Some Activity Predicates as Accomplishments

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Juwon Lee. 2016. Some Activity Predicates as Accomplishments. Language and Information 20.2, 117-143. In this paper I argue that some "activity" predicates in Korean are actually a kind of accomplishment rather than activity, unlike English counterparts. As evidence for this recategorization, failed attempt interpretation, ambiguity with in-adverbial or keuy 'almost', and non-ambiguity with tasi 'again' are discussed. This type of accomplishment is called activity-accomplishment here and this accomplishment analysis is extended to other kinds of "activity" verbs in Korean, manner of speaking verbs and perception verbs. I also show that in addition to lexical activity-accomplishment, some derived activity-accomplishments involving resultative or causative constructions support the existence of activity-accomplishment in Korean. (Kyung Hee University)

Keywords: lexical aspect, activity, accomplishment, event structure, failed attempt interpretation, Korean

1. Introduction

This paper discusses the event structure of what is referred to as activity predicate in Korean (see discussions on Korean activity predicates in C. Lee 1982, Oh 1998, Kim & Sells 2006, 2010, Chung 2007, inter alia). Activity predicate in English can be defined as the predication of an action over an individual (see English activity in e.g. Vendler 1957, Dowty 1979, Levin 1993, Rappaport Hovav & Levin 1998, Rothstein 2004, Beavers 2013). For instance, some English verbs of manner of motion (a kind of activity verbs) are presented in (1) (see more examples in Levin 1993: 89); they describe a manner of motion or means of motion, as the name suggests (Levin 1993).

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(1) He jumped / walked / ran / spun / swam / danced.

The English activity verbs like (1) are considered to have the simplex event structure in (2b) without smaller subevents; the event structures of the other lexical aspectual classes (see Rappaport Hovav & Levin 1998) are also given in (2) with some examples (see also Dowty 1979, Parsons 1990, Pustejovsky 1991, Smith 1997, Levin 1993, Rothstein 2004, Beavers 2013, among others):

(2) a. State: [x <STATE>]
   know, believe, have, desire, love

b. Activity: [x ACT<MANNER>]
   run, walk, swim, push a cart, drive a car

c. Achievement: [BECOME [x <STATE>]]
   arrive, notice, spot, find, die

d. Accomplishment: [[x ACT] CAUSE [BECOME [y <STATE>]]]
   paint a picture, make a chair, draw a circle, build a house

The corresponding Korean manner of motion verbs are presented in the following:

(3) ku-ka ttwi-ess-ta / kel-ess-ta / talli-ess-ta / tol-ass-ta
   he-Nom jump-Pst-Dec / walk-Pst-Dec / run-Pst-Dec / spin-Pst-Dec
   / swuyenghay-ss-ta / chwumchwu-ess-ta.
   / swim-Pst-Dec / dance-Pst-Dec
   'He jumped / walked / ran / spun / swam / danced.'

Although the Korean verbs in (3) appear to have the same meanings as those of the English counterparts, we may ask from a typological perspective whether the former are really the same as the latter. In the literature the Korean verbs like (3) are called activity verbs just like the English counterparts and so it is generally assumed that they also have the simplex event structure in (2b) (see C. Lee 1982, Ahn 1995, Oh 1998, Chung 2007, E. Lee 2008, J. Kim 2013). In this paper, however, I propose the hypothesis that some "activity" predicates in Korean are actually a kind of accomplishment having a complex causative event structure whose caused subevent is an action, rather than genuine activity having the simplex event structure. This hypothesis is supported with several pieces of evidence here and I believe this study can offer an important insight into aspectual classes and verbal semantics in Korean.

This paper is organized as follows. In section 2, I show that some Korean "activity"
predicates permit failed attempt readings, which require a causative event structure. Section 3 shows that the "activity" predicates are ambiguous when modified by an in-adverbal. In section 4, the ambiguity with keuy 'almost' is taken as another piece of evidence for the hypothesis. In section 5, I classify Korean accomplishment into two types, state-accomplishment and activity-accomplishment. In section 6, I argue that the non-ambiguity of activity-accomplishment with tasi 'again' can be derived from its event structure. In section 7, I show that some manner of speaking verbs and perception verbs are also activity-accomplishment. Section 8 concludes the paper.

2. Failed attempt interpretations

In this section, I show that failed attempt interpretation is allowed only for accomplishments (lexical or derived) in Korean and that some Korean "activity" predicates also allow failed attempt interpretations.

2.1 The phenomenon

English accomplishment predicates (involving break, open, etc.) require actual occurrences of the inherent result states of the predicates. As illustrated in (4), it is contradictory to deny the occurrence of the inherent result of an accomplishment predicate after asserting the event denoted by the predicate.

(4) a. Lily broke the window, #but it was not broken.
    b. Lily opened the window, #but it was not opened.
    c. Lily turned on the light, #but it was not turned on.
    d. Lily woke her husband, #but he was not woken.

However, not every language has the same property as English in this respect. In some other languages, the inherent result of an accomplishment predicate is not required to obtain completely for the sentence headed by the predicate to be true (see Japanese in Ikegami 1985, Korean in Park 1993, Y. Lee 2004, J. Lee 2012, 2014, 2015, Hindi in Singh 1998, Arunachalam & Kothari 2011, Thai in Koenig and Muansuwan 2000, Salish languages in Bar-el et al. 2005, Karachay-Balkar in Tatevosov 2008, Tamil in Pederson 2008, Chinese in Koenig and Chief 2008, among many others). When the result included in an accomplishment predicate does not occur at all in the actual world, this reading of the predicate is called failed attempt (see Tatevosov 2008).\footnote{Failed attempt is a type of what is called non-culmination interpretation. Partial success (or partial result) also belongs to non-culmination (Tatevosov 2008: 397). In this paper, however, I focus on failed attempt interpretation, since partial success interpretation is not directly relevant to the issue under discussion.}

