Two types of deadjectival inchoatives in Korean

Introduction: This paper aims to analyze two kinds of Korean inchoatives that correspond to deadjectival verbs in English. Unlike English, Korean deadjectival verbs have two forms. First, there are predicates that do not require additional morphemes from their stative forms to mean a change of state, hereafter bare inchoatives. For example, *malu-* '(be) dry' can indicate both the state of dryness and "becoming dry".

The other type of inchoatives is marked by the morpheme *-(e)ci-* after the root forms. For example, *nelp* '(be) wide' must combine with *-(e)ci* to mean 'widen'. The predicates that belong to *-(e)ci* inchoatives must have this morphological marking to contain the meaning of the change of state. For example, the inchoative form of *nelp-* '(be) wide' requires *-(e)ci* to have the meaning of changing to a wider state. Bare inchoatives are ill-formed when they combine with *-(e)ci.* The list of bare and *-(e)ci* inchoatives is shown in (1):

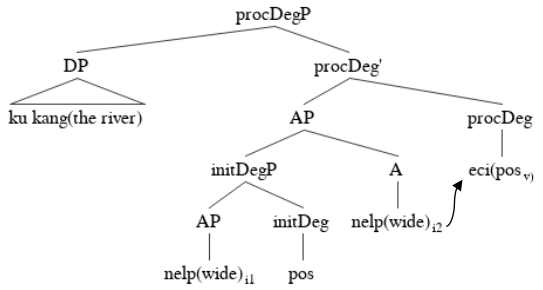
(1) a. Korean bare inchoative
tat-hi, 'close', *malu-* 'dry', *cec-* 'wet' (the towel dried/got wet), *swum-* 'hide', *pi-* 'empty', *cha-* 'fill', *yel-li* 'open', *tulena-* 'expose'

b. Korean *-eci* inchoative
kkaykkushay-eci- 'clean', *kencohay-eci-* 'dried', *suphay-eci-* 'wet' (the atmosphere of the room dried/got wet), *telewu-eci-* 'dirty', *hulisha-eci-* 'blur', *nelp-eci-* 'widen', *cop-aci-*'narrow', *ccalp-aci-* 'shorten'

-(e)ci is knows to denote the event where the degree property of an entity becomes greater than the previous one. In this respect, previous analyses of the structure of *-(e)ci* inchoatives put forth the idea that it contains comparative components in the structure as comparative constructions (Lim, 2016; Lim & Zubizarreta, 2010). Furthermore, *-(e)ci* is assumed to be a spell-out of light verb v, meaning 'become' (Zubizarreta & Oh, 2007; Lim & Zubizarreta, 2010). Under their assumption, however, it is difficult to rule out predicates that are incompatible with *-(e)ci* since *-(e)ci* acts as a BECOME operator.

Proposal: I propose two distinct structures of *-(e)ci* and bare inchoatives. The main ideas are firstly, *-(e)ci* is a spell-out of the degree head pos_v, and secondly, bare inchoatives have a covert v_{INCHO} that lead to the change of state, meaning 'become'. Following Ramchand's (2008) decompositional event structure, this paper proposes that *-(e)ci* inchoatives have two stages of degree phrases and uses intervals: *init*DegP and *proc*DegP as in (2):

(2)



Following Kennedy (1999), adjectives are assumed to be functions from individuals to degrees. Thus, it first combines with a functional degree head called Deg, which takes an adjective of type <e,d> as its argument and returns a predicate of type <e,t>. One of the functional degree heads, *pos,* is an unmarked positive form of degree, which is sensitive to the semantic property of a predicate (Petersen, 2015: 30). For predicates combining with *-(e)ci, pos* presents the non-minimal degree of the entity as its initial state in *init*DegP, at interval i_1 as in (3). The idea comes from the presupposition where the degree of the river must be wide enough to be called the river from the beginning of an event. This assumption rules out the predicates that become bare inchoatives since they require non-minimal or zero degree in the beginning of the event (e.g. *open*, *close*), whereas *-(e)ci* inchoatives require the minimal degree initially.

(3) a. $[\![\text{nelp(wide)}_{i1}]\!] = \lambda x.\ \lambda i_1 \in D_{<i>}.\ \text{width}_{max}(x)(i_1)$

b. $[\![pos]\!] = \lambda g \in D_{<e,<i,d>>}.\ \lambda x.\ \lambda i_1 \in D_{<i>}.\ g(x)(i_1)\text{: } g(x)(i_1) > \min_c(g)$

($\min_c$ is function from measure function to the contextually minimal element in the range.)

