Telicity and Scale-boundedness in Change-of-State/Creation Verbs in Korean

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One type of Korean change-of-state verbs (*kkulh-i-ta* "boil", *malli-ta* "dry", *kuwp-ta* "bake", etc) as illustrated in (1), shows a different aspectual behavior from the other type morphologically derived from gradable adjectives (*neophi-ta/neolpeoji-ta* "widen", etc). The former displays only a telic reading as accomplishments, when its meaning extension to creation occurs (see p.2). The former type, with change-of-state process, however, can also be classified as Degree Achievements (DAs; Hey et al (1999), Kennedy and McNally(1999)), which shows variable telic (telic/atelic alternation) property, taking a durative as well as time span adverbial.

(1) a. Inpuw-tul-i   kil-ul   keoui   *(i miteo) neolphi-eoss-ta.

   Workers-Nom road-Acc   almost   2meters widen-Past-Dec

   " Workers almost widened the road 2 meters."

   b. Sue –ka   mool-ul   keoui   (ta/ wanceonhi) kkulhi-eoss-ta.

   Sue-Nom water-Acc almost   all/completely boil –Past-Dec

   " Sue almost boiled water (completely)." (Lit.)

The two types with *keoui* "almost" describe not attaining the respective result state. Unlike the change-of-state/creation verb in (1b), the gradable adjective-based class cannot yield a telic reading without a (contextual) measure phrase (MP) like *2 meter* (imperfective paradox arising).

Extending Hay et al (1999) and Kennedy (1997), we argue that this difference in telicity results from the difference in their scale structures associated with the respective class of verbs.

(2) a. A: Mul kkeulh-eoss-ni?

   Water boil-Past-Que   " Water boiled?"

   B: Ajik   an kkulh-eoss-eo.

   Yet Neg boil-Past-Dec   "Not yet." (Activity, not attaining the result state)

   b. A: Kil-i   neolpeojy-eoss-ni?

   Road   widen-Past-Que "The road widened?"

   B: Kutaero-ya. Ajik an neolpeojy-eoss-eo. (Even process event not occurring)

      Intact –Dec yet Neg widen-Past –Dec "It is as it was. The road not yet widened."

The unmarked reading of question (2aA) is a telic reading of change-of-state. These question-

answer pairs show the distinction between the scale structures. Under the assumption that P-results (predicating result state of each stage of event in progress) including gradable adjectives as a measure function from argument to degree on the scale, we argue that the *neolp-hi-ta/neolp-eoji-ta* 'widen' (Vt/Vi) class as open-range predicates introduces a nonfinite scale lacking a lower-/upper-end value, while the other a closed one.

For the events expressed by a de-adjectival predicate, the telic reading can result from the specificity of the MP like *i miteo* "two meters", which refers to a specific degree on the width scale and thus delimits the process subevent. Without this MP, the change-of-state verb only shows the process in which the scalar value as a projection of individual *kil* "road" varies along the limitless scale continuously. The overt measure material *i miteo* rather than the affected argument *kil* bounds the event as an incremental Theme, resulting in the telic reading and homomorphism between the change-of-state process and the difference value on the scale.

The other type including *kkulh-ta* 'boil' lexically incorporates a bounded scale (associated with the boiling point/measurement) and thus its default is a telic 'completely' reading, without overt MP/expression referring to an end point. Completeness can be denied by precification of telicity vagueness or by canceling the telicity conversational implicature. For *kkulhi-ta* "boil", the upper bound is regarded as a trivial standard value, cross-contextually.

In contrast, when the change-of-state verb undergoes meaning extension to creation, the new artifact argument binds a specific value other than an end value. Telicity by the artifact's binding the specific difference value cannot be cancelled. Only the fact an upper-end value is the artifact's binding point can be cancelled, as in *panzzum kuweoji-n ppang* " half baked bread".

We represent both change-of-state verbs' and polysemous verbs' lexical semantic structures encoding this telicity variability, based on difference in scale structures, by means of extended co-composition of each verb with its argument (Pustejovsky, 1995)(see (B) on p. 2).

(A) In Korean, *kkulhi—ta* 'boil' and other verbs meaning 'dry' and 'bake' become creation verbs, with an artifact object. Observe:

  Sue –ka   ccigae-rul keoui (ta)   kkulhi-eoss-ta.

  Sue-Nom water-Acc almost all/completely boil –Past-Dec

   " Sue almost cooked the stew (completely)." (Lit.)

(B) a. When the structure of *neolph-i-ta* (in its atelic reading) in co-composition with that of a Default Argument, a numeric measure that includes a bounded FORMAL value, the extended structure is derived from qualia unification under the condition of

Q_{TELIC}(*neolph-i-ta*) $=Q_{TELIC}$(numeric measure). The FORMAL role becomes the FORMAL of the VP with an overt measure. As result of co-composition, the FORMAL inherited from the numeric measure results in the telicity interpretation.

b. As for change-of-state/creation verb as closed-range predicates, the structure of the verb is composed with its artifact nominal's structure that includes a FORMAL result state, the end point of the event.

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