Consider the failed attempt
readings of the Korean accomplishments in (5) (see similar examples in Park 1993, Y. Lee 2004, J. Lee 2015). Note, however, that the default readings of the accomplishment predicates are the readings in which the inherent results actually occur.3

   he-Nom door-Acc break-Pst-but at.all break-Pass-Comp Neg-Pst-Dec
   (lit.) 'He broke the door, but it was not broken at all.'
   = (roughly) 'He tried to break the door, but it was not broken at all.'

   he-Nom door-Acc open-Pst-but at.all open-Pass-Comp Neg-Pst-Dec
   (lit.) 'He opened the door, but it was not opened at all.'
   = (roughly) 'He tried to open the door, but it was not opened at all.'

c. ku-ka pwul-ul khi-ess-ciman, pwul-i khie-ci-ci
   he-Nom light-Acc turn.on-Pst-but light-Nom turn.on-Pass-Comp
   Neg-Pst-Dec
   (lit.) 'He turned on the light, but it was not turned on.'
   = (roughly) 'He tried to turn on the light, but it was not turned on.'

   he-Nom Jane-Acc wake-Pst-but Janet-Nom wake-Comp Neg-Pst-Dec
   (lit.) 'He woke Jane, but she did not wake up.'
   = (roughly) 'He tried to wake Jane, but she did not wake up.'

In (5) the actual occurrences of the results are explicitly denied in the following clauses, but the sentences are still acceptable unlike English counterparts. The first clauses in (5) are interpreted as failed attempts (due to the denials of the occurrences of the results): that is, in (5a) the subject intended to break the door, but he failed probably because the door was very thick and solid; in (5b) the subject intended to open the door, but he failed maybe because the door was very heavy; in (5c) the subject intended to turn on the light, but he failed perhaps due to the malfunction of the electric wiring connected to

2 Failed attempt interpretation is similar to but different from the meaning of 'try to VP': the former requires the occurrence of a direct causing event, but the latter does not (J. Lee 2015: 94-98).

3 Some native speakers of Korean may not accept the sentences in (5). However, similar sentences are found in the Web (J. Lee 2015: 5) and most of my informants accepted the sentences. So I assume that the sentences in (5) are basically licensed by the grammar and similarly for the other data in this paper, though a detailed experimental study appears to be required to further verify the data (see experimental studies of non-culmination in Pederson 2008, Arunachalam & Kothari 2011).
the light; and in (5d) the subject intended to wake Jane, but he failed perhaps because Jane fell into a deep sleep. Note that if Jane was actually woken, then the sentence (5d) cannot be applied to this situation, of course. All the sentences in (5) can be used only in a situation wherein the subject had an intention (see section 2.2), but the result did not occur. Moreover, in a failed attempt reading, the causing event must actually occur: for instance (5d) is not true of a situation in which the subject simply had an intention to wake Jane in his mind, but did nothing yet to wake her (J. Lee 2015).


(6) a. Martin-i os-ul tasi kkaykkusa-key mouncille-ss-ta.
    Martin-Nom clothes-Acc again clean-Key rub-Pst-Dec
    'Martin rubbed the clothes clean again.'

    1. Repetitive reading: Entails that Martin rubbed the clothes clean and
       presupposes that Martin rubbed the clothes clean before.
    2. Restitutive reading: Entails that Martin rubbed the clothes clean and
       presupposes that the clothes were previously clean.

b. Martin-i os-ul tasi kkaykkusa-key hay-ss-ta.
    Martin-Nom clothes-Acc again clean-Key do-Pst-Dec
    'Martin made the clothes clean again.'

    1. Repetitive reading: Entails that Martin made the clothes clean and
       presupposes that Martin made the clothes clean before.
    2. Restitutive reading: Entails that Martin made the clothes clean and
       presupposes that the clothes were previously clean.

The sentences in (6) belong to derived accomplishments. In the resultative sentence (6a), for instance, the combination of the verb and the resultative predicate, kkaykkusa-key 'clean-Key', constitutes a causative event structure in which the rubbing event functions as the causing subevent and the cleanness corresponds to the caused subevent. The causative sentence in (6b) is similar to (6a) in that (6b) also has a causative event structure, but its causing subevent is not specified unlike (6a). The resultative and causative constructions also allow failed attempt interpretations, as shown by the
examples in (7).

(7) ku-ka os-ul kkaykkusha-key yelsimhi mwuncille- / hay-ss-ciman,
    he-Nom clothes-Acc clean-Key diligently rub- / do-Pst-but
   cokumto kkaykkusha-ci anh-ass-ta.
   at.all clean-Comp Neg-Pst-Dec

   (lit.) 'He diligently rubbed/made the clothes clean, but it was not clean at all.'

In the failed attempt readings of the sentences, the causing events (specified or unspecified) must occur in the actual world, but the result (cleanness) is not achieved.

By contrast, achievement and state in Korean disallow failed attempt reading (J. Lee 2015). For instance, the verbs tochakha- ‘arrive’ and alapo- ‘recognize’ are achievements like their English counterparts, which can be distinguished from accomplishments by the non-ambiguity with in x time (see section 3 below and some properties of English achievement in Dowty 1979: 58, Rothstein 2004: 22):

(8) a. ku-ka samwusil-ey il pwun maney tochakhay-ss-ta.
    he-Nom office-at one minute in arrive-Pst-Dec
   'He arrived at the office in one minute.' (only completion reading)

b. ku-ka Jane-ul il pwun maney alapo-ass-ta.
   he-Nom Jane-at one minute in recognize-Pst-Dec
   'He recognized Jane in one minute.' (only completion reading)

The Korean achievement predicates are obviously contradictory to the denials of the results of the predicates, as shown in (9).

(9) a. ku-ka sameusil-ey tochakhay-ss-ciman, #tochakha-l swu eps-ess-ta.
    he-Nom office-at arrive-Pst-but arrive-Rel way not.exist-Pst-Dec
   (lit.) 'He arrived at the office, but he could not arrive at the office.'

    he-Nom Jane-at recognize-Pst-but recognize-Rel way not.exist-Pst-Dec
   (lit.) 'He recognized Jane, but he could not recognize Jane.'

Thus a failed attempt reading is not available for Korean achievements: e.g. (9a) cannot be interpreted as something like 'He tried to arrive at the office, but he could not arrive at the office' and similarly for (9b).

