

Directed Motion and Non-Predicative Path P in Korean

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Abstract

In this paper, I argue that an atelic path PP headed by *-(u)lo* ‘toward’ in Korean is an argument of a directed motion verb on a par with its telic counterpart headed by the locative *-ey* ‘(be) AT’. I further argue that, despite having the same argumental status, the atelic path PP is distinguished from the goal-marking locative PP in terms of an entailment of a result state and predicativity; while the goal PP in directed motion constructions forms a secondary predicate associated with a resultative interpretation, the atelic path PP merges with the verb as a non-predicative complement and does not license a resultative interpretation.

1. Introduction

It has been argued (e.g., Lee et al. 1998, Chae 1999; 2000, Zubizarreta and Oh in press) that a directional PP headed by *-(u)lo* ‘toward’ in Korean is an adjunct phrase, while a goal-marking PP headed by the locative *-ey* is a complement of the directed motion verb.^{1,2} Zubizarreta and Oh

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¹Abbreviations used in this paper are: NOM: Nominative case, ACC: Accusative case, GEN: Genitive case, LOC: Locative marker, DC: Declarative marker, DIR: Directional marker, CON: Connective morpheme, INSTR: Instrumental marker, PRES: Present tense, PAST: Past tense HON: Honorific marker INCHO: Inchoative morpheme, INFIN: Infinitive marker

²The postposition *-(u)lo* can also express different kinds of thematic relations (e.g., cause, instrument, means of motion), as illustrated below.

- (i) a. Halmeni-kkeyse (am-ulo) tolaka-si-ess-ta.
grandmother-HON.NOM cancer-due.to pass.away-HON-PAST-DC
‘My grandmother died of cancer.’ (Cause)
- b. Inho-ka (yelsoi-lo) mwun-ul yel-ess-ta.
Inho-NOM key-INSTR door-ACC open-PAST-DC
‘Inho opened the door (with a key).’ (Instrument)
- c. Mary-ka (pay-lo) ceycwuto-ey ka-ass-ta.
Mary-NOM ship-by ceycwu.island-LOC go-PAST-DC
‘Mary went to Ceycwu island (by ship).’ (Means of Motion)

Since there seem to be no semantic commonalities between the directional *-(u)lo* and the non-directional *-(u)lo* seen above, I consider the different uses of *-(u)lo* to be accidental homophony, unless proven otherwise.

(in press), in particular, have taken telicity to be central to this claim. They argue that when the goal-marking PP occurs with motion verbs, it gives rise to telicity and thus is in the VP-internal position. In contrast, when the directional PP occurs with motion verbs, it does not affect the event properties of the verbs, and thus it must be a modifier of the VP. In this paper, however, I argue that telicity cannot be used as a reliable diagnostic for argumenthood by demonstrating that it is not necessarily correlated with a syntactic property but can be affected by other semantic and pragmatic factors, as has also been shown elsewhere (e.g., Hay et al. 1999, Borer 2005, Folli and Harley to appear). Contrary to the previous claims, I argue, on the basis of ‘do-so’ VP elision, that both the directional and the goal-marking PP are arguments of the verbs in directed motion constructions, analogous to path-encoding PPs in English and Italian (see Folli and Harley to appear). I further show that, despite having the same argumental status, the directional (*u*)*lo*-phrase must still be distinguished from the goal-marking *ey*-phrase in terms of an entailment of a result state held by the argument that undergoes movement; the goal-marking phrase licenses inferences about a result state of a moving subject, while the directional PP does not. I argue that the entailment difference between the two phrases arises from a structural difference; the goal-marking *ey*-phrase creates a secondary (resultative) predicate introduced by a Result Phrase (RP, Ramchand and Svenonius 2002), along the lines of a small clause hypothesis for directed motion constructions (Hoekstra and Mulder 1990, Folli and Harley to appear). The directional (*u*)*lo*-phrase does not form secondary predication but simply merges with the motion verb as a non-predicative complement.

2. Atelic path PPs and manner-of-motion verbs

According to Talmy’s (1985, 1991) typological work on directed motion constructions, Korean (as well as Japanese) is considered to be a verb-framed language, along with Spanish and French, wherein the characteristic typological pattern of expressing paths of motion is via path-encoding motion verbs. The verb-framed languages are typologically distinguished from satellite-framed languages such as English and German where the characteristic expression of path is always via some satellite (e.g., prepositions/postpositions, prefixes), and motion verbs typically encode only a manner component. What is important for the issue at hand is that in verb-framed languages such as Korean and Spanish, satellites (e.g., prepositions/postpositions) prototypically do not carry path semantics, while those in satellite languages do. Thus, the generalization according to Talmy’s work is normally taken up as follows: in verb-framed languages manner-of-motion verbs alone cannot express directed motion due to the absence of satellites that incorporate path semantics, unlike satellite-framed languages like English and German, which have a large inventory of path-encoding

prepositions. Let us first consider Korean examples in (1) that seemingly follow this generalization.³

- (1) Korean
- a. Mary-ka cip-an-ey tul-e-ka-(a)ss-ta.
Mary-NOM house-inside-LOC enter-CON-go-PAST-DC
 ‘Mary went into the house.’
 - b. *Mary-ka cip-an-ey ttwi-ess-ta.
Mary-NOM house-inside-LOC run-PAST-DC
 ‘Mary ran into the house.’
 - c. Mary-ka cip-an-eyse ttwi-ess-ta.
Mary-NOM house-inside-LOC run-PAST-DC
 ‘Mary ran inside the house.’ (Locative, not directional)
 - d. Mary-ka cip-an-ey ttwi-e tul-e-ka-(a)ss-ta.
Mary-NOM house-inside-LOC run-CON enter-CON-go-PAST-DC
 ‘Mary went into the house running.’

