

**Korean change of state predicates**  
**Non-culminating readings across scale and causative structures**

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Research across various languages has demonstrated that a set of change of state (henceforth CoS) predicates in the perfective can yield two distinct readings: (i) a culminating reading, in which the result state specified by the verb’s semantic core is achieved, and (ii) a non-culminating (hereafter NC) reading, in which the result state does not obtain (cf. Tatevosov & Ivanov 2009; Demirdache & Martin 2015; Martin & Schäfer 2017, a.o.). Korean causative CoS predicates also exhibit this phenomenon (cf. Beavers & Lee 2020; Fritz-Huechante et al. 2020). Central to the availability of NC readings is the agenthood properties of the external argument, as captured by the Agent Control Hypothesis (ACH, cf. Demirdache & Martin 2015). For instance, under the ACH, negating the result state is possible in the presence of an agentive subject as in (1a), while the result state cannot be defeated in the presence of an inanimate causer as in (1b).

- (1) a. Yuli-ka ipwul-ul mal-ly-ess-ta. haciman ipwul-i malu-ci anh-ass-ta.  
 Yuri-NOM blanket-ACC be.dry-CAUS-PST-DECL but blanket-NOM be.dry-CONN NEG-PST-DECL  
 ‘Yuri dried the blanket, but the blanket was not dry.’  
 b. hayspyeth-i ipwul-ul mal-ly-ess-ta. #haciman ipwul-i malu-ci anh-ass-ta.  
 sun-NOM blanket-ACC be.dry-CAUS-PST-DECL but blanket-NOM be.dry-CONN NEG-PST-DECL  
 ‘The sun dried the blanket, but the blanket was not dry.’

This study extends the analysis of NC readings in Korean by investigating two additional, less-explored factors: scale structure and causative structure. Drawing from scalar classification frameworks (cf. Hay et al. 1999; Kennedy & McNally 2005; Kennedy & Levin 2008), we focus on Korean causative upper-bounded predicates (e.g. *mallita* ‘to dry’) and lower-bounded predicates (e.g. *ceksita* ‘to wet’). Korean data reveal that NC readings occur with the former and not so with the latter. Sentence (1) is an instantiation of an upper-bounded predicate. In order for (1) to hold true, the blanket needs to be maximally dry. This maximum degree corresponds to the standard degree of comparison (or bound) that manifests the property specified by the semantic core of the verb. A NC reading arises in the presence of an agentive subject as in (1a), yielding an interpretation that Yuri acted upon the blanket to dry it without necessarily causing the crucial CoS (i.e. the blanket being completely dry). This is not the case with lower-bounded predicates. Lower-bounded predicates hold true at the presence of a minimal amount of change. In (2), a minimum CoS occurs as soon as the subject referent acts upon the object, hence negating the result state generates a contradiction irrespectively of the type of subject.

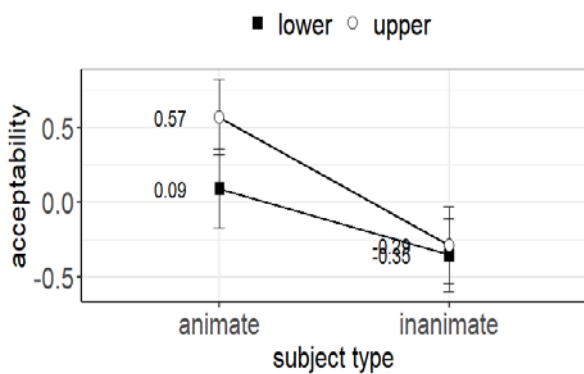
- (2) Yuri-ka / pipalam-i ipwul-ul ceks-y-essta. #haciman ipwul-i  
 Yuri-NOM / rainstorm-NOM blanket-ACC be.wet-CAUS-PST-DECL but blanket-NOM  
 cec-ci anh-ass-ta.  
 be.wet-CONN NEG-PST-DECL  
 ‘Yuri / the rainstorm wetted the blanket, but the blanket was not wet.’