Although it is not very surprising, the predicative adjectives mwukep- 'heavy' and kapyep- 'light' cannot occur in the progressive, as shown in (10).
Since states generally do not occur in the progressive, the predicates in (10) should be classified as states (see the properties of state in Dowty 1979, Dixon 1982, Rothstein 2004, Koontz-Garboden 2007). They do not allow failed attempt interpretation as follows:

(10) *kapang-i mweke- / kapyep-ko iss-ta.
    bag-Nom heavy- / light-Comp exist-Pst-Dec
    (lit.) 'The bag is being heavy/light.'

In (11), the denials of the states in the following clauses apparently contradict the assertions of the states in the preceding clauses. Summarizing, the generalization observed here is that failed attempt reading is available for accomplishment (whether it be lexical or derived) and not state or achievement in Korean (J. Lee 2015).

2.2 The subject's intention

The relation between failed attempt interpretation and intention is discussed in this section. J. Lee (2015) argues that failed attempt readings of Korean accomplishment predicates entail the intentionality on the part of the subject (see similar observations on other languages in Ikegami 1985, Tatevosov 2008, Martin and Schäfer 2012). In order to see if failed attempt readings really require the notion of intention, we may test whether failed attempt predicates can be modified by an adverb like silswulo 'accidentally'. If failed attempt predicates can be modified by such an adverb, then failed attempt interpretations may not entail the intentionality. However, it is important to note that when an adverb such as silswulo 'accidentally' modifies a failed attempt predicate, this does not necessarily mean that the subject does not have an intention related to the event denoted by the predicate, since the adverb can describe the subject's misunderstanding or non-intentionality. For instance, consider the following sentence which is uttered in the misunderstanding context given in (12).

(12) [Context: Tom intended to wake Grace and not Mary. But Tom mistook Mary as Grace and Tom shook Mary to wake her, thinking she was Grace.]
In (12), Tom tried to wake Mary in the actual world, but he tried to wake Grace in his mind. Even though the adverb *silswulo* 'accidentally' appears in a sentence, this does not necessarily mean that the subject of the sentence did not intend to do what he did. Thus in order to see whether the subject really intends to do something in his mind, we should exclude the possibility of misunderstanding of the sort. For example, because of the contexts given in (13), the possibility of the agent's misunderstanding can be excluded. In these contexts, the accomplishment predicates modified by *silswulo* 'accidentally' contradict the denials of the occurrences of the inherent results of the predicates:

(13) a. [Context: There was a window in front of Glen and Glen knew that it was a window. That is, Glen did not mistake the window as something else.]

Tom-i silswulo Mary-lul kkay-wess-ciman,
Tom-Nom accidentally Mary-Acc wake-Pst-but
Mary-nun kkay-ci anh-ass-ta.
Mary-Top wake-Comp Neg-Pst-Dec
(lit.) 'Tom accidentally woke Mary, but she did not wake up.'

b. [Context: There was a light in front of Glen and Glen knew that it was a light. That is, Glen did not mistake the light as something else.]

Glen-i silswulo changmwun-ul yel-ess-ciman,
Glen-Nom accidentally window-Acc open-Pst-but
at.all open-Pass-Comp Neg-Pst-Dec
(lit.) 'Glen accidentally opened the window, but it was not opened at all.'

In the following sentence, *Glen-i pwul-ul khi-ess-ciman, pwul-i khi-ce-ci anh-ass-ta* (lit.) 'Glen turned on the light, but it was not turned on', whether Glen had an intention is not explicitly specified. But if *silswulo* 'accidentally' is added to the sentence as in (13b), thus explicitly specifying that Glen had no intention, the result must occur. Then the failed attempt sentence (*Glen-i pwul-ul khi-ess-ciman, pwul-i khi-ce-ci anh-ass-ta* (lit.) 'Glen turned on the light, but it was not turned on') cannot be applied to a situation where Glen had no intention. Thus the contradictions in (13) indicate that the agent's intention in her
mind is necessary for failed attempt interpretations of accomplishments.

The notion of intention in turn requires the agent’s belief about a causation (see an argument for this relation in J. Lee 2015: 76-80). Intuitively, we cannot intend to do what we believe is impossible. In the context given in (14) Jessica does not have her belief or knowledge regarding a causal relation (i.e. she thought that it was impossible to break the cup simply by hitting it) and the accomplishment predicate cannot have its failed attempt reading in this context.

(14) [Context: Jessica wanted the cup to be broken. Jessica did not know that hitting the cup could break it, since she thought that the cup was very strong and solid. Jessica deliberately hit the cup.]

Jessica-Nom cup-Acc break-Pst-but cup-Nom break-Pass-Comp Neg-Pst-Dec
(lit.) ‘Jessica broke the cup, but it was not broken.’

If Jessica knew that hitting the cup could break it in the context in (14) with other parts being equal, then the failed attempt interpretation of kkay- ‘break’ is possible in this new context. This suggests that the subject’s belief or knowledge about a possible causal relation is necessary for failed-attempt interpretation. Since only accomplishment predicates have a causative event structure, it is natural that failed attempt readings are available only for accomplishment predicates.

2.3 Failed attempt readings of activity predicates

Based on the generalization that failed attempt interpretation requires an accomplishment, we can now test the lexical aspectual class of the so-called "activity" predicates by investigating whether they allow failed attempt readings or not. In (15) the Korean manner of motion verbs ttwi- ‘jump’ and ket- ‘walk’ seem to permit their failed attempt readings:

(15) a. [Context: Arthur’s legs were stuck in the mud.]
Arthur-ka onhimultahayse ttwi-ess-ciman,
Arthur-Nom with.all.the.strength jump-Pst-but
cokiumto ttwi-l swu eps-ess-ta.
at.all jump-Rel way not.exist-Pst-Dec
(lit.) ‘Arthur jumped with all the strength, but he could not jump at all.’
= (roughly) ‘Arthur tried to jump with all the strength, but he could not jump at all.’
b. [Context: Arthur's legs were stuck in the mud.]

