The Causative Event Structure of Some “Activity” Predicates

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1. Introduction (1/4)

• **Topic**: activity predicates (involving manner of motion verbs, manner of speaking verbs, or perception verbs) in Korean

• **Question**: what is the true event structure of activity predicates in Korean?

• **Proposal**: some “activity” predicates in Korean actually have a causative event structure.
1. Introduction (2/4)

- Activity predicate in English can be defined as the predication of an action over an individual:

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

- The English activity verbs are considered to have the simplex event structure in (2b) (see e.g. Rappaport Hovav & Levin 1998).

(2) a. **State**: \([x <STATE>]\) know, believe, have, desire, love
   
b. **Activity**: \([x ACT<manner>]\) run, walk, swim
   
c. **Achievement**: [BECOME \([x <STATE>]\)] arrive, notice, find
   
d. **Accomplishment**: \([$[x ACT] CAUSE [BECOME [y <STATE>]]\]$) paint a picture, make a chair, draw a circle, build a house
1. Introduction (3/4)

- The Korean manner of motion verbs:

  (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.’

- In the literature the Korean verbs like (3) are called activity verbs and so it is just assumed that they also have the simplex event structure (i.e. \([x \text{ } ACT\langle\text{manner}\rangle]\))
I propose the hypothesis (Lee 2016):

Some “activity” predicates in Korean are actually a kind of accomplishment having a complex causative event structure whose caused subevent is an action.

Several pieces of evidence (Lee 2016):

(i) zero-result readings of Korean “activity” verbs
(ii) ambiguity with maney-adverbial (in-adverbial)
(iii) ambiguity with keuy ‘almost’
(iv) non-ambiguity with tasi ‘again’
2. Zero-result: contradictions in English (1/9)

• The inherent result of an accomplishment predicate cannot be denied:

(4) a. Lily broke the window, #but it was not broken.
   b. Lily opened the window, #but it was not opened.

• The action of an activity predicate cannot be denied:

(5) a. Lily walked, #but she could not walk.
   b. Lily jumped, #but she could not jump.
   c. Lily ran, #but she could not run.
   d. Lily danced, #but she could not dance.
2. Zero-result: lexical accomplishments (2/9)


(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.’
2. Zero-result: derived accomplishments (3/9)

- Zero-result reading is also available for derived accomplishment in Korean (e.g. resultative or causative constructions):

\[(7) \text{ ku-ka os-ul } \text{ kkaykkusha-key mwuncille-} / \text{ hay-ss-ciman,} \]
\[
\text{he-Nom clothes-Acc clean-Key rub- / do-Pst-but}
\]
\[
\text{cokumto kkaykkusha-ci anh-ass-ta.}
\]
\[
\text{at.all clean-Comp Neg-Pst-Dec}
\]
\[
\text{(lit.) ‘He rubbed/made the clothes clean, but it was not clean at all.’}
\]
2. Zero-result: achievements (4/9)

- Non-culmination is not allowed for achievements:

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

(9) ku-ka Jane-ul alapo-ass-ciman, he-Nom Jane-at recognize-Pst-but
#alapo-l swu eps-ess-ta.
recognize-Rel way not.exist-Pst-Dec
(lit.) ‘He recognized Jane, but he could not recognize Jane.’
2. Zero-result: states (5/9)

- States do not allow zero-result interpretation:

(10) *kapang-i mwuke-wess-ciman,*

  bag-Nom heavy-Pst-but
  #mwukep-ci anh-ass-ta.
  heavy-Comp Neg-Pst-Dec
  (lit.) ‘The bag was heavy, but it was not heavy.’

- Summarizing, the generalization observed so far is that zero-result is available for **accomplishment** (whether it be lexical or derived) but **not state** or **achievement** in Korean.
2. Zero-result: manner of motion verbs (6/9)

- The Korean manner of motion verb *ttwi*-'jump’ seems to permit zero-result reading:

(11) [Context: Jane's legs were stuck in the mud.]

\[
\begin{align*}
J\text{ane-}i & \quad o\text{nhi}m\text{ultahayse} & \quad ttwi-\text{ess-ciman}, \\
& \quad J\text{ane-Nom with.all.the.strength} & \quad j\text{ump-Pst-but} \\
& \quad cokumto \quad ttwi-l & \quad swu \quad eps-\text{ess-ta}. \\
& \quad at.all \quad j\text{ump-Rel way} & \quad n\text{ot.exist-Pst-Dec} \\
\text{(lit.) ‘Jane jumped with all the strength, but she could not jump at all.’} = \text{(roughly) ‘Jane tried to jump with all the strength, but she could not jump at all.’}
\end{align*}
\]
2. Zero-result: manner of motion verbs (7/9)

