity between transitive and ditransitive frames on a 7-point Likert scale (1=“same event”). As predicted, differences between frames were smaller in punctive verbs with count syntax (*to hug* vs *to give a hug,* mean rating: 1.55) and durative verbs with mass syntax (*to advise* vs *to give advice*; mean rating: 1.56) than in durative verbs with count syntax (*to talk* vs *to give a talk*; mean rating: 2.17; *β*s>.6, *t*s>4.8, *p*s<.0001; mixed-effect model with maximal random effects structure).

**STUDIES 2 & 3: Duration Estimates.** 100 English native speakers answered questions like *When they met up, Natasha hugged Cynthia. How long do you think that took?* Responses were transformed into log-seconds and analyzed with a mixed-effect model using maximal random effects structure. As predicted, punctive count syntax and durative mass syntax (*β*s>.34, *t*s>1.8, *p*s<.05), but not durative count syntax (*β*>.19, *t*s>1.1, *p*s>.25), led to shorter event construal. Study 3 was a replication with verb type as between-subjects factor, yielding the same results.

**STUDIES 4 & 5: Duration Categorizations.** To ensure that the pattern obtained by free duration estimates was not due to unreliable time estimates (Kruger & Evans, 2004), we provided 100 participants with pre-defined time bins as choices, e.g.: *When they met up, Natasha hugged Cynthia. How long do you think that took? a) less than 3 seconds, b) between 3 and 30 seconds, c) longer than 30 seconds.* Again we found shorter event conceptualization in punctive count and durative mass syntax (χ2s>12.8, *p*s<0.005), but not durative count syntax (χ 2=6.2, *p*>0.1). Study 5 was a replication, but with each transitive/ditransitive pair’s individual quartiles obtained in Study 3 as possible answers, yielding the same pattern.

**Conclusion:** Describing an event with mass/count syntax affects the construal of event similarity and duration in a way that is systematically predictable from the interaction of mass/count syntax and verb semantics: *give a hug* and *give advice* are imagined as taking less time than *hug* and *advise*; the same is not true for *give a talk* versus *talk*. This supports the Number Asymmetry hypothesis, but not a hypothesis in which particular lexical items share the same ontology, independent of syntax. These results also add to studies that suggest that people conceptualize events differently depending on subtle choices among syntactic alternations (Fausey & Boroditsky, 2010; Johnson & Goldberg, 2012; Wittenberg & Snedeker, 2014).