Arthur-ka onhimmultahayse kel-ess-ciman,
Arthur-Nom with.all.the.strength walk-Pst-but
cokumto kel-ul swu eps-ess-ta.
at.all walk-Rel way not.exist-Pst-Dec
(lit.) 'Arthur walked with all the strength, but he could not walk at all.'
= (roughly) 'Arthur tried to walk with all the strength, but he could not walk at all.'

The availability of the failed attempt readings in (15) suggests that the predicates are in fact accomplishment with a causative event structure, rather than activity with a simplex event structure.

However, it seems not the case that all the activity predicates in Korean allow failed attempt readings. Consider the following sentences:

(16) a. [Context: Arthur's legs were stuck in the mud.]

Arthur-ka onhimmultahayse talli-ess-ciman,
Arthur-Nom with.all.the.strength run-Pst-but
??cokumto talli-l swu eps-ess-ta.
at.all run-Rel way not.exist-Pst-Dec
(lit.) 'Arthur ran with all the strength, but he could not run at all.'

b. [Context: Arthur was tightly bound.]

Arthur-ka onhimmultahayse chwumchwu-ess-ciman,
Arthur-Nom with.all.the.strength dance-Pst-but
??cokumto chwumchwu-l swu eps-ess-ta.
at.all dance-Rel way not.exist-Pst-Dec
(lit.) 'Arthur danced with all the strength, but he could not dance at all.'

If the sentences in (16) are really contradictory, how to account for the contrasts between (15) and (16) is an interesting question, but I set aside this issue. What is important in this study is that the failed attempt readings in (15) show that at least some Korean "activity" predicates should be recategorized as a kind of accomplishment. Another piece of evidence for this accomplishment analysis is presented in the following section.

3. Ambiguity with in-adverbial

Another grammatical property to distinguish accomplishment from activity is related to the modification involving in x time (see Dowty 1979, Rothstein 2004, among others). In
(17a), the accomplishment predicate *built the house* is modified by the *in*-adverbial, *in one month*, and it has two readings. However, in (17b) *walked* is not ambiguous even though it is modified by the same type of temporal modifier, *in one minute*.

(17) a. Bill built the house in one month.
   1. Ingressive reading: It took one month for Bill to prepare to build the house (e.g. Bill thought about how to build a house just before he started building it).
   2. Completion reading: It took one month for Bill to complete building the house.

b. Bill walked in one minute.
   1. Ingressive reading: It took one minute for Bill to prepare to walk (e.g. Bill put on his shoes and stood on the starting line just before he started walking).

The account of this difference hinges on the difference in the event structures associated with these two types of verbs (Dowty 1979). Verbs like *build* are accomplishment whose causative event structure includes a result state and so the completion reading is available when the result state occurs at the end of the time interval denoted by *in x time* (see Smith 1997: 114-115). The verbs like *walk* are activity having a simplex event structure and only the preliminary event of, for example, walking is completed at the end of the time interval denoted by *in x time*.

The Korean accomplishment is parallel to English counterparts in this respect. If the verbs *cis-* 'build' and *chilha-* 'paint' are modified by a *maney*-adverbial (*in*-adverbial), they are ambiguous between ingressive and completion readings:

   Bill-Nom one month in house-Acc build-Pst-Dec
   'Bill built the house in one minute.'
   1. Ingressive reading: It took one month for Bill to prepare to build the house.
   2. Completion reading: It took one month for Bill to complete building the house.

b. *Bill-i il pawun maney byek-ul chilhay-ss-ta.*
   Bill-Nom one minute in wall-Acc paint-Pst-Dec
   'Bill painted the wall in one minute.'
   1. Ingressive reading: It took one minute for Bill to prepare to paint the
wall (e.g. Bill moved paint to the wall and stood in front of it).
2. Completion reading: It took one minute for Bill to complete painting the wall.

Like the accomplishment predicates in (18), the Korean manner of motion verbs are ambiguous between ingressive and completion readings when they are modified by a maney-adverbial:

    Jack-Nom one minute in jump-Pst-Dec
    (lit.) 'Jack jumped in one minute.'
    1. Ingressive reading: It took one minute for Jack to prepare to jump (e.g. Jack put on his shoes and then stood on the ground just before he started jumping).
    2. Completion reading: It took one minute for Jack to actually jump (e.g. Jack bent and stretched his legs and then took his feet off the ground).

    Jack-Nom one minute in walk-Pst-Dec
    (lit.) 'Jack walked in one minute.'
    1. Ingressive reading: It took one minute for Jack to prepare to walk (e.g. Jack tied his shoe laces and then stood on the starting line just before he started walking).
    2. Completion reading: It took one minute for Jack to actually walk (e.g. Jack lifted his leg and then put it onto the ground).

This ambiguity of the manner of motion verbs can be explained if they have a causative event structure like typical accomplishments.4

4 An anonymous reviewer pointed out that the "activity" predicates can be modified by tongan-adverbial (for x time) more naturally than maney-adverbial (in x time), unlike typical accomplishment predicates and said that this difference cannot be explained if the "activity" predicates are accomplishment. First, I agree that the "activity" predicates tend to be modified by tongan-adverbial. However, this difference of tendency does not necessarily mean that the "activity" predicates are not accomplishment. Rather, I believe that an important property distinguishing accomplishment from activity is whether a predicate modified by maney-adverbial is ambiguous or not. The tendency difference is probably attributed to the different types of results: state result vs. action result (see the two types of accomplishments in section 5 below), though further research is necessary to examine this hypothesis.

4. Ambiguity with almost
If an accomplishment predicate is modified by *almost*, it is ambiguous, but this is not the case for activity (Dowty 1979). For example, consider the following contrast (examples from Dowty 1979: 58):

(20) a. John almost painted a picture.
   b. John almost walked.

The sentence in (20a) is considered to have two readings because of the modification with *almost*: (i) John almost started painting a picture (e.g. John sit on a chair to paint a picture) but did nothing at all (i.e. *almost* takes scope over the whole event structure), or (ii) John started painting a picture but he almost but not quite finished it (i.e. *almost* takes scope only over the result state). The sentence in (20b), in contrast, is not ambiguous: John almost started walking (e.g. John stood on the starting line to walk) but did not walk at all. The multiple meanings of (20a) can be derived from the scopal ambiguity of *almost* in relation to the causative event structure of (20a).