- Zero-result reading of *ket-* ‘walk’:

(12) [Context: Jane's legs were stuck in the mud.]

\[\text{Jane-i onhimultahayse \textit{kel-ess-ciman}, }\]
\[\text{Jane-Nom with.all.the.strength \textit{walk-Pst-but} }\]
\[\text{cokumto \textit{kel-ul swu \textit{eps-ess-ta}.} }\]
\[\text{at.all walk-Rel way \textit{not.exist-Pst-Dec} }\]
\[\text{(lit.) ‘Jane walked with all the strength, but she could not walk }\]
\[\text{at all.’ = (roughly) ‘Jane tried to walk with all the strength, but }\]
\[\text{she could not walk at all.’} \]
2. Zero-result: manner of motion verbs (8/9)

- However, it seems that not every the activity predicate allows zero-result reading:

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

Jane-i onhimultahayse talli-ess-ciman,
Jane-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.) 'Jane ran with all the strength, but she could not run at all.'
2. Zero-result: manner of motion verbs (9/9)

(13) b. [Context: Jane was tightly bound.]

Jane-i onhimultahayse chwumchwu-ess-ciman,
Jane-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.) ‘Jane danced with all the strength, but she could not
dance at all.’

• In short, at least some Korean "activity" predicates allow zero-result
readings.
(14) [Context: Mary was breaking the door to go out and walk but she failed to break it and so she could not walk.]

a. Mary-ka \textit{kel-ulye-ko nolyekhay-ss-ciman},
Mary-Nom \textit{walk-to-Comp try-Pst-but}
\textit{kel-ul swu eps-ess-ta}.
walk-Rel way \textit{not.exist-Pst-Dec}
(lit.) ‘Mary tried to walk, but she could not walk.’

b. \#Mary-ka \textit{kel-ess-ciman},
Mary-Nom \textit{walk-Pst-but}
\textit{kel-ul swu eps-ess-ta}.
walk-Rel way \textit{not.exist-Pst-Dec}
(lit.) ‘Mary walked, but she could not walk.’
3. Trying vs. Zero-result (2/3)

(15) [Context: Mary tried to move her leg to walk.]

a. *Mary-ka kel-ulye-ko nolyekhay-ss-ciman*,
   *Mary-Nom walk-to-Comp try-Pst-but*

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kel-ul swu eps-ess-ta.
walk-Rel way not.exist-Pst-Dec
```

(lit.) ‘Mary tried to walk, but she could not walk.’

b. *Mary-ka kel-ess-ciman*,
   *Mary-Nom walk-Pst-but*

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kel-ul swu eps-ess-ta.
walk-Rel way not.exist-Pst-Dec
```

(lit.) ‘Mary walked, but she could not walk.’
3. Trying vs. Zero-result (3/3)

- Zero-result readings require an occurrence of a direct causing event.

- The Korean “activity” predicates allow zero-result readings.

- Thus these predicates should encode a causing event in a causative event structure.
4. *In*-adverbial (1/3)

- If *cis- 'build'* is modified by a *maney-adverbial* (*in*-adverbial), they have ingressive and completion readings:

(16) Bill-i  *han tal  maney  cip-ul  ci-ess-ta.*
Bill-Nom one  month in  house-Acc build-Pst-Dec
‘Bill built the house in one month.’

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.
4. *In*-adverbial (2/3)

- The Korean manner of motion verbs are parallel to the accomplishment predicates:

(17) *Jack*-i 
  
i cho maney ttwi-ess-ta.
  
  Jack-Nom **two second** in **jump**-Pst-Dec
  
  (lit.) ‘Jack jumped in two seconds.’

1. **Ingressive reading**: It took two seconds for Jack to prepare to jump (e.g. Jack stood on the ground just before he started jumping).

2. **Completion reading**: It took two seconds for Jack to actually jump (e.g. Jack bent and stretched his legs and then took his feet off the ground).
4. In-adverbial (3/3)

- Ambiguity of ket- ‘walk’ with maney-adverbial:

(18) Jack-i il pwun maney kel-ess-ta.
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).
5. *Keuy* ‘almost’ (1/3)

- The Korean accomplishment predicates are also ambiguous with *keuy* ‘almost’:

(19) *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 a causing action of opening the door (e.g. Taylor pushed the door), but he almost but not quite finished it.
5. Keuy ‘almost’ (2/3)

- The "activity" predicates are also ambiguous with *keuy* ‘almost’.

