

Semantic affectedness and passive acceptability in a case-marking language

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Passives have traditionally been used to argue for the autonomy of syntax operating on rules independently of meaning/function within **generativist frameworks**, which predict that all verbs should be equally passivizable in transitive sentences [1]. Conversely, **constructivist accounts** argue that constructions are abstracted from input based on inherent meaning/function [2], that of **semantic affectedness** [3] – the degree to which the PATIENT/THEME *Bob* is affected determines passivizability: *Bob was kicked* > *?known* > **resembled by Wendy*. Previously supported in English, where affectedness predicted passive *but not active* acceptability [4], this study examines Turkish, a language in which constructions (including passives) are highly regular and rule-based [5]. In addition to word-order, its case-marking system marks AGENT-PATIENT roles in active/transitive constructions via an accusative marker on the PATIENT. This allows speakers to foreground the PATIENT/THEME via fronting (a *pseudo-passive*; see supplemental information) without passive morphosyntax, potentially obviating the need to abstract a semantically-constrained passive construction. Supporting the semantic affectedness in a highly rule-based language, which also offers an alternative construction with the same communicative function as passives, would therefore provide even stronger evidence for the constructivist framework. Turkish adults ($n = 70$) rated active, passive, pseudo-passive sentence-acceptability paired with animations (1-7 scale; Figure 1a). Another group ($n = 20$) rated patient-affectedness with the same animations and (only active) sentences (1-7 scale; Figure 1b). A Bayesian ordinal mixed-effects model was fitted with maximal random-effects structure [6], with passives set as the reference level. As predicted, affectedness predicted passive acceptability to a greater extent than active acceptability with a 95% posterior probability (Figure 2; interaction; $\beta = -.16$, 95% *CrI* $[-.34, .03]$, $SE = .10$, $P(\beta < 0) = .95$). Interestingly, affectedness predicted pseudo-passive acceptability to a larger extent than passive acceptability with a 99% posterior probability (Figure 2; interaction; $\beta = .15$, 95% *CrI* $[.02, .29]$, $SE = .07$, $P(\beta < 0) = .99$). These results suggest that affectedness constrains the passive in Turkish as in English, strengthening the constructivist claim that constructions carry meanings above and beyond those of the individual words in any particular instantiation, and that languages may employ different strategies to achieve the same functional ends; here, topicalizing an affected patient via passive morphosyntax or pseudo-passive word order.

References

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Figure 1a (left): Acceptability-Judgment Task. Same animations paired with Turkish sentence-audios in three conditions (here, the verb 'see'): Active (*The woman VERBed the man*), Passive (*The man was VERBed by the woman*), and Pseudo-passive (*It was the man the woman VERBed*), with alternating man-woman agent-patient. English demo at [Gorilla](#).

Figure 1b (right): Semantic-Rating Task. Same animations paired with the same sentences as in the acceptability judgment task, but only actives. English demo at [Gorilla](#).

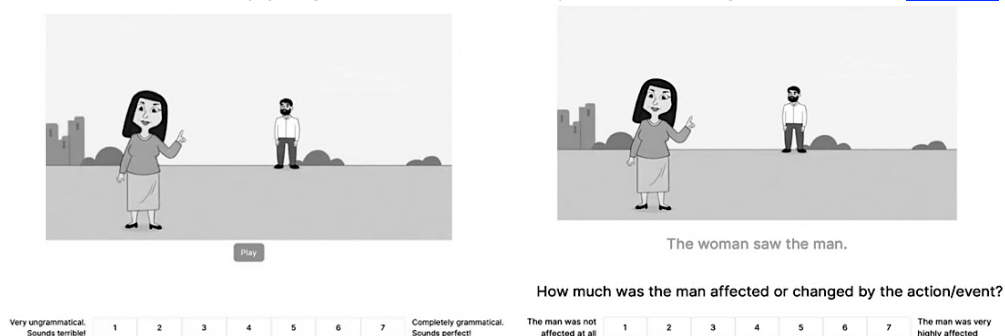
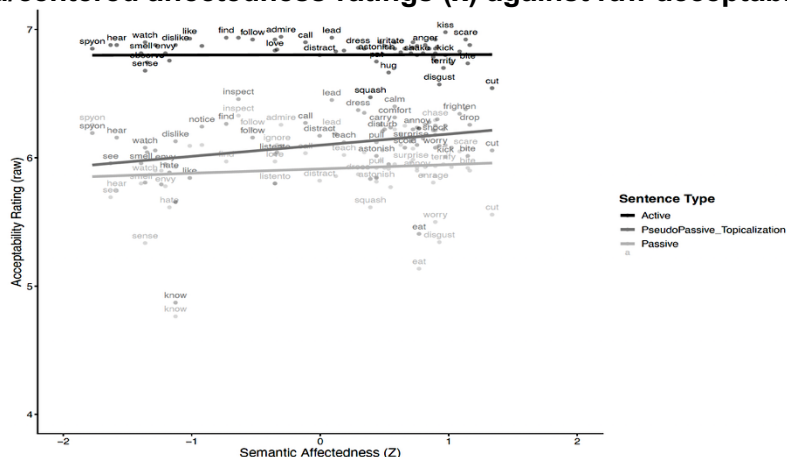


Figure 2: Scaled/centered affectedness-ratings (x) against raw acceptability-ratings (y)



Optional Supplemental Information

Turkish passive: Turkish forms passives using one of the three verbal suffixes (-l, -n, -in; depending on verb-stem phonology):

Bob Wendy tarafından tekmele-**n**-di

Bob by Wendy kick-**PASS**-PAST ‘Bob was kicked by Wendy’

Turkish case-marking: Turkish is also a case-marking language that, in addition to syntactic word order, marks AGENT-PATIENT roles using accusative case-marking in an active/transitive sentence:

Wendy Bob’**u** tekmeledi

Wendy Bob-**ACC** kick-PAST ‘Wendy kicked Bob’

Turkish *pseudo-passive*: Importantly, this system of case marking gives Turkish speakers the opportunity to topicalize the patient via fronting, without using passive (a construction that we term the *pseudo-passive*):

Bob’**u** Wendy tekmeledi

Bob-**ACC** Wendy kick-PAST ‘It was Bob that Wendy kicked’