As seen in (1), the locative *-ey* in Korean can express the goal of a motion event in the context of path-encoding, directional verbs like *tul-e-ka-* ‘go in (or enter)’, as in (1a), but not in the context of manner-of-motion verbs like *ttwi-*‘run’, as in (1c). In order to make (1c) grammatical on a directional interpretation, a path-encoding, directional verb must be added to the sentence, as shown in (1d), creating a serial verb construction.⁴

Similar to Korean, Spanish manner-of-motion verbs alone cannot license a directional interpretation with a locative PP, as shown in (2a).⁵

- (2) Spanish
- a. Maria corrió en la casa.
Maria ran in the house
 ‘Maria ran in(side) the house.’ (Locative, not directional)

³There are two different types of locative postpositions in Korean, the static locative *-ey* ‘(be) AT’ and the dynamic locative *-eyse* ‘(happen) AT’. The static locative *-ey* occurs only with stative predicates (e.g., be, remain) when expressing a location. The dynamic locative *-eyse* occurs only with non-stative predicates (e.g., play, run).

⁴Unlike Spanish in which (directed) motion verbs often incorporate path semantics (e.g., (2b)), path marking in Korean surfaces as an independent lexical verb, separate from the verb that encodes directed motion (e.g., (1a)). Korean further differs from Spanish in terms of the requirement that speakers take a viewpoint perspective on the directed motion event. The viewpoint perspective is normally reflected on the final (deictic) verb in a serialized verb construction: *ka-* ‘go’ for the motion away from and *o-* ‘come’ for the motion towards a deictic center. Thus, directed motion constructions in Korean normally surface with a series of verbs that express manner, path, and deixis in this fixed order. In the serialized verb configuration, only the deictic verb encodes directed motion (unlike Japanese, see Tsujimura 2002) and functions as the main predicate, unlike in Chinese and Thai serial verb motion constructions (e.g., Matsumoto 2003). See Zubizarreta and Oh (in press) for further discussion of serial verb motion constructions in Korean.

⁵Spanish examples reported in this paper are from Luisa Marti (p.c.) and handouts distributed in the Moving Right Along seminar held in Spring 2006.

- b. Maria entró a la casa corriendo.
Mary entered to the house running
 ‘Mary entered the house running.’

In order to license a directional interpretation, a path-incorporating verb like *entró* ‘enter’ must be added to the sentence, as in (2b), in a fashion similar to Korean (e.g., (1d)).

The Korean and Spanish directed motion constructions seen above are in sharp contrast with those in satellite-framed languages such as English and German, in which manner-of-motion verbs can license directional interpretations with locative PPs. This is exemplified in (3) and (4).

- (3) a. Mary ran in the house. (Directional and Location)
 b. John walked in the room. (Directional and Location)
 c. The bottle floated under the bridge. (Directional and Location)
- (4) Maria ist in das Haus gelaufen.
Maria is in the.ACC house run
 ‘Maria ran into the house.’ (Directional)

According to Talmy’s generalization, the contrast shown above between verb-framed languages such as Korean and satellite-framed languages such as English is attributed to the difference in the semantic properties of satellites, (e.g., adpositions); the locative preposition *in* in English and German, as shown in (3) and (4), incorporates path, while the locative adpositions *en* in Spanish and *-ey* in Korean do not.

The following set of examples in Spanish, however, show that there exist prepositions that add path semantics to manner-of-motion verbs (Aske 1989), which is unexpected by Talmy’s generalization. Thus, as seen in (5), manner-of-motion verbs can license directional interpretations when these prepositions are used.

- (5) a. Juan anduvo hacia la tienda.
Juan walked toward the store
 ‘Juan walked toward the store.’
 b. La botella flotó hacia la cueva.
the bottle floated toward the cave
 ‘The bottle floated toward the cave.’
 c. El libro se deslizó hasta el suelo.
the book RFX slid until the floor
 ‘The book slid down to the floor.’

Korean also has postpositions that encode path. Similar to Spanish in (5), manner-of-motion verbs occurring with these postpositions license directional interpretations, as illustrated below.⁶

⁶It should be noted that not all manner-of-motion verbs allow a directional interpretation with the directional (*u*)*lo*-phrase, as shown below.

- (6) a. John-i kongwen-ulo ttwi-ess-ta.
John-NOM park-DIR run-PAST-DC
 ‘John ran toward the park.’
- b. Mary-ka kongwon-ulo kel-ess-ta.
Mary-NOM park-DIR walk-PAST-DC
 ‘Mary walked toward the park.’
- c. Inho-ka hoswu-uy pantayphyen-kkaci heyemchi-ess-ta.
Inho-NOM lake-GEN opposite.side-up.to swim-PAST-DC
 ‘Inho swam up to the opposite side of the lake.’
- d. Chelswu-ka kongwen-kkaci kel-ess-ta.
Chelswu-NOM park-up.to walk-PAST-DC
 ‘Chelswu walked up to the park.’

The above examples in Spanish and Korean, therefore, are unexpected if these two languages generally resist expressing Path as a satellite to a motion verb, as Talmy suggests.

A number of researchers argue that path-encoding PPs in Korean are not problematic in terms of Talmy’s typology, since they are adjuncts (e.g., Lee et al. 1998, Chae 1999; 2000, Zubizarreta and Oh in press).^{7,8} Zubizarreta and Oh (in press), for instance, claim that the adjunct status of the path-encoding PPs in (6) is seen by the fact that they do not affect the event properties of motion verbs. Consider the examples in (7) and (8).

- (7) a. John-i (kongwen-eyse) cokum ttwi/kel-ess-ta.
John-NOM park-LOC a.little run/walk-PAST-DC
 ‘John ran/walked (inside the park) a little.’ (Unbounded)
- b. John-i (kongwen-eyse) sip-pwun-tongan
John-NOM park-LOC ten-minute-for
 ttwi/kel-ess-ta.
run/walk-PAST-DC
 ‘John ran/walked (inside the park) for 10 minutes.’ (Unbounded)

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- (i) a. *Mary-ka pwuek-ulo chwum-ul chwu-ess-ta.
Mary-NOM kitchen-DIR dance-ACC dance-PAST-DC
 ‘Mary danced toward the kitchen.’
- b. *Inho-ka pwuek-ulo wus-ess-ta.
Inho-NOM kitchen-DIR laugh-PAST-DC
 ‘Inho laughed to the kitchen.’

