

Korean Locative Alternation Revisited: Decomposing Event Structures*

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1 Introduction

Over the decades, the topic on locative verb constructions has attracted many scholars in the field of syntax, semantics, and the interface of the two fields. What is generally agreed upon is that there seem to exist some consistent syntax-semantics correspondences between the lexical item (i.e., locative verb) and the frame (i.e., syntactic structure) in which they can appear. In this paper, however, I claim otherwise: the overt syntactic “frames” and the semantic “variants” of locatives do not necessarily correspond to each other. That is, the fundamental defining feature of the so-called “locative construction” ought not to be mistaken with its representation of “V NP *preposition*-NP.”

This paper is organized as follows: Section 2 introduces previous studies and controversies regarding locative verbs, focusing on the work of Pinker (1989). Section 3 provides theoretical backgrounds for the syntax of ‘again,’

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justifying the adoption of the restitutive *tolo* ‘again’ diagnosis on analyzing the argument structure of the locative constructions. Section 4 demonstrates the empirical results of the restitutive *tolo* ‘again’ survey, thereby reaching the following conclusion: the “NP-*ul* NP-*lo*” frame (known as the Korean equivalent of the English “DP with DP” frame) is not a genuine locative construction; the “NP-*lo*” is merely a manner modifier.

2 Previous Studies

Locative verbs refer to a type of predicate which denotes the location change of an argument, i.e., transfer of an entity or a set of entities (henceforth, the *figure*) into or to a position or area (henceforth, the *ground*) (Pinker 1989). Accordingly, locative construction, by their nature, involves two genuine arguments, a figure and a ground, participating in the locative event. Since there exist variations in the syntactic possibility in which the arguments can be constructed, the syntactic/semantic structure of locative construction has been a central issue.

Alternating locative verbs are known to appear in two variants, depending on whether their direct objects realize as a locatum, i.e, the figure (*books* and *the breadcrumbs*), or a location, i.e., the ground (*the shelf* and *the turkey*):

- (1) Locative alternation (Pinker 1989:125, revised)
- a. He *piled* the books onto the shelves.
He *piled* the shelf with books.
 - b. He *stuffed* the breadcrumbs into the turkey.
He *stuffed* the turkey with the breadcrumbs.

Notably, there are non-alternating locative verbs, which as their names suggest, do not allow alternation between the figure and the ground. They can also be further divided into two variants regarding which argument they take as direct objects. The verbs in (2) only allow the Figure frame, where the figure element is encoded as the direct object and the ground element is encoded as the *into/onto*-DP. The verbs in (3), by contrast, only allow the Ground frame, where the ground element is encoded as the direct object and the figure element is encoded as the *with*-DP.

- (2) a. John *poured* water into the glass. *Figure-Frame*
 Alice *spilled* soup onto the table.
 Tim *dripped* water onto the floor.
- b. *John *poured* the glass with water. **Ground-Frame*
 *Alice *spilled* the table with soup.
 *Tim *dripped* the floor with water.

- (3) a. *John *filled* water into the glass. *Figure-Frame
 *Alice *covered* the blanket over the baby.
 *Tim *decorated* lights on the Christmas tree.
- b. John *filled* the glass with water. Ground-Frame
 Alice *covered* the baby with blanket.
 Tim *decorated* the Christmas tree with lights.
- Examples taken from Kim (1999:2)

A vast previous literature on locative verbs grounds on the lexicalist approach of Pinker (1989). Specifically, he assumes that the syntactic behavior of verbs is assumed to be semantically determined, hence the verb items classified in the same semantic verb class are expected to demonstrate idiosyncratic behavior in their syntactic realization. Accordingly, previous research has focused on classifying which verbs can appear in which syntactic frames, under the assumption that a verb's possibility of entering a certain frame directly reflects its argument structure. However, cross-linguistic variations and even evidence from English has challenged this view (Beavers 2017; Kim 1999; Yakhabi and Lotfi 2017), and there has been doubts (Goldberg 1995; Iwata 2008) raised against the reliability of the diagnostics on the locative verbs proposed by Pinker (1989). Korean has been one of the controversial languages, with researchers showing different judgements in their classification on locative verbs.

In this paper, I aim to provide empirical evidence that the traditional lexicalist approach to locative verbs is unsuitable, at least for Korean. In doing so, I demonstrate the distinct argument structures of each locative constructions, based on a new diagnostic to classify the locative variants: the restitutive *tolo* 'again' diagnostic.