The Korean accomplishment predicate in (21) is also ambiguous with *keuy* 'almost', as expected.

(21) *Taylor-ka keuy mwun-ul yel-ess-ta.*  
   Taylor-Nom almost door-Acc open-Pst-Dec  
   'Taylor almost opened the door.'

1. Taylor almost started opening the door (e.g. Taylor stood in front of the door to open it, but changed his mind and went away).
2. Taylor started opening the door (e.g. Taylor pushed the door), but he almost but not quite finished it.

Just like the accomplishment predicate, the Korean "activity" predicates in (22) are ambiguous with *keuy* 'almost'.

(22) a. *Taylor-ka keuy ttwi-ess-ta.*  
   Taylor-Nom almost jump-Pst-Dec  
   (lit.) 'He almost jumped.'

1. Taylor almost started jumping (e.g. he stood on the ground to jump, but changed his mind and went away).
2. Taylor started a causing action of jumping (e.g. he bent his legs and stretched them to jump by internal functions of his body), but he almost but not quite finished jumping (e.g. he did not take his feet off the ground probably because someone bumped against him at that moment).
b. Taylor-ka keuy kel-ess-ta.
   Taylor-Nom almost walk-Pst-Dec
   (lit.) 'He almost walked.'

1. Taylor almost started walking (e.g. he stood on the starting line to walk, but changed his mind and went away).
2. Taylor started a causing action of walking (e.g. he lifted his leg to walk by internal functions of his body), but he almost but not quite finished walking (e.g. he did not put his leg onto the ground probably because someone bumped against him at that moment).

Here again, the ambiguity with keuy 'almost' can be accounted for if the manner of motion verbs have a causative event structure; keuy 'almost' can take different scopes in relation to the causative event structure of the verbs. Achievement and state, which have a simplex event structure, modified by keuy 'almost' are not ambiguous.

5. Two types of accomplishments

Based on the three pieces of evidence presented above, it is more plausible to view the Korean verbs such as ttwi- 'jump' and kel- 'walk' as an accomplishment. I refer to this kind of accomplishment as activity-accomplishment and propose the following complex causative event structure consisting of two smaller subevents:

(23) Activity-Accomplishment: [[x ACT] CAUSE [x ACT<\textit{MANNER}>]]

According to (23), the causing subevent [x ACT] is an unspecified action (though it involves internal functions of our body), and the caused subevent [x ACT<\textit{MANNER}>] specifies a result action. The other typical accomplishment predicates (involving e.g. kkaqwu- 'wake' or yel- 'open') are referred to as state-accomplishment since the caused subevent specifies a result state:

(24) Classification of accomplishment predicates in Korean:

\[
\begin{array}{c}
\text{Accomplishment} \\
\text{State-Accomplishment} \quad \text{Activity-Accomplishment}
\end{array}
\]

As shown in section 2.1 above, we have both lexical state-accomplishment and derived state-accomplishment (e.g. resultative constructions). I show below that we also have derived activity-accomplishment in addition to the lexical activity-accomplishment.
Resultative constructions in Korean can be broadly classified into two types: stative resultative like (25a) and eventive resultative like (25b) (see the distinction of resultative constructions in Son 2008).

(25) a. ku-ka os-ul kKaykkusha-key mwuncille-ss-ta.
   he-Nom clothes-Acc clean-Key rub-Pst-Dec
   'He rubbed the clothes clean.'

   b. Mary-ka Marcus-lul ttwi-key mil-ess-ta.
   Mary-Nom Marcus-Acc jump-Key push-Pst-Dec
   'Mary pushed Marcus so that he jumped.'

Unlike lexical accomplishments, the causing events of the derived accomplishments in (25) are specified by the main verbs. The caused event of the stative resultative in (25a) is the result state (cleanness) but the caused event of the eventive resultative in (25b) is the result action (jumping). The existence of derived activity-accomplishments such as (25b) further supports the general classification of Korean accomplishments in (24).

6. Ambiguity with again

The ambiguity involving tasi 'again' is used as a general property of accomplishment predicates in section 2.1 above (see the examples in (6)). If the verbs like ttwi- 'jump' and ket- 'walk' are really accomplishments, it is predicted that they should be ambiguous between repetitive and restitutive readings when modified by tasi 'again'. However, as shown in (26) the manner of motion verbs seem to have only the repetitive readings:

   Sam-Nom again jump-Pst-Dec
   'Sam jumped again.'
   1. Repetitive reading: Entails that Sam jumped and presupposes that Sam jumped before.

   b. Sam-i tasi ket-ess-ta.
   Sam-Nom again walk-Pst-Dec
   'Sam walked again.'
   1. Repetitive reading: Entails that Sam walked and presupposes that Sam walked before.

By contrast, a lexical state-accomplishment has the multiple interpretations when
modified by tasi 'again':

(27)  Martin-i os-ul tasi mali-ess-ta.
     Martin-Nom clothes-Acc again dry-Pst-Dec
     'Martin dried the clothes again.'

1. Repetitive reading: Entails that Martin dried the clothes and presupposes that
   Martin dried the clothes before.
2. Restitutive reading: Entails that Martin dried the clothes and presupposes
   that the clothes were previously dry.

In the restitutive reading of (27), tasi 'again' takes scope only over the state in the event
structure of the predicate and so what is repeated is the state of being dry: the repetitive
reading is a kind of the restitutive reading, since the former is more specific than the
latter.

Then there are two possible approaches to the non-ambiguity with tasi 'again' in (26):
(i) the manner of motion verbs are not accomplishments (like English counterparts) or (ii)
they are in fact accomplishments, but there is a confounding factor preventing them from
being ambiguous with tasi 'again'. If we assume that the manner of motion verbs are not
accomplishment, then we would have much burden to explain why they have crucial
properties that are found in typical accomplishments (i.e. availability of failed attempt
interpretation and ambiguity involving maney-adverbial or keuy 'almost'). If we assume
that the manner of motion verbs are accomplishment, then the confounding factor should
be identified. In other words, what derives the non-ambiguity in (26)?