It is not clear exactly what type of manner verb allows the directional (*u*)*lo*-phrase. One could argue that only those manner verbs that express a conventional way of movement (e.g., *run*, *walk*, *crawl*) can take the directional PP, while those that do not (e.g., *dance*, *sing*, *laugh*) are simple activity-denoting predicates.

⁷For further discussion of Spanish path PPs, see Aske (1989).

⁸Beavers (2003) provides a similar argument with respect to Japanese *made* ‘until’. He argues that *made*, which adds path semantics to manner-of-motion verbs, is not a path-incorporating P but is a generic event delimiter, and thus does not contradict Talmy’s typology.

- (8) a. John-i kongwen-ulo cokum ttwi/kel-ess-ta.
John-NOM park-DIR a.little run/walk-PAST-DC
 ‘John ran/walked toward the park a little bit.’
- b. John-i kongwen-ulo sip-pwun-tongan ttwi/kel-ess-ta.
John-NOM park-DIR ten-minute-for run/walk-PAST-DC
 ‘John ran/walked toward the park for ten minutes.’
- c. John-i (cip-eyse) kongwen-kkaci sip-pwun-tongan
John-NOM home-from park-up.to ten-minute-for
ttwi/kel-ess-ta.
run/walk-PAST-DC
 ‘On his way (from home) up to the park, John ran/walked (for ten minutes).’

As in (7), manner-of-motion verbs (e.g., *ttwi-* ‘run’, *ket-* ‘walk’) are unambiguously unbounded, as shown by the standard telicity tests, the *for*-phrase for atelicity and the *in*-phrase for telicity. When occurring with path-encoding PPs, as in (8), the manner-of-motion verbs remain unbounded, given that they can be modified by gradable adverbs like *cokum* ‘a little’, as in (8a), and by the atelic temporal phrase headed by *tongan* ‘for’, as in (8b) and (8c).

Zubizarreta and Oh (in press) further show that the atelic nature of path-encoding phrases is observed not only with manner-of-motion verbs but also with inherently directed motion verbs such as *ka-* ‘go’ and *o-* ‘come’, as seen below.

- (9) a. John-i kongwen-ulo cokum ttwi-e ka-(a)ss-ta.
John-NOM park-DIR a.little run-CON go-PAST-DC
 ‘John ran towards the park a little.’
- b. John-i kongwen-ulo il-pwun-tongan ttwi-e ka-(a)ss-ta.
John-NOM park-DIR one-minute-for run-CON go-PAST-DC
 ‘John ran towards the park for one minute.’
- c. John-i sip-pwun-tongan kongwen-ccok-ulo ka-ss-ta.
John-NOM ten-minute-for park-side-DIR go-PAST-DC
 ‘John went towards the park for ten minutes.’

The sentences in (9) are contrasted with the following examples in which the ground DP is marked by the locative *-ey*, instead of the directional *-(u)lo*. The locative PP, which expresses a goal of a directed motion event, renders the event bounded, given that it is compatible with the telic *in*-phrase, but incompatible with the atelic *for*-phrase or the gradable modifier *cokum*.

- (10) a. John-i kongwen-ey il-pwun-man-ey ttwi-e
John-NOM park-LOC one-minute-interval-at run-CON
ka-(a)ss-ta.
go-PAST-DC
 ‘John ran to the park in one minute.’

- b. *John-i kongwen-ey cokum ttwi-e ka-(a)ss-ta.
John-NOM park-LOC a.little run-CON go-PAST-DC
 ‘John ran to the park a little bit.’
- c. *John-i kongwen-ey o-pwun-tongan ttwi-e ka-(a)ss-ta.
John-NOM park-LOC five-minute-for run-CON go-PAST-DC
 ‘John ran to the park for 5 minutes.’

On the basis of the contrast between a goal-marking phrase and path phrases in terms of their effect on telicity, Zubizarreta and Oh (in press), following Lee et al. (1998) and Chae (2000), conclude that the atelic path PPs are adjuncts, while the goal-marking PP is a complement of the motion verb.⁹

The argument for the adjunct status of atelic path PPs presupposes a particular connection between syntactic structure and telicity. That is, the analysis put forth by Zubizarreta and Oh (in press) follows the standard analysis of English manner-of-motion verbs with goal PPs like those seen in (11).

- (11) a. Mary ran to the house.
 b. John walked to the park.

Manner-of-motion verbs such as *run* and *walk* in English are atelic, activity-denoting predicates, given that they can be modified by the atelic *for*-phrase but not by the telic *in*-phrase.

- (12) a. Mary ran for an hour/*in 2 minutes.
 b. John walked for an hour/*in 2 minutes.

⁹The argument that the path PP headed by *-kkaci* ‘up to’ is atelic cannot be maintained, given that it normally gives rise to telicity in the presence of inherently directed motion verbs, as seen below.

- (i) a. Mary-ka hakkyo-*kkaci* i-pwun-man-ey (kel-e) ka-(a)ss-ta.
Mary-NOM school-up.to two-minute-interval-at (walk-CON) go-PAST-DC
 ‘Mary went up to the school (walking) in two minutes.’
- b. Mary-ka san-cengsang-*kkaci* han-sikan-man-ey ol-la
Mary-NOM mountain-top-up.to one-hour-interval-at climb-CON
 ka-(a)ss-ta.
go-PAST-DC
 ‘Mary climbed up to the top of the mountain in one hour.’

The postposition *-kkaci* also has a non-spatial, temporal use, similar to English *until*.