3 Background: the Syntax of 'again'

The adverb 'again' is well known to be semantically ambiguous, especially when it is combined with telic predicates; Korean is not an exception:

- (4) Sally-ka ku mun-ul *tasi/tto/tolo* yel-ess-ta. (Ko 2014)
 Sally-NOM that door-ACC **again** open-PAST-DEC
- i. 'Sally opened the door again, and she had done that before' (repetitive *tto* 'again' reading)
 ii. 'Sally opened the door again, and the door had been in the state of being open before' (restitutive *tolo* 'again' reading)

The scope ambiguity of 'again' in accordance with their repetitive and restitutive readings has allowed lexical semantics to demonstrate verb decom-

position of complex event structures¹ (see Dowty 1979; von Stechow 1995, 1996; Beck and Johnson 2004; Beck 2005, 2006; Bale 2007, Snyder 2001, among all).

In particular, Beck and Johnson (2004) diagnose that the core difference between the ‘repetitive’ and the ‘restitutive’ meanings is that the ‘again’ in the former modifies a ‘causing’ subevent, while the latter modifies a ‘becoming’ one. Accordingly, Ko (2014), taking a structuralist approach towards the ambiguity of ‘again,’ presents the following structure:

(5) [_{VP} Subj v_{CAUSE} [_{VP} v_{BECOME} [_{SC} door open *again*_{REP}]]] *again*_{REST}]

Previous studies have analyzed locative constructions as complex predicate denoting change of location or change of state.² Hence, adopting Ko’s (2014) analysis, I attempt to decompose the locative constructions via the ‘again’ diagnostics.

4 Survey: the *tolo* ‘again’ Diagnostics

For the survey, each verb items were tested whether they allow the restitutive *tolo* ‘again’ reading in condition where the ‘NP-ey’ or ‘NP-lo’ was modified from the initial action.³

- (6) a. Context: John loaded the box *onto the wagon* and unloaded it.
 Sally loaded the box *onto the truck* again.
- b. Context: John wrapped the plate *with cloth* and unwrapped it.
 Sally wrapped the plate again *with vinyl* again.

The result of the survey is as the following: In general, Ground frames allowed *tolo*, whereas Figure frames rejected it. Each of the Figure and Ground

¹ In Snyder’s (1995, 2001) terms, only “complex predicate constructions” can take part in predicate decomposition. Such constructions are as the following:

- (i) Snyder’s (1995, 2001) “complex predicate construction”
- | | |
|-----------------------------------|----------------------------|
| a. Joe wiped the table clean. | Resultative |
| b. Joe picked up the book. | Verb-particle |
| c. Joe put the book on the shelf. | <i>put</i> -locative |
| d. Joe gave Bill the book. | Double object construction |
| e. Joe swam to the island. | Goal-PP |

Take note of (ic), that the *put*-locative is specifically analyzed as a complex predicate construction.

² See Pinker (1989), Levin and Rappaport Hovav (1998), Goldberg (2005) for English. See Nam (2015) for Korean.

³ Minju Kim (p.c.) commented that there may exist interpersonal variation between Korean native speakers in how individuals lexicalize the word *tolo*, hence affecting the results of the survey. She additionally noted that adding a sentence such as ‘Then Sally unloaded the box.’ at the end would reinforce the restitutive meaning of *tolo*, hence clarifying the context.

frame of the alternating verbs demonstrated identical patterns to their non-alternating Figure and Ground counterparts.

- (7) Non-alternating Figure-frame verb (*sitta* ‘load’)
- Chulsoo-ka sangca-lul sure-ey silessta kuliko nayryutta
 Chulsoo-NOM box-ACC wagon-EY loaded and unloaded
 ihwu, Younghee-ka sangca-lul thuluk-ey **#tolo** silessta
 later Younghee-NOM box-ACC truck-EY **again** wrapped
- ‘Chulsoo loaded the box onto the wagon and unloaded it. Later, Younghee loaded the box again onto the truck.’

- (8) Non-alternating Ground-frame verb (*ssata* ‘wrap’)
- Chulsoo-ka kurut-ul pocaki-lo ssassta kuliko pulessta
 Chulsoo-NOM plate-ACC cloth-LO wrapped and unwrapped
 ihwu, Younghee-ka kurut-ul binil-lo **tolo** ssassta
 later Younghee-NOM plate-ACC vinyl-LO **again** wrapped
- ‘Chulsoo wrapped the plate with cloth and unwrapped it. Later, Younghee wrapped the plate again with vinyl.’