Then, in the later stage *proc*DegP, the width at interval i_2 that i_1 precedes combines with pos_v, which is the degree head of a verbal positive form morpheme introduced by Kennedy and Levin (2008). The width at interval i_2 undergoes head-to-head raising, moving to a higher *proc*Deg head, pos_v. In this structure, *-(e)ci* is the realization of pos_v and conveys the meaning that the width at interval i_2 is greater than the width at interval i_1.

(4) a. $[\![\text{nelp(wide)}_{i2}]\!] = \lambda x.\ \exists i_2\text{: } \mathbf{m}(x)(i_2)$

b. $[\![\textit{-eci (pos}_v\textit{)}]\!] = \lambda f \in D_{<e,<i,d>>}.\ \lambda h \in D_{<e,<i,d>>}.\ \lambda x.\ \lambda i_1.\ f(x) > h(x)(i_1)$

pos_v has been introduced to be a degree head that returns the measure of change function m_Δ to a predicate of type <e,t> (Kennedy and Levin, 2008).

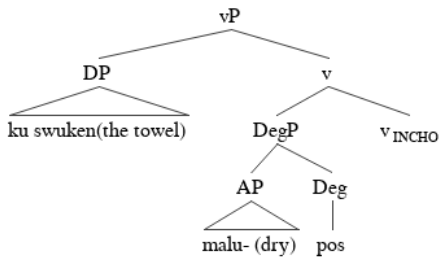
(5) Measure of change (Kennedy & Levin, 2008: 18)

For any measure function **m**, $\mathbf{m}_\Delta = \lambda x.\ \lambda e.\ \mathbf{m}_{\uparrow m(x)(init(e))}(x)(fin(e))$

The measure of change function contains the information of the positive change from the degree at the initial event to the degree at the final event. In the end, the core meaning of the output is the degree at the final event. I claim that the overall semantic denotation of m_Δ is decomposed into *init*DegP and the degree at interval i_2, as *nelp(wide)*$_{i2}$ in (2), in *-(e)ci* structure. The *init*DegP is the underlying structure of *-(e)ci* constructions and $nelp_{(i2)}$ is the pronounced *nelp*-'wide' with *-eci.*

I claim the predicates that become bare inchoatives combine with the degree head *pos,* but do not have two stages of DegPs as shown in (6). These predicates must achieve their minimal or maximal standardized degree to obtain their own semantic properties. The degree head *pos* encodes the maximal or minimal semantic property depending on the required standardized degree of a predicate. Furthermore, there is a covert little verb v_{INCHO} that contains the meaning of the change of state, adopting Son's (2006) proposal. However, in addition to her proposal, v_{INCHO} is more restricted to select the absolute predicates. For example, the truth value of *malu*-'dry' remains same across contexts as an absolute predicate, in contrast to *nelp*-'wide'. The semantic denotation of v_{INCHO} is shown in (7). It provides the critical end point where the state is changed. The structure of (6) presents an event where the towel reached its maximal degree of dryness. Before the event happens, the state of towel did not reach the maximal degree of dryness. It is true only if the towel attains the maximum degree value of dryness.

(6)



(7) v_{INCHO}: $\lambda P\ \exists e\ [\ \text{BECOME}\ (P)(e)=1]$

a. For all P, x and e, BECOME (P)(e) is defined iff for any context c and c', $[\![P]\!]^c \leftrightarrow [\![P]\!]^{c'}$

b. If defined, $\lambda P.\ \exists e.[\text{BECOME}\ (P)(e))=1]$ iff for all relevant interval $i < \tau(e)$, P is false at i' and for all relevant interval $\tau(e) < i''$, P is true where $\tau(e)$ is the running time of e.

Remarks: The proposed structure sheds light on the morphosyntax of degree achievements and its syntactic structure that Kennedy and Levin (2008) left as a future research. The proposal that *-(e)ci* is an overt pos_v marker would be a crosslinguistic evidence of Kennedy's (1999) claim. It also accounts for the distribution of *-(e)ci* and bare inchoatives by claiming the two distinct structures and the selection of predicates in each structure.

Selected reference: Kennedy, C. & Levin, B. 2008. Measure of Change: The Adjectival Core of Degree Achievements. In *Adjectives and Adverbs: Syntax, Semantics and Discourse*, (eds.). L. McNally and C. Kennedy, 1-30. Oxford: Oxford University Press.