- (ii) Inho-ka ku il-ul yel-si-*kkaci* kkutmachi-eyahan-ta.
Inho-NOM the task-ACC ten-hour-until finish-modal-DC
 ‘Inho must finish the task until ten o’clock.’

Since *-kkaci* has a more complicated and wider distribution than the directional *-(u)lo* and is presumably used as a generic event delimiter, similar to Japanese *made* ‘until’, I will put aside further discussion of *-kkaci* in this paper. See Beavers (2003) for an analysis of the Japanese counterpart, *made* ‘until’, which may be able to extend to *-kkaci*.

However, the presence of goal-PPs changes the event properties of manner-of-motion verbs from atelic to telic, as seen in (13).

- (13) a. Mary ran to the house in 2 minutes/*for an hour.
b. John walked to the park in 2 minutes/for an hour.

Unlike goal-PPs, typical adjunct phrases like (unambiguously) locative PPs do not affect the event properties of the verbs.

- (14) a. Mary ran inside the house for an hour/*in 2 minutes.
b. John walked inside the park for an hour/*in 2 minutes.

The standard syntactic analysis of the variable behavior of manner-of-motion verbs seen above is that, unlike typical adjunct phrases, a goal PP (e.g., *to the house*) is in the VP-internal position and arguably creates secondary predication (see Hoekstra 1984, Kayne 1985, Beck and Snyder 2001, Ramchand and Svenonius 2002; among many others).

The logic of the argument for the adjunct status of Korean atelic path PPs provided by Zubizarreta and Oh (in press) follows that of the standard syntactic analysis of the English manner-of-motion verbs; the presence of the goal-PP headed by *-ey* necessarily gives rise to telicity in directed motion constructions, and hence it is in the VP-internal position. In contrast, the presence of the path PPs headed by *-(u)lo* ‘towards’ and *-kkaci* ‘up to’ do not change the event properties of motion verbs and thus must be outside the VP domain as modifiers.

However, in what follows, I will show that telicity in directed motion constructions is not necessarily correlated with the presence of a goal PP but may be affected by other semantic or pragmatic factors such as the meaning of motion predicates.

3. Telicity induced by other sources

Consideration of a broader range of examples indicates that the telicity of motion events in Korean is not always correlated with the presence of a goal PP but can be affected by other semantic and pragmatic factors. For example, when the event described by a directed motion verb involves boundary crossing (e.g., *tul-e-ka-* ‘enter’/*na-o-* ‘exit’), the event can be interpreted as bounded regardless of whether the ground DP occurs in the telic *ey*-phrase or the atelic *(u)lo*-phrase. Consider the examples in (15) with the serial verb *tul-e-ka-* that roughly means ‘go in’ or ‘enter’.

- (15) a. ??Aki-ka pang-an-ulo il-pwun-tongan ki-e
baby-NOM room-inside-DIR one-minute-for crawl-CON
tul-e-ka-(a)ss-ta.
enter-CON-go-PAST-DC
‘The child went into the room crawling for one minute.’

- b. Aki-ka pang-an-ulo il-pwun-man-ey ki-e
baby-NOM room-inside-DIR one-minute-interval-at crawl-CON
 tul-e-ka-(a)ss-ta.
enter-CON-go-PAST-DC
 ‘The baby went into the room crawling in one minute.’
- c. Aki-ka pang-an-ey il-pwun-man-ey
baby-NOM room-inside-LOC one-minute-interval-at
 ki-e tul-e-ka-(a)ss-ta.
crawl-CON enter-CON-go-PAST-DC
 ‘The baby went into the room crawling in one minute.’

As seen in (15a), despite the presence of the atelic (*u*)*lo*-phrase, the temporal *for*-phrase severely degrades the sentence when the verb expresses a boundary-crossing event. Instead, the telic *in*-phrase is more natural with the verb regardless of whether the ground DP occurs in the telic or atelic PP, as in (15c) and (15b), respectively. The boundedness (or telicity) of the event described by (15) is presumably due to the meaning contribution of the verb *tul-e-ka* ‘go in (or enter)’, which Folli and Harley (to appear) call a threshold effect. Citing Borer (2005), Folli and Harley (to appear) contend that endpoint is not an essential property of telicity, but any sufficiently distinct transition (i.e., a threshold) can give rise to a telic interpretation, even one which is intermediate within the event as a whole. The verb meaning ‘go in’ in (15) gives a sufficiently distinct transition from ‘not being inside the room’ to ‘being inside the room’. The telic interpretation of (15b) with the directional atelic PP thus carries the implication that the baby got inside the room and kept crawling, so that the sentence can be paraphrased as the baby crawled until it went inside the room and then beyond. The telic interpretation of (15c) with the goal PP, however, involves an entailment of an endpoint, so that the sentence can be paraphrased as the baby crawled until it got inside the room and stopped there.

The following set of examples provides further evidence along the same lines.

- (16) a. Maykwuyeng-i tali-mit-ulo cokum tte(-e)
beer.bottle-NOM bridge-bottom-DIR a.little float(-CON)
 nayli-e-ka-(a)ss-ta.
descend-CON-go-PAST-DC
 ‘The beer bottle floated down toward the bottom of the bridge a little.’
- b. Maykwupyeng-i tali-mit-ulo i-pwun-tongan
beer.bottle-NOM bridge-bottom-DIR two-minute-for
 tte(-e) nayli-e-ka-(a)ss-ta.
float(-CON) descend-CON-go-PAST-DC
 ‘The beer bottle floated down toward the bottom of the bridge for two minutes.’

- c. Maykcwupyeng-i tali-mit-ulo i-pwun-man-ey
beer.bottle-NOM bridge-bottom-DIR two-minute-interval-at
 tte(-e) nayli-e-ka-(a)ss-ta.
float(CON) descend-CON-go-PAST-DC
 ‘The beer bottle floated down under the bridge in two minutes.’