An important difference between state- and activity-accomplishments is that the agent
and theme can be different in the event structure of state-accomplishment (see the
variables, x and y, in [[x ACT] CAUSE [BECOME [y <STATE>]]]), but in the proposed
event structure of activity-accomplishment ([[x ACT] CAUSE [x ACT_{MANNER}]]) the agent
and theme are the same. The causal relation in the activity-accomplishment is assumed to
be reflexive: the causer is the causee. Intuitively, we can jump or walk only by internal
functions of our bodies; a person seems not to be able to control internal functions of
other people's bodies. In other words, whenever jumping or walking occurs, this is
generally done by the very person who jumps or walks unlike opening a window or
waking a person, which can be done by different agents. Then if tasi 'again' takes scope
only over the result action of the causative event structure of ttwi-ess-ta 'jumped' in (26a),
we seem to have the restitutive reading which entails that Sam jumped (i.e. [[Sam ACT]
CAUSE [Sam ACT_{jump}]])) and presupposes that Sam jumped before (i.e. [Sam ACT_{jump}]
which should be caused by [Sam ACT] due to the reflexive relation and probably some
kind of homomorphism). This restitutive reading is basically the same as the repetitive
reading that entails that Sam jumped (i.e. [[Sam ACT] CAUSE [Sam ACT_{jump}]])) and
presupposes that Same jumped (i.e. [[Sam ACT] CAUSE [Sam ACT\textsuperscript{jump}]]) before. In other words, the reflexivity in the lexical activity-accomplishment seems to restrict the restitutive reading in a way that it is applied to the same situation described by the repetitive reading, although at first glance the restitutive reading seems to be unavailable.

Then if the participants are different in the event of an activity-accomplishment sentence, we expect that the restitutive reading should be different from the repetitive reading. In (28), \textit{tasi} 'again' modifies the derived activity-accomplishment predicate, in whose event the agent of the pushing event can be different from the agent of the jumping event, and the sentence has the two readings:

\begin{quote}
\begin{tabular}{l}
(28) Mary-ka tasi Marcus-lul ttwi-key mil-ess-ta. \\
Mary-Nom again Marcus-Acc jump-Key push-Pst-Dec \\
'Mary pushed Marcus so that he jumped again.'
\end{tabular}
\end{quote}

1. Repetitive reading: Entails that Mary pushed Marcus so that he jumped and presupposes that Mary pushed Marcus so that he jumped before.

2. Restitutive reading: Entails that Mary pushed Marcus so that he jumped and presupposes that Marcus jumped before.

In the following section, I extend the accomplishment analysis to some manner of speaking verbs and perception verbs in Korean.

\section{Extension to other verbs}

I show in this section that in addition to the manner of motion verbs, some other kinds of "activity" verbs in Korean should be also treated as accomplishments.

\subsection{Manner of speaking verbs}

Verbs of manner of speaking (e.g. \textit{shout}, \textit{whisper}, \textit{scream}, etc.) are "verbs referring to intended acts of communication by speech and describing physical characteristics of the speech act" (Zwicky 1971: 223). They are a type of activity in English (Lakoff 1966, Zwicky 1971); \textit{Alice is shouting} entails \textit{Alice has shouted} (see more English verbs of manner of speaking in Levin 1993: 204). However, Korean manner of speaking verbs behave very differently in several ways. First, it appears that they allow failed attempt readings as follows:
(29) a. [Context: Jane was not completely recovered from injury to her vocal cords.]

\[
\text{Jane-i onhinultahayse solichi-ess-ciman,}
\]
Jane-Nom with.all.the.strength shout-Pst-but
\[
\text{moksoli-ka nao-ci anh-ass-ta.}
\]
voice-Nom come.out-Comp Neg-Pst-Dec

(lit.) 'Jane shouted with all the strength, but her voice did not come out.'

= (roughly) 'Jane tried to shout with all the strength, but her voice did not come out.'

b. [Context: Jane was not completely recovered from injury to her vocal cords.]

\[
\text{Jane-i onhinultahayse soksaki-ess-ciman,}
\]
Jane-Nom with.all.the.strength whisper-Pst-but
\[
\text{moksoli-ka nao-ci anh-ass-ta.}
\]
voice-Nom come.out-Comp Neg-Pst-Dec

(lit.) 'Jane whispered with all the strength, but her voice did not come out.'

= (roughly) 'Jane tried to whisper with all the strength, but her voice did not come out.'

Second, the predicates involving the manner of speaking verbs are ambiguous between ingressive and completion readings when modified by a *maney*-adverbial, as in (30).

(30) a. \[
\text{Jane-i il pwun maney solichi-ess-ta.}
\]
Jane-Nom one minute in shout-Pst-Dec

(lit.) 'Jane shouted in one minute.'

1. Ingressive reading: It took one minute for Jane to prepare to shout (e.g. Jane walked to the window and stood in front of it just before she started shouting).
2. Completion reading: It took one minute for Jane to actually shout (e.g. Jane was not completely recovered from injury to her vocal cords and she tried hard to shout for one minute by articulating her vocal cords and related organs. Then finally she succeeded in shouting).

b. \[
\text{Jane-i il pwun maney soksaki-ess-ta.}
\]
Jane-Nom one minute in whisper-Pst-Dec

(lit.) 'Jane whispered in one minute.'

1. Ingressive reading: It took one minute for Jane to prepare to whisper (e.g. Jane walked to Tom and put her mouth near his ear before she
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started whispering).
2. Completion reading: It took one minute for Jane to actually whisper (e.g. Jane was not completely recovered from injury to her vocal cords and she tried hard to whisper for one minute by articulating her vocal cords and related organs. Then finally she succeeded in whispering).

