

**A Study of “Degree Inchoative States” in Korean**  
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This paper examines a class of predicates in Korean (e.g. *nulk* ‘old’, *hwana* ‘angry’, *malu* ‘thin’), which refer to a property holding continuously in time, but crucially also to the *onset* of the described property (i.e. an initial boundary). These predicates are referred as “inchoative states (henceforth INS)” which have been reported in languages such as Salish languages (Bar-El 2005, Kiyota 2008), Japanese (Kiyota 2008), Korean (Chung 2005, Lee 2006, Choi 2015), Niuean, St’á’imcets (Davis 2012, Matthewson 2013, 2014), Spanish (Marín & McNally 2011 for discussion of reflexive psychological verbs) and Chinese (Chang 2003). As illustrated in (1a-b), an INS can yield, in the absence of an inchoative morpheme corresponding to ‘become’, an “inchoative interpretation”, according to which the property described by the predicate starts to hold at the reference time. The semantics of INSs proposed by Bar-El (2005) and Kiyota (2008) is given in (2).

- (1) a. *Squamish Salish* (Bar-El 2005)                      b. *Japanese* (Kiyota 2008)  
       Chen                      t’ayak’.  
       1.SG                      ANGRY  
       ‘I got tired.’  
       Taoru-ga                      nure-tei-ru.  
       towel-NOM                      wet-PFCT-PRES  
       ‘The towel got wet.’
- (2) b. INSs:  $\lambda e.\exists e_1\exists e_2. e=e_1\oplus e_2$  and  $e_2$  immediately follows  $e_1$  and  
       [[BECOME P]]( $e_1$ ) = 1 and [[P]]( $e_2$ ) = 1.                      (cf. Bar-El 2005 Kiyota 2008)

Following from the previous studies of INSs in other languages, this paper aims to investigate deadjectival INSs in Korean, which, as I shall argue, are in fact “degree inchoative states (henceforth DegINSs)”, that is, INSs associated with a degree parameter.

DegINSs in Korean exhibit gradability in that they can occur in the comparative and can also be modified by degree modifiers, just like gradable adjectives (cf. Kamp 1975, Croft 1991, Larson & Segal 1995) as shown in (3a-b).

- (3) a. Sue-ka                      **maywu**                      nulk-ess-ta.  
       Sue-NOM                      very                      old-PFCT-DEC                      ‘Sue is very old.’  
       b. Sue-ka                      Yuna-**bota**                      (te) nulk-ess-ta.  
       Sue-NOM                      Yuna-than                      more old-PFCT-DEC                      ‘Sue is older than Yuna.’

DegINSs in Korean are typically lexicalized as verbal predicates. It has been traditionally argued that, to describe on-going eventualities, verbal predicates in Korean take the overt non-past morpheme *-nun*, while non-verbal predicates do not take it (cf. Han 1996, Chung 1999, Song 1999, Yoon 1996).

- (4) a. Minho-nun                      cikum                      sakwa-lul                      mek-**nun**-ta.  
       Minho-TOP                      now                      apple-ACC                      eat-NON.PAST-DEC  
       ‘Minho is eating an apple now.’                      [verb]  
       b. Minho-nun                      cikum                      pikonha- $\emptyset$ /**\*nun**-ta.  
       Minho-TOP                      now                      tired-NON.PAST-DEC  
       ‘Minho is tired now.’                      [adjective]  
       c. Minho-to                      enceynkanun                      nulk-**nun**/**\* $\emptyset$** -ta.  
       Minho-also                      someday                      old-NON.PAST-DEC  
       ‘Minho also gets old someday.’                      [DegINS]

DegINSs such as *nulk* ‘old’ in (4c) can felicitously combine with the overt non-past marker *-nun* just like other verbal predicates, yielding an interpretation where Minho is not old at utterance time, but he will surely get old in the future.