As seen above, the directed motion verb *tte(-e) nayli-e-ka-*, which is roughly translated as ‘float down’, can be interpreted either as unbounded, as in (16a) and (16b), or bounded, as in (16c). The atelic interpretation of (16) carries the implication that the beer bottle never got under the bridge, so that there is no sufficiently distinct transition that can give rise to telicity. In contrast, the telic interpretation of (16) implies that the beer bottle got under the bridge (and kept floating down), which provides a threshold (from ‘not being under the bridge’ to ‘being under the bridge’). Thus, the emergence of a telic reading is precisely what we predict.¹⁰

We have seen thus far that telicity is not necessarily correlated with a syntactic property but may be affected by other non-syntactic factors. Thus, telicity cannot be used as a diagnostic for syntactic constituency. In what follows, I will provide a more reliable diagnostic that distinguishes complements from adjuncts in Korean, namely ‘do-so’ VP elision. By demonstrating that the atelic path PP headed by the directional *-(u)lo* behaves in the same way as argumental PPs in the ‘do-so’ VP elision test, I will argue that the *(u)lo*-phrase is an argument of the motion verb on a par with its telic counterpart.

4. The argumental status of the directional PP

In this section, I demonstrate that the atelic path PP headed by *-(u)lo* has an argumental status based on ‘do-so’ VP elision, which I argue is fairly reliable, unlike other tests corresponding to those often used in English (see below). Before detailing the ‘do-so’ VP elision test for constituency in Korean, let us briefly look at the arguments for the argumental status of English atelic path PPs provided by Folli and Harley (to appear).

4.1. Atelic (or open-scale) path PPs in English

Folli and Harley (to appear) argue that atelic (open-scale in their terminology) path PPs such as *along*, *around*, and *toward(s)* in the context of motion verbs are not adjuncts but arguments that reside in the VP-internal resultative position.¹¹ They provide evidence for the argumental status of

¹⁰See Borer (2005) and Folli and Harley (to appear) for more examples from English that illustrate a correlation between a threshold and telicity.

¹¹See Folli and Harley (to appear) for further discussion of the resultative nature of directed motion constructions in connection with adjectival resultative constructions.

these path PPs from various syntactic diagnostics such as word order, ‘do-so’ VP elision, and locative inversion.¹²

First, they demonstrate that, unlike adjunct PPs, atelic path PPs must be adjacent to the verb, similar to typical argument DPs. For instance, switching the order of two locative PPs as in (17), both of which modify a dancing event, does not affect grammaticality. However, Folli and Harley (to appear) report that reversing the order of a locative and an atelic Path PP, as in (17d), severely degrades the sentence, indicating that the atelic Path PP is in the VP-internal position rather than an adjunct position.¹³

- (17) a. Sue danced at the party in the bathroom.
 b. Sue danced in the bathroom at the party.
 c. Sue danced around the bathroom at the party.
 d. #Sue danced at the party around the bathroom.

They report that the same fact is observed with the directional *toward*, which is the main concern of this paper; switching the order of the atelic PP headed by *toward* and the temporal *for*-phrase severely degrades the sentence, as in (18). (18d) is in sharp contrast with (18b) where the locative PP, *at the state fair*, and the temporal PP, *for hours*, are reversed.¹⁴

- (18) a. John pushed the cart at the state fair for hours.
 b. John pushed the cart for hours at the state fair.
 c. John pushed the cart towards New York for hours.
 d. #John pushed the cart for hours towards N.Y.

Another relevant test for constituency in English according to Folli and Harley (to appear) is ‘do-so’ VP elision, which will be shown to be applicable to Korean as well. Elements which are adjoined to the VP may normally occur outside the domain of ‘do-so’, as illustrated in (19a) for a locative PP. On the other hand, VP-internal PPs, as in the ditransitive case in (19b), may not be excluded from elision, because they are structurally part of the VP being elided. The crucial example for their argument is (19c), where the atelic Path PP is shown to be part of the VP being elided.

- (19) a. Mary kissed John in the park and Sue did so in the bedroom.
 b. *Sue gave a book to John and Mary did so to Bill.

¹²They also include an asymmetry between weak-island extraction from arguments and that from adjuncts as one of the syntactic diagnostics for argumenthood, which I omit here.

¹³It should be noted that (17d) is fully acceptable with an intonational boundary between *party* and *around* (Peter Svenonius, p.c.). The sentence is also grammatical if *around the bathroom* is part of the DP headed by *party*, although this reading is irrelevant to the issue at hand. No such intonational boundary is necessary in (17a) and (17b). Thus, Folli and Harley’s contrast holds up.

¹⁴Again, (18d) is acceptable with an intonational boundary between *hours* and *towards* (Peter Svenonius, p.c.).

- c. *John pushed a cart towards N.Y. and Bill did so towards Washington.

Based on the ungrammaticality of (19c), they argue that the atelic PP, *towards Washington*, must be within the VP, and hence cannot be an adjunct.

Their final syntactic diagnostic for argumenthood is based on Bresnan's (1992) observation that locative inversion is possible for motion verbs with telic path (e.g., *into*) PPs but not with adjunct locative PPs, as shown below.

- (20) a. *At the party danced a smiling girl.
b. Into the room danced a smiling girl.

If one assumes that locative inversion is movement to an A-position, and hence should be good for arguments but not for adjuncts, atelic path PPs must be arguments, given that locative inversion is also possible with them.

- (21) Around the room danced a smiling girl.

They further confirm the argumental (and resultative) nature of the atelic PP in the equivalent construction in Italian by considering auxiliary selection facts. In Italian, changing an auxiliary correlates with a change in the interpretation of a PP, for example, from locative adjunct, as in (22a), to telic goal endpoint, as in (22b).

- (22) a. Gianni ha corso nel bosco per ore/#in un minuto.
John has run in.the woods for hours/in one minute
'John has run in the woods for hours.'
b. Gianni é corso nel bosco in un minuto/#per ore.
John is run in.the woods in a minute/for hours
'John has run into the woods in one minute.'