Third, when *keuy* 'almost' modifies a manner of speaking verb, the combination is ambiguous, as in (31).

\[(31)\]

\[a.\] \(\text{Jane-i keuy solichi-ess-ta.}\)
\(\text{Jane-Nom almost shout-Pst-Dec}\)
\(\text{(lit.) 'Jane almost shouted.'}\)
1. Jane almost started shouting (e.g. Jane inhaled to shout, but changed her mind and went away).
2. Jane started a causing action of shouting (e.g. Jane opened her mouth wide and exhaled by internal functions of her body), but she almost but not quite finished shouting (e.g. her voice did not come out because someone bumped into her at that moment).

\[b.\] \(\text{Jane-i keuy soksaki-ess-ta.}\)
\(\text{Jane-Nom almost whisper-Pst-Dec}\)
\(\text{(lit.) 'Jane almost whispered.'}\)
1. Jane almost started whispering (e.g. Jane put her mouth near Tom's ear to whisper, but changed her mind and went away).
2. Jane started a causing action of whispering (e.g. Jane opened her mouth wide and exhaled by internal functions of her body), but she almost but not quite finished whispering (e.g. her voice did not come out because someone bumped into her at that moment).

The verbs of manner of speaking are parallel to accomplishment verbs in terms of these properties, which indicates that they are more like accomplishment than activity.

In addition to the lexical activity-accomplishment involving manner of speaking verbs, we can find derived activity-accomplishments with these verbs. For example, a manner of speaking verb is used as the resultative predicate (V-key) of the resultative construction in (32a) and the causative construction in (32b).

\[(32)\]

\[a.\] \(\text{Chelswu-ka Sarah-lul solichi-key nollaykhi-ess-ta.}\)
\(\text{Chelswu-Nom Sarah-Acc shout-Key startle-Pst-Dec}\)
\(\text{'Chelswu startled Sarah so that she shouted.'}\)
When the sentences in (32) are modified by tasi 'again', they are ambiguous between repetitive and restitutive readings. For instance, (32a) with tasi 'again' can have the restitutive reading which entails that Chelswu startled Sarah so that she shouted and presupposes that Sarah shouted before. In the causative event structure of (32a) the startling event functions as the causing subevent and the shouting event the caused subevent, although the former seems not to directly cause the latter (see discussion on CAUSE and a causal relation in Dowty 1979: 227-228); similarly, the causative event structure of (32b) can be decomposed into an unspecified causing event and a specified caused subevent (the whispering).

7.2 Perception verbs

Verbs of perception like see and hear are activity verbs as well (e.g. Alice is seeing the picture entails Alice has seen the picture) (see more perception verbs in Levin 1993: 185 and discussion on event structure of perception verbs in Gisborne 2010). The verbs peep and overhear are also classified as perceptions verbs (Levin 1993). Just like the other accomplishments, the corresponding Korean perception verbs permit failed attempt readings, as illustrated in (33).

(33)  

a. [Context: There were trees in front of the window.]  
\[
\text{ku-ka} \quad \text{changpakk-}u\mu \quad \text{po-} \text{ass-ciman},  
\text{he-Nom window.outside-Acc see-Pst-but}  
\text{changpakk-i} \quad \text{po-i-ci} \quad \text{anh-} \text{ass-ta}.  
\text{window.outside-Nom see-Pass-Comp Neg-Pst-Dec}  
\text{(lit.) 'He saw the outside of the window, but it was not seen.'}  
\]
\[
\text{=} \quad \text{(roughly) 'He tried to see the outside of the window, but it was not seen.'}  
\]

b. [Context: People were talking so loudly in the room.]  
\[
\text{ku-ka} \quad \text{ladio-lul} \quad \text{tul-ess-ciman, soli-ka} \quad \text{tul-li-ci} \quad \text{anh-} \text{ass-ta}.  
\text{he-Nom radio-Acc hear-Pst-but sound-Nom hear-Pass-Comp Neg-Pst-Dec}  
\text{(lit.) 'He heard the radio, but the sound of the radio was not heard.'}  
\]
\[
\text{=} \quad \text{(roughly) 'He tried to hear the radio, but the sound of the radio was not heard.'}  
\]
c. [Context: The window of the room was opaque and dirty.]

Jane-i pang an-ul yespo-ass-ciman,
Jane-Nom room inside-Acc peep-Pst-but
amwukes-to po-i-ci anh-ass-ta.
anything-also see-Pass-Comp Neg-Pst-Dec
(lit.) 'Jane peeped at the inside of the room, but nothing was seen.'
= (roughly) 'Jane tried to peep at the inside of the room, but nothing was seen.'

d. [Context: Tom was talking so quietly.]

Jane-i Tom-uy iyaki-lul yestul-ess-ciman,
Jane-Nom Tom-Gen talk-Acc overheard-Pst-but
amwukes-to tul-li-ci anh-ass-ta.
anything-also hear-Pass-Comp Neg-Pst-Dec
(lit.) 'Jane overheard Tom's talk, but nothing was heard.'
= (roughly) 'Jane tried to overhear Tom's talk, but nothing was heard.'

The perception verbs modified by a maney-adverbial are ambiguous between ingressive and completion readings:

Jane-Nom one minute in window.outside-Acc see-Pst-Dec
(lit.) 'Jane saw the outside of the window in one minute.'

1. Ingressive reading: It took one minute for Jane to prepare to see the outside of the window (e.g. Jane went to the window and stood in front of it just before she started seeing the outside of the window).
2. Completion reading: It took one minute for Jane to actually see the outside of the window (e.g. Jane gave careful attention to the outside of the window for one minute since there were trees in front of the window and then finally succeeded in seeing it).

Jane-Nom one minute in radio-Acc hear-Pst-Dec
(lit.) 'Jane heard the radio in one minute.'

1. Ingressive reading: It took one minute for Jane to prepare to hear the radio (e.g. Jane sit on a chair and turned on the radio just before she started hearing the radio).
2. Completion reading: It took one minute for Jane to actually hear the radio (e.g. Jane gave careful attention to the radio for one minute since
people were talking so loudly in the room and then finally succeeded in hearing it).

Jane-Nom one minute in room inside-Acc peep-Pst-Dec
(lit.) 'Jane peeped at the inside of the room in one minute.'