The asymmetry between the Ground and Figure frame in the restitutive *tolo* ‘again’ diagnostics suggest that the two frames in which the locatives can be constructed has distinct internal structures. In accordance to the structure of restitutive ‘again,’ I further propose that the frames which disallow *tolo* (i.e., the Ground frame), is not a genuine locative construction.

5 Discussion

Returning back to the syntactic structure of the ‘again,’ the restitutive *tolo* ‘again’ takes scope over only the result state ((5), repeated below as (10)):

- (9) [_{VP} Subj v_{CAUSE} [VP v_{BECOME} [_{ResP} door open *again*_{REP}]]] *again*_{REST}]

Recall that a genuine locative construction involves both of the Figure and the Ground elements to take part in the event, implying that the both elements are positioned inside the Res(ult)P. In the case of repetition, ‘again’ in adjunction to ResP position gives rise to restitutive reading; it is the ResP that is being repeated. Keeping these facts in mind, let’s examine the Figure frame:

- (10) Restitutive reading in the Figure-frame construction
- | | | | | |
|-----------------|--------------------|------------------|------------------|-----------|
| [v' Chulsoo-ka | [ResP sangca-lul | <u>sure-ey</u> | sitta]] | ... |
| Chulsoo-NOM | box-ACC | wagon-EY | load | |
| [v' Younghee-ka | [ResP #tolo | [ResP sangca-lul | <u>thulek-ey</u> | sitta]]] |
| Younghee-NOM | again | box-ACC | truck-EY | load |

Since the Ground element was replaced by *thulek-ey* ‘truck-EY’ in the latter event, it would fail to gain restitutive reading of the initial event subject to repetition, i.e., *loading the box into the wagon*. Indeed, *tolo* was rejected in the construction in question. In this case, both the Figure and Ground elements *sangca* ‘box’ and *thulek* ‘truck’ are located in the ResP, acting as genuine arguments that take part in the locative event.

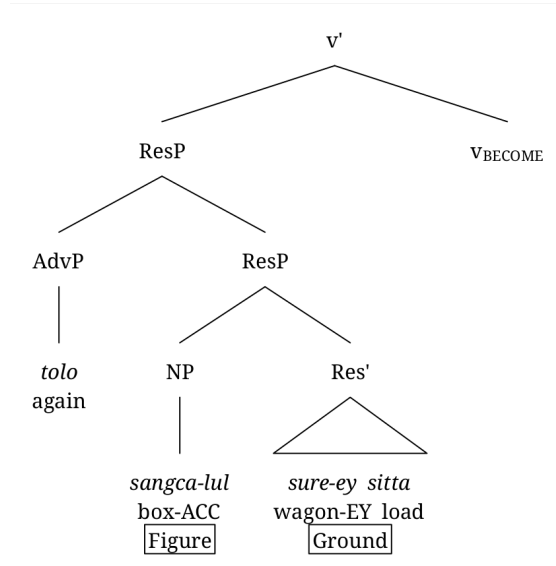
However, it was not the case for the Ground frames: *tolo* was allowed in the particular constructions. What the result suggests is that in the Ground frame, the ‘NP-lo’ must be located outside of the result phrase:

- (11) Restitutive reading in the Ground frame construction
- | | | | | |
|-----------------|------------------|-------------------|----------------|-----------|
| [v' Chulsoo-ka | <u>pocaki-lo</u> | [ResP kurut-ul | satta]] | ... |
| Chulsoo-NOM | cloth-LO | plate-ACC | wrap | |
| [v' Younghee-ka | <u>binil-lo</u> | [ResP tolo | [ResP kurut-ul | satta]]] |
| Younghee-NOM | vinyl-LO | again | plate-ACC | wrap |