Crucial for their argument is the fact that changing the preposition from a telic, endpoint locating preposition like *in* 'into' to an atelic, path-denoting preposition like *verso* 'toward' still results in *essere* 'be' being selected as the auxiliary, as shown in (23).

- (23) a. Gianni é corso verso il bosco.
John is run towards the woods
'John ran towards the woods.'
b. Gianni é scivolato in direzione della pianta.
John is slid in.the direction of.the tree
'John slid in the direction of the tree.'

The fact shown in (23) thus suggests that the atelic path PPs are argumental in the same way as their telic counterparts.¹⁵

¹⁵The same auxiliary selection facts are observed in Dutch (Folli and Harley to appear

On the basis of the language-internal syntactic diagnostics for argumenthood and resultativity, Folli and Harley (to appear) conclude that the structural position of the atelic Path PPs discussed above is not that of an adjunct, but rather the usual VP-internal position of a PP that specifies a Path argument.

4.2. Argumental status of an atelic PP in Korean

Among the aforementioned syntactic diagnostics relevant for English, ‘do-so’ VP elision is the only reliable test applicable to Korean, since it shows a clear distinction between arguments and adjuncts.¹⁶ As exemplified in (24) through (26), locative, instrumental, and temporal adverbial phrases, which are known to be typical adjunct types, can all occur outside the domain of ‘do-so’.

- (24) Locative PP
- a. Mary-ka John-eykey kongwen-eyse ppopoha-yss-ta.
Mary-NOM John-DAT park-LOC kiss-PAST-DC
‘Mary kissed John in the park.’
 - b. Sue-to tosekwan-eyse kuliha-yss-ta.
Sue-also library-LOC so.do-PAST-DC
‘Sue did so in the library.’
- (25) Instrumental PP
- a. Inho-ka ku mwun-ul tongcen-ulo yel-ess-ta.
Inho-NOM the door-ACC coin-INSTR open-PAST-DC
‘Inho opened the door with a coin.’
 - b. John-to chelsa-lo kuliha-yss-ta.
John-also wire-INSTR so.do-PAST-DC
‘John did so with a wire.’
- (26) Temporal Adverbial
- a. Mary-ka ecey yenghwa-lul po-le ka-(a)ss-ta.
Mary-NOM yesterday movie-ACC see-INFIN go-PAST-DC
‘Mary went to see a movie yesterday.’
 - b. Sue-to onul kuliha-yss-ta.
Sue-also today so.do-PAST-DC
‘Sue did so today.’

On the other hand, VP-internal PPs, as in the ditransitive case in (27) and (28) with verbs of the ‘put’ class, may not be excluded from VP elision, because they are part of the VP being elided.

and in German according to Klaus Abels (p.c.).

¹⁶Korean has a relatively free word order (except the verb is always final) and does not appear to have a special rule of locative inversion.

- (27) a. Yenghi-ka kkochpyeng-ul theyipul-wi-ey
Yenghi-NOM flower.bottle-ACC table-surface-LOC
 noh-ass-ta.
put.on-PAST-DC
 ‘Yenghi put the vase on the table.’
 b. *Senhi-to chayksang-wi-ey kuliha-yss-ta.
Senhi-also desk-surface-LOC so.do-PAST-DC
 ‘Senhi did so on the table.’
- (28) a. Inho-ka kong-ul sangca-ey neh-ess-ta.
Inho-NOM ball-ACC box-LOC put.in-PAST-DC
 ‘Inho put the ball in the box.’
 b. *Mary-to selap-ey kuliha-yss-ta.
Mary-also drawer-LOC so.do-PAST-DC
 ‘Mary did so in the drawer.’

As expected, the goal-marking PP headed by *-ey* in the context of both intransitive (e.g., (29) and (30)) and transitive (e.g., (31)) motion verbs cannot be excluded from VP elision, which confirms its argumental status.

- (29) a. Mary-ka hakkyo-ey ttwi-e ka-(a)ss-ta.
Mary-NOM school-LOC run-CON go-PAST-DC
 ‘Mary went to school running.’
 b. *Sue-to kakey-ey kuliha-yss-ta.
Sue-also store-loc so.do-PAST-DC
 ‘Sue did so to the store.’
- (30) a. Mary-ka khun pang-ey tul-e-ka-(a)ss-ta.
Mary-NOM big room-LOC enter-CON-go-PAST-DC
 ‘Mary went into the parent’s room.’
 b. *Inho-to caki pang-ey kuliha-yss-ta.
Inho-also self room-LOC so.do-PAST-DC
 ‘Inho did so into his room.’
- (31) a. Inho-ka totwuk-ul kyengchalse-ey
Inho-NOM burglar-ACC police.station-LOC
 kkul-ko-ka-(a)ss-ta.
drag-CON-go-PAST-DC
 ‘Inho dragged the burglar to the police station.’
 b. *John-to kyotoso-ey kuliha-yss-ta.
John-also jail-LOC so.do-PAST-DC
 ‘John did so to the jail.’

Crucially, the directional *(u)lo*-phrase behaves in the same way as the goal-PP, given that it cannot occur outside the domain of ‘do-so’, as shown in (32) to (34).

- (32) a. Mary-ka hakkyo-lo ka-(a)ss-ta.
Mary-NOM school-DIR go-PAST-DC
 ‘Mary went towards the school.’
 b. *Sue-to kekey-lo kuliha-yss-ta.
Sue-also store-DIR so.do-PAST-DC
 ‘Sue did so towards the store.’
- (33) a. Mary-ka hakkyo-lo ttwi-e ka-(a)ss-ta.
Mary-NOM school-DIR run-CON go-PAST-DC
 ‘Mary went towards the school running.’
 b. *Sue-to kekey-lo kuliha-yss-ta.
Sue-also store-DIR so.do-PAST-DC
 ‘Sue did so towards the store.’
- (34) a. Inho-ka totwuk-ul kyengchalse-lo
Inho-NOM burglar-ACC police.station-DIR
 kkul-ko-ka-(a)ss-ta.
drag-CON-go-PAST-DC
 ‘Inho dragged the burglar towards the police station.’
 b. *John-to kyotoso-lo kuliha-yss-ta.
John-also jail-DIR so.do-PAST-DC
 ‘John did so towards the jail.’