(20) *Taylor-ka keuy ttwi-ess-ta.*
Taylor-Nom almost jump-Pst-Dec
(lit.) ‘He almost jumped.’

1. Taylor almost started a causing action of 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).
5. *Keuy* ‘almost’ (3/3)

- *Ket-* ‘walk’ is also ambiguous when modified by *keuy* ‘almost’:

(21) *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).
6. Two types of accomplishments (1/2)

- It is more plausible to view the Korean verbs such as *ttwi-* 'jump' and *ket-* 'walk' as an accomplishment.

- I refer to this kind of accomplishment as *activity-accomplishment*:

(22) Activity-Accomplishment:

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[[x ACT] CAUSE [x ACT<MANNER>]]
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- The causing subevent [x ACT] is an unspecified action (though it seems to involve internal functions of our body), and the caused subevent [x ACT<MANNER>] specifies a result action.
(23) Classification of accomplishment predicates in Korean:

- State-accomplishment includes a result state.
- Activity-accomplishment includes a result action.
7. Activity-accomplishment: derived (1/1)

• Resultative constructions in Korean can be broadly classified into two types: stative resultative like (24a) and eventive resultative like (24b) (see e.g. Son 2008).

(24) 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.’

• The existence of derived activity-accomplishments such as (24b) further supports the general classification in (23).
8. *Tasi* ‘again’ (1/5)

- The ambiguity involving *tasi* 'again' is used as a general property of accomplishment predicates (see e.g. Stechow 1996).

- However, the manner of motion verbs seem to have only the repetitive readings:

\[(25)\]  
\[a. \text{Sam-}i \quad \text{*tasi} \quad \text{ttwi-ess-}ta.\]  
Sam-Nom **again jump**-Pst-Dec  
‘Sam jumped again.’

1. **Repetitive reading**: Entails that Sam jumped and presupposes that Sam jumped before.

\[b. \text{Sam-}i \quad \text{*tasi} \quad \text{kel-}ess-}ta.\]  
Sam-Nom **again walk**-Pst-Dec  
‘Sam walked again.’

1. **Repetitive reading**: Entails that Sam walked and presupposes that Sam walked before.
8. *Tasi* ‘again’ (2/5)

- Then there are two possible approaches to the non-ambiguity with *tasi* 'again':

  (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 of typical accomplishments.

- If we assume that the manner of motion verbs are accomplishment, then the confounding factor should be identified.
8. *Tasi* ‘again’ (3/5)

- The causal relation in the activity-accomplishment is assumed to be **reflexive**: the causer is the causee.

  \[
  [[x \text{ ACT}] \text{ CAUSE} [x \text{ ACT}<\text{MANNER}>]]
  \]

- Intuitively, we can jump or walk only by internal functions of our 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, we seem to have the **restitutive reading** that entails Sam jumped (i.e. [[Sam ACT] CAUSE [Sam ACT<\text{MANNER}>]]) and presupposes that Sam jumped before (i.e. [Sam ACT<\text{MANNER}>], which should be caused by [Sam ACT]).
8. *Tasi* ‘again’ (4/5)

- This **restitutive reading** is basically the same as the **repetitive reading** that entails that Sam jumped (i.e. [[Sam ACT] CAUSE [Sam ACT]]) and presupposes that Same jumped (i.e. [[Sam ACT] CAUSE [Sam ACT]]) 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.
8. *Tasi* ‘again’ (5/5)

- 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.

(26) *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.’

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.
9. Manner of speaking verbs (1/1)

- Manner of speaking verbs allow zero-result readings (Lee 2016):

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

Jane-i onhimultahayse soksaki-ess-ciman,
Jane-Nom with.all.the.strength whisper-Pst-but
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.’
9. Perception verbs (1/1)

- Korean perception verbs permit failed attempt readings (Lee 2016):

(28) [Context: There were trees in front of the window.]

```
ku-ka changpakp-ul po-ass-ciman,
he-Nom window.outside-Acc see-Pst-but
changepakk-i po-i-ci anh-ass-ta.
window.outside-Nom see-Pass-Comp Neg-Pst-Dec
(lit.) 'He saw the outside of the window, but it was not seen.' =
(roughly) 'He tried to see the outside of the window, but it was not seen.'
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10. Conclusion

• 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 having a complex causative event structure (activity-accomplishment).

• It would be interesting to investigate whether the so-called activity predicates in other languages also allow failed attempt readings and to examine what event structure they actually have.
Selected references


Selected references