We further observe that Korean causative structures have an impact on NC readings. Morphological causatives, formed by attaching the causative morpheme *-i* (or its allomorphs) to the stem of the stative verb (e.g. *mal-li-ta* ‘be.dry-CAUS-DECL’), are able to yield NC readings with upper-bounded predicates in the presence of an agentive subject, as in (1a). In contrast, periphrastic causatives, built by attaching the light verb *hata* ‘do’ to the stative verb stem (e.g. *malu-key ha-ta* ‘be.dry-ADVR do-DECL’), are able to produce NC readings across both lower- and upper-bounded predicates in agentive contexts. This distinction aligns with the morphosyntactic features of *hata* ‘do’, which can emphasize either an activity or result state reading (Fritz-Huechante et al., 2020; Choe, 2022).

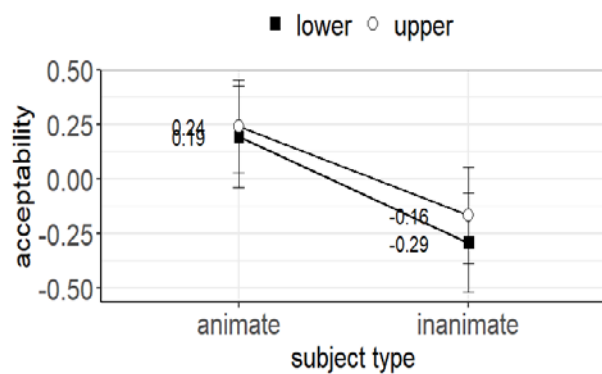
- (3) Yuri-ka ipwul-ul malu-key / cec-key hay-ss-ta. haciman ipwul-i  
 Yuri-NOM blanket-ACC be.dry-ADVR / be.wet-ADVR do-PST-DECL but blanket-NOM  
 malu-ci / cec-ci anh-ass-ta.  
 be.dry-CONN / be.wet-CONN NEG-PST-DECL  
 ‘Yuri made the blanket dry / wet, but the blanket was not dry / wet.’

Two 1–5 Likert scale experiments were conducted with native Korean speakers, in which participants evaluated sentences canceling the result state with *but*-clauses, as in (1). The experiments were built w.r.t the verbs’ availability to form both morphological and periphrastic causative structures, testing the factors: (a)

subject type (agent vs. causer) and (b) scale structure (lower vs. upper). 8 target items (4 lower-bounded and 4 upper-bounded) were selected plus 24 fillers per experiment. Sentences were presented online on IBEX HU. Expectations were: (a) the factor subject type has an impact on the acceptability of a sentence to the extent that NC readings are allowed in the presence of an agent in contrast to causers, and (b) an interaction between scale structure and causative structure to the extent that NC readings are available for upper-bounded predicates in a morphological causative construction, whereas (c) NC readings are available for both lower- and upper-bounded predicates in a periphrastic construction. 32 Korean native speakers participated in the surveys ( $N = 16$  per list). One participant was excluded due to missing data points ( $N = 31$ , 15 female, 15 male, 1 no gender. Age: 22–42.  $M = 29,90$ ). Fig. 1 for morphological causatives shows an interaction of the factors subject type and scale structure to the extent that the acceptability of NC readings is higher in the condition with upper-bounded predicates constructed with an agentive subject. In the case of periphrastic causatives, Fig. 2 shows that this interaction is not present, i.e. both lower- and upper-bounded predicates behave similarly to the extent that the acceptability of NC readings is higher in the presence of an agentive subject than with a causer. The data was fitted with a cumulative link mixed models (cf. Taylor et al. 2023). The random effects structure contained intercepts for items (different verbs) and participants. Results showed a significant effect of subject type ( $p=.02$ ), scale structure ( $p=.02$ ), a significant interaction of causative structure<sup>^</sup>scale structure ( $p=.01$ ), and a marginal significant interaction of causative structure<sup>^</sup>scale structure<sup>^</sup>subject type ( $p=.05$ ).



**Fig. 1:** Acceptability NC readings morphological causatives (95% C.I.)



**Fig. 2:** Acceptability NC readings periphrastic causatives (95% C.I.)

This work underscores the nuanced interplay of agentivity, scale properties, and morphosyntactic causative structures in shaping NC readings, contributing to broader cross-linguistic studies of event semantics and causation.

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