Therefore, the ‘do-so’ VP elision test indicates that the atelic path PP headed by *-(u)lo* is argumental in the same way as its telic counterpart headed by the locative *-ey*, contrary to previous claims. We have seen thus far that both the directional (atelic) and the goal-marking (telic) PP in Korean are in the VP-internal position and are arguments of a motion verb. Despite the identical argumental status of the two phrases, I will argue, in the following section, that motion constructions with the directional PP must still be distinguished from those with the goal-marking PP in terms of licensing a resultative interpretation.

5. Resultativity and directional vs. goal PPs in Korean

We have seen earlier that auxiliary selection facts in Italian indicate that atelic path PPs are in the VP-internal resultative position. Examples are repeated below.

- (35) Italian
- a. Gianni é corso nel bosco.
John is run in.the woods
 ‘John has run into the woods.’
 b. Gianni é corso verso il bosco.
John is run toward the woods
 ‘John has run towards the woods.’

- c. Gianni ha corso nel bosco.
John have run in.the woods
 ‘John has run inside the woods.’

It is argued in most of the literature (e.g., Folli 2001 and references therein) that constraints on auxiliary selection are a good diagnostic for unaccusativity; a change in the auxiliary selection from ‘have’ to ‘be’ corresponds to an unergative versus an unaccusative structure. Given this, one of the standard syntactic approaches to the motion construction with the goal PP in (35a) has been that it has an unaccusative structure by virtue of having a goal PP; the goal PP forms a predicative small clause embedded in the VP (e.g., Hoekstra and Mulder 1990 and Folli and Harley to appear). The consequent structural change then forces a reinterpretation of some argument of the main predicate as the subject of the lower predication. In (35a), it is the subject of the main predicate (e.g., *John*) that serves this function. Thus, the consequent structural position of the subject in (35a) is not external but internal to the VP by being generated in the spec of the small clause embedded in the VP. The unaccusative structure induced by the goal PP thus explains the selection of the auxiliary ‘be’, rather than ‘have’.

Folli and Harley (to appear) argue that the secondary predicate associated with a resultative interpretation need not be telic, but atelic path PPs like those seen in (35b) also form a predicative small clause. Thus, the subject in (35b) also serves as the subject of the lower predication created by the atelic PP, *verso il bosco* ‘towards the woods’. The unaccusative structure, therefore, forces the selection of ‘be’ as the auxiliary, rather than ‘have’, even when a path PP is atelic.

Unlike in Italian and English where both a telic (e.g., *to*) and an atelic (e.g., *toward*) path PP give the same structural effect, the atelic (*u*)lo-phrase and the telic *ey*-phrase in Korean do not appear to have the same effect on syntactic structure in terms of creating a resultative secondary predicate. This is shown by the contrast between motion verbs with a goal-PP and those with a directional PP in an aspectual construction expressed by the aspectual marker *-a/e iss-*, which has a characteristic similar to the auxiliary *essere* ‘be’ in Italian.

The aspectual marker *-a/e iss-* is a combination of a non-finite connective morpheme *-a/e* and the auxiliary verb *iss-* ‘be’.¹⁷ The aspectual construction expressed by *-a/e iss-* expresses a continuation of a result state hold by an internal argument of the verb at a reference point.¹⁸ Similar to Italian *essere* ‘be’, the aspectual marker *-a/e iss-* combines with unac-

¹⁷The choice between *-a* and *-e* is conditioned by the preceding vowel in a type of vowel harmony.

¹⁸The term ‘result state’ used here is intended to be equivalent to a target state, as opposed to a resultant state, defined by Kratzer (2000), given that it refers to a state hold by an internal argument that undergoes a change of state or location, rather than an external argument.

cusatives, in particular, inchoatives, but not with unergatives, as illustrated below.

- (36) Change of State Verbs
- a. Aiskulim-i nok-a iss-ta.
ice.cream-NOM melt-CON be-DC
'The ice cream has melted.'
 - b. Mwun-i yel-li-e iss-ta.
door-NOM open-INCHO-CON be-DC
'The door has opened.'
 - c. Koyangi-ka cwuk-e iss-ta.
cat-NOM die-CON be-DC
'The cat has died.'
- (37) Unergative/Activity Verbs
- a. *Inho-ka wuntongcang-eyse talli-e iss-ta.
Inho-NOM playground-LOC run-CON be-DC
'Inho has run in the playground.'
 - b. *Mary-ka kongwen-eyse kel-e iss-ta.
Mary-NOM park-LOC walk-CON be-DC
'Mary has walked in the park.'
 - c. *Ai-ka wul-e iss-ta.
child-NOM cry-CON be-DC
'The child has cried.'

The aspectual marker *-a/e iss-* can also combine with passive predicates, as in (38a).

- (38) a. Mwun-i (nwukwunka-eyuyhay) kochi-e ci-e iss-ta.
door-NOM (someone-by) fix-CON become-CON be-DC
'The door has been fixed.'
- b. *Nwukwunka-ka mwun-ul kochi-e iss-ta.
someone-NOM door-ACC fix-CON be-DC
'Someone has fixed the door.'

As seen in (38b), the transitive verb *kochi-* 'fix' cannot combine with the aspectual marker. Its passive counterpart, *kochi-e ci-* 'fix-con become', however, is compatible with *-a/e iss-*. On the basis of the examples from (36) through (38), the generalization one can draw regarding a constraint on the occurrence of the auxiliary form *-a/e iss-* is that the subject of the verb with which it combines must be an internal argument that holds the result (or final) state of an event.¹⁹

¹⁹If passive predicates are considered to be one type of unaccusative, i.e., derived unaccusatives, one could argue that the auxiliary form *-a/e iss-* is a diagnostic for unaccusativity in Korean. Note that the auxiliary 'be' in Italian, which is known to be a diagnostic for unaccusativity, also combines with passive predicates including adjectival passives, as shown below (Rafaella Folli, p.c.).