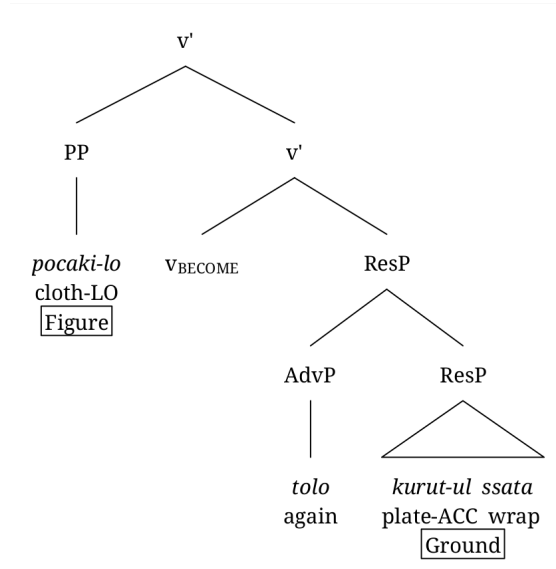
That is, only the Ground element *kurut* ‘plate’ is the genuine argument that take part in the locative event, and the ‘NP-lo’ *binil-lo* ‘vinyl-LO’ is a manner modifier that modifies the locative event; hence, the genuine meaning of *pocaki-lo kurut-ul ssata* ‘wrap the plate with cloth’ denotes the event of wrapping the plate, with the manner that involves cloth.

In accordance with the results of the restitutive *tolo* ‘again’ diagnostics, I propose the following structures:

(12) Structures of the Figure and the Ground frame



(a) Figure frame



(b) Ground frame

In the Figure frame (12a), the repeated event is ResP, *loading the wagon with box*. Hence, in order for the construction to gain a restitutive reading, the whole ResP including both the Figure and Ground element ought to take part in the repeated event. Meanwhile, the Ground Frame (12b) is not a genuine locative construction. The event of *wrapping the plate* in (12b) constructs an independent result state event, whereas the Figure element *pocaki-lo* ‘cloth-LO’ does not participating in the ResP itself but rather modifies the entire event as an oblique PP.

Notably, there were two exceptions in the results: the non-alternating Figure verb *pusta* ‘pour’ and the Figure frame of the alternating verb *chaywuta* ‘fill.’ Although in Figure frames, the two verbs exceptionally allowed *tolo*, behaving just like the Ground frame verbs. The result seem to be relevant to the semantics of the verb types;⁴ I will not address the issue in detail. The results suggest that even in identical frames (e.g., “NP-ul NP-ey”), each verb items may behave differently, further providing evidence that the overt syntactic syntactic frames do not independently indicate a cue for locative construction. Moreover, given that the availability of restitutive reading under the *tolo* diagnostics points to non-locatives, there exists possibility that some of the Figure frame verbs, i.e., the exceptions, such as *pusta* ‘pour’ and *chaywuta* ‘fill,’ are not locative verbs in the first place; they can be simple event verbs (e.g., pure manner verbs), or complex event verbs involving only one argument, either the figure or the ground.

To sum up, genuine locative construction does not allow for restitutive reading when either the PP, “NP-ey” or “NP-lo,” of the initial event is altered in the repeated event. This was the case for only Figure frame verbs; they disallowed the restitutive reading when the “NP-ey” element was replaced. On the other hand, verbs in the Ground frame construction is not a genuine locative, hence allowing for restitutive reading if the direct object is observed.

6 Conclusion

In this paper, I provide empirical evidence that the traditional lexicalist approach to locative verbs is unsuitable for Korean. In doing so, I provide a reliable diagnostics to classify the locative variants: the restitutive *tolo* ‘again’ diagnostics.

The main finding is the following: the “NP-ul NP-lo” frame (known as the Korean counterpart of the English “DP with DP” frame) is not a genuine locative construction; the “NP-lo” is merely a manner modifier. Moreover, the heterogeneous behavior of the “NP-ul NP-ey” frame (known as the Korean

⁴In fact, the idea of subclassifying Figure frame verbs regarding their semantics is not new; see Jackendoff (1996) for English, Kim (2001) for adoption of Jackendoff’s (1996) account to Korean.

counterpart of the English “DP into/onto DP” frame) raise the possibility that some of the Figure frame verb are not locative verbs, demonstrating distinct behavior from genuine locative verbs in the Figure frame.

The findings suggest that the verbs previously analyzed as the “locative verbs” has been overcategorized, classifying non-locative verbs as locative verbs. Regarding the overt syntactic frames as a direct evidence for locative variants can mislead researchers from correctly characterizing the nature of locative constructions. I conclude by addressing the possibility that the findings of the present study can be further extended to languages other than Korean.

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