1. Ingressive reading: It took one minute for Jane to prepare to peep at the inside of the room (e.g. Jane went to the window of the room and stood in front of it just before she started peeping at the inside of the room).
2. Completion reading: It took one minute for Jane to actually peep at the inside of the room (e.g. Jane gave careful attention to the inside of the room for one minute since the window of the room was opaque and dirty and then succeeded in peeping at it).

Jane-Nom one minute in Tom-Gen talk Acc overhear-Pst-Dec
(lit.) 'Jane overheard Tom's talk in one minute.'

1. Ingressive reading: It took one minute for Jane to prepare to overhear Tom's talk (e.g. Jane went near Tom just before she started overhearing Tom's talk).
2. Completion reading: It took one minute for Jane to actually overhear Tom's talk (e.g. Jane gave careful attention to Tom's talk for one minute since Tom was talking so quietly and then succeeded in overhearing it).

The perception verbs modified by keuy 'almost' are also ambiguous:

Jane-Nom window outside Acc almost see-Pst-Dec
(lit.) 'Jane almost saw the outside of the window.'

1. Jane almost started seeing the outside of the window (e.g. Jane went to the window and stood in front of it to see the outside of it, but changed her mind and went away).
2. Jane started a causing action of seeing the outside of the window (e.g. Jane paid careful attention to the outside of the window since there were trees in front of the window), but she almost but not quite finished seeing the outside of the window (probably because someone bumped into her at that moment).
Jane-Nom radio-Acc almost hear-Pst-Dec
(lit.) 'Jane almost heard the radio.'
1. Jane almost started hearing the radio (e.g. Jane sit on a chair to hear the radio, but changed her mind and went away).
2. Jane started a causing action of hearing the radio (e.g. Jane paid careful attention to the radio since people were talking so loudly in the room), but she almost but not quite finished hearing the radio (probably because someone bumped against her at that moment).

Jane-Nom almost room.inside-Acc peep-Pst-Dec
(lit.) 'Tom almost peeped at the inside of the room.'
1. Jane almost started peeping at the inside of the room. (e.g. Jane went to the window of the room and stood in front of it, but changed her mind and went away).
2. Jane started a causing action of peeping at the inside of the room (e.g. Jane paid careful attention to the inside of the room since the window of the room was very opaque and dirty), but she almost but not quite finished peeping at the inside of the room (probably because she was caught by a security guard).

Jane-Nom almost Tom-Gen talk-Acc overhear-Pst-Dec
(lit.) 'Jane almost overheard Tom.'
1. Jane almost started overhearing Tom's talk (e.g. Jane went near Tom to overhear Tom's talk, but changed her mind and went away).
2. Jane started a causing action of overhearing Tom's talk (e.g. Jane paid careful attention to Tom since he was talking so quietly), but she almost but not quite finished overhearing Tom's talk (probably because she was caught by a security guard).

In addition to the lexical activity-accomplishments, we also have derived activity-accomplishments involving the perception verbs, as illustrated in the following resultative constructions:

Mary-Nom Jane-Acc window.outside-Acc see-Key order-Pst-Dec
'Mary ordered Jane to see the outside of the window.'
b. Mary-ka Jane-ul radio-lul tut-key myenglyenghay-ss-ta.
   Mary-Nom Jane-Acc radio-Acc hear-Key order-Pst-Dec
   'Mary ordered Jane to hear the radio.'

c. Mary-ka Tom-ul pangan-ul yespo-key myenglyenghay-ss-ta.
   Mary-Nom Tom-Acc room.inside-Acc peep-Key order-Pst-Dec
   'Mary ordered Tom to peep at the inside of the room.'

d. Mary-ka Tom-ul Bella-lul yestut-key myenglyenghay-ss-ta.
   Mary-Nom Tom-Acc Bella-Acc overhear-Key order-Pst-Dec
   'Mary ordered Tom to overhear Bella.'

The resultative sentences in (36) are derived activity-accomplishments in whose event structures the causing events are specified by the main verbs and the caused events are result actions. Again, even though the subject's ordering does not directly cause the actions, the resultative sentences appear to have a causative event structure since they bear the properties of accomplishment. For instance, (36d) is ambiguous when modified by tasi 'again'. The repetitive reading entails that Mary ordered Tom to overhear Bella and presupposes that Mary ordered Tom to overhear Bella before; the restitutive reading entails that Mary ordered Tom to overhear Bella and presupposes that Tom overheard Bella before. This again supports the distinction of accomplishments proposed in (24).

8. Conclusion

I have argued in this paper that some Korean predicates which have been referred to as activity predicates are in fact accomplishment predicates of some kind having a complex causative event structure. This new type of accomplishment is called activity-accomplishment and the other canonical accomplishment state-accomplishment. As evidence for the existence of activity-accomplishment, I have provided the availability of failed attempt interpretation, ambiguity with in-adverbal, and ambiguity with keuy 'almost'. I also discussed how the non-ambiguity with tasi 'again' can be derived from the event structure of activity-accomplishment. Although all the possible properties of typical accomplishments are not discussed in this paper, the set of the important features here seems to be enough to categorize some "activity" predicates as an accomplishment. This accomplishment analysis is extended to other types of "activity" verbs in Korean, manner of speaking verbs and perception verbs.

According to our knowledge of facts about the real world, there must be a causing action (e.g. internal or neurological functions of our body) to jump or walk; without some kind of causing action, we cannot jump or walk, of course. However, in English this causal relation involving activity is linguistically encoded as having a simplex event
structure perhaps because the causing event of jumping or walking is not very obvious to our senses; but nonetheless, in Korean the causal relation involving activity is linguistically encoded to have a causative event structure. How to systematically account for this difference between Korean and English is remained as future work. In addition, other languages like Chinese, Japanese and Karachay-Balkar permit failed attempt readings of accomplishment predicates; it would be interesting to investigate whether the so-called activity predicates in those languages also allow failed attempt readings and to examine what event structure they actually have. This might provide cross-linguistic evidence for the distinction between state- and activity-accomplishments (lexical or derived) and some insights into aspectuality of natural languages.

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