Based on the properties observed in (3a-b, 4c), I claim that DegINSs in Korean are verbs derived from gradable adjectival roots [<sub>Adj<sup>o</sup></sub> *state*] via zero affixation of a null inchoative morpheme BECOME. As such, they give rise to gradability effects.

Interestingly, DegINSs modified by *in/for x time* adverbials yield three different readings: (i) a change of state reading, as in (5a); (ii) a resultant state reading as in (5b), and (iii) a process of iterated changes reading where throughout a period of *x* time, iterated changes of the property described by the DegINS take place, as in (5c).

- (5) a. Juno-ka                    *il-nyen-maney*                    sallji-ess-ta.  
       Juno-NOM                    one-year-in                    fat-PFCT-DEC  
       'Juno got fat in a year.'
- b. Juno-ka                    *il-nyen-tongan*                    saljji-essess-ta.  
       Juno-NOM                    one-year-for                    fat-PAST-DEC  
       'Juno had got fat and was fat for a year.'
- c. Juno-ka                    *il-nyen-tongan*                    saljji-ess-ta.  
       Juno-NOM                    one-year-for                    fat-PFCT-DEC  
       'Juno got fatter and fatter for a year.'

To account for the readings shown in (5a-c), I argue that a DegINS in Korean can alternate between two senses: 'become *S*' or 'become *S-er*', thus making a parallel with degree achievements (henceforth DA; e.g. *cool, lengthen*; cf. Dowty 1979, Hay et al. 1999, Kennedy & Levin 2008 among many others) which show a similar pattern, on Abusch (1986) and Kearns (2007)'s analysis. Crucially, however, I argue that DegINSs in Korean differ from DAs: On their telic reading, DegINSs are associated with a scale that has a lower-bound –that is, a *minimal* value of the relevant property–, unlike DAs which are associated with an upper-bound scale corresponding to a maximal value. The idea is that the change of state described by a DegINS is the change that leads to the attainment of a *minimal* value of the relevant property which can be seen as the *onset* of the described state (cf. Choi & Demirdache 2014). Accordingly, a telic DegINS is interpreted as 'become (minimally) *S*' (i.e. *standard telos*; Kearns 2007), unlike a telic DA which is interpreted as 'become maximally *S*' (i.e. *maximal telos*; Hay et al. 1999). This proposal correctly predicts that on the telic reading, the property described by a DegINS could progress further on the relevant scale after reaching the *telos*, as shown in (6).

- (6) Sue-ka    twu-tal-maney                    (manhi)                    malu-ess-ta.  
       Sue-NOM    two-month-in                    much                    thin-PFCT-DEC  
       Kulena                    taiethu-lul                    kyeysocha-myen                    te                    malu-l-swuto-iss-ta.  
       But                    diet-ACC                    continue-if                    more                    thin-FUT-could-be-DEC  
       'Sue got (very) thin in two months, but if she keeps the diet up, she could be thinner.'

The continuation in (6) expresses that it is possible to proceed to a higher value on the relevant scale; this is coherent because the *telos* of DegINS is not provided by a maximal scale degree.

Assuming that sentences containing DegINSs should be evaluated with respect to a degree parameter that constitutes a *minimal* value of the relevant gradable property, I account for the readings shown in (5a-c) of DegINSs induced by *in/for x time* adverbials, as follows. The DegINS in (5a) is interpreted as 'become *S*' and allows modification by the *in a year* adverbial measuring the time it takes to attain (at least) a minimal degree of Juno's fatness. The DegINS in (5b) interpreted as 'become *S*' also allows modification by the *for a year* adverbial measuring the duration of the eventuality of Juno's being fat. Finally, I derive the 'become *S-er*' reading of the DegINS in (5c) from the semantics of a basic INS given in (2), just assuming two additional semantic operations: (i) a *TO SOME DEGREE* operator that can be applied to a basic INS, giving us a predicate describing changes of state that result in possession of the relevant property to some degree or other; (ii) a *REPEATEDLY* operator that can apply to a predicate of eventualities, giving us a predicate describing iterated eventualities. The analysis will be provided in detail.