With this constraint in mind, let us consider how goal-marking and directional PPs interact with the aspectual marker *-a/e iss-*. Recall that predicates with a directional component can take either a goal or a directional PP (e.g., (15b)). As seen below, however, motion verbs with a goal PP can occur in the result-state-denoting aspectual construction but those with a directional PP cannot.

- (39) a. *Mary-ka pang-ey tul-e-ka-(a) iss-ta.*
Mary-NOM house-LOC enter-CON-go-CON be-DC
 ‘Mary is in the room as a result of going into the room.’
 b. *Inho-ka namwu-wi-ey ol(u)-a-ka-(a) iss-ta.*
Inho-NOM tree-surface-LOC rise-CON-go-CON be-DC
 ‘Inho is (up) on the tree as a result of going up there.’
 c. *Mary-ka tali-mit-ey nayli-e-ka-(a) iss-ta.*
Mary-NOM bridge-bottom-LOC descend-CON-go-CON be-DC
 ‘Mary is under the bridge as a result of going down there.’
- (40) a. **Mary-ka pang-ulo tul-e-ka-(a) iss-ta.*
Mary-NOM house-DIR enter-CON-go-CON be-DC
 ‘Mary is in the room as a result of going towards the room.’
 b. **Inho-ka namwu-wi-lo ol(u)-a-ka-(a) iss-ta.*
Inho-NOM tree-surface-DIR rise-CON-go-CON be-DC
 ‘Inho is (up) on the tree as a result of going up towards the tree.’
 c. **Mary-ka tali-mit-ulo nayli-e-ka-(a) iss-ta.*
Mary-NOM bridge-bottom-dir descend-CON-go-CON be-DC
 ‘Mary is under the bridge as a result of going down towards the bridge.’

When the goal-marking *ey*-phrase is present in a motion construction, there is an entailment that the subject of the motion ends up being in the final location of the event (e.g., ‘in the house’ in (39a)). Such an entailment is not available with a motion construction that contains a directional PP; the sentences in (40) with the directional (*u*)*lo*-phrase do not license inferences about the final state of the subject. The subject, *Mary* in (40a), for example, does not hold the final state of being in the house but may have continued moving and gone out of the house through the back door. Crucial to the issue at hand is that the subject of the motion verb with

-
- (i) a. *Il bicchiere si e rotto*
the glass si is broken
 ‘The glass broke.’ (Inchoative)
 b. *Il bicchiere e rotto*
the glass is broken
 ‘The glass is broken.’ (Adjectival passive)
 c. *Il bicchiere e stato rotto*
the glass is been broken
 ‘The glass has been broken (by someone).’ (Passive)

the goal PP must be an internal argument of the verb, given that the verb is compatible with the aspectual marker, as shown in (39). The subject of the motion verb with the directional PP, on the other hand, must be an external argument, given that the verb is not compatible with the aspectual marker, as in (40), on a par with unergatives (e.g., (37)) and transitives (e.g., (38b)).

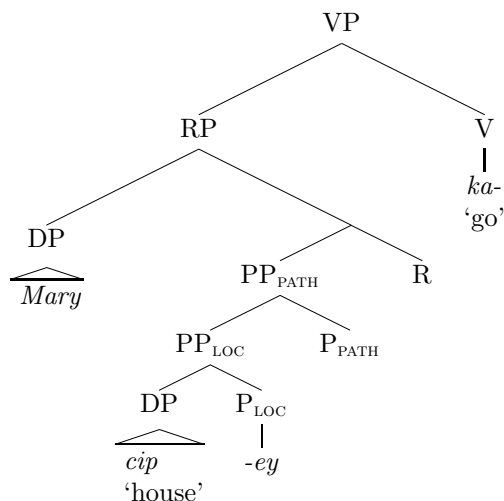
We have seen thus far that although both a goal PP and a directional PP are in the VP-internal position (based on ‘do-so’ VP elision), they are different in terms of licensing a resultative interpretation. This was shown by the fact that the goal PP is allowed in a result-state-denoting aspectual construction, while the directional PP is not. In the following section, I argue that the different behavior of the two phrases is attributed to a structural difference, and that the presence of Result Phrase (RP) is vital for a resultative interpretation and the compatibility with the aspectual marker *-a/e iss-*.

6. Syntactic representation of directional and goal-marking PPs in Korean

We have seen that when we add a goal-marking PP headed by *-ey* to an intransitive directed motion construction, the subject is interpreted as necessarily holding a state of being in the Ground DP at the end of the event. The fact that a motion verb with the goal PP is licensed in the aspectual *-a/e iss-* construction has also indicated that the subject is an internal argument, rather than an external argument. I argue that these facts associated with the goal PP are accounted for if we hypothesize that the goal PP forms a resultative secondary predicate, following the literature that adopts a small clause hypothesis (Hoekstra and Mulder 1990) for directed motion constructions. The subject of the directed motion verb then is reinterpreted as the subject of the secondary predication. In addition, I adopt the proposals of Ramchand and Svenonius (2002) and Ramchand (2006), according to which there is a special functional Result Phrase (RP) that introduces a small clause and the DP in the spec of RP is interpreted as a holder of the state denoted by the complement of R(esult). A directed motion construction with the goal PP then has a syntactic representation along the lines of (41).²⁰

²⁰In this paper, I put aside the discussion of the syntactic representation of a motion construction that involves a serialized verbal configuration since it would take us too far afield. I also omit the discussion of how the subject in a directed motion construction with a goal PP receives an agentive interpretation. See Son (2006) for further discussion on these issues.

(41) Directed Motion Construction with Goal PP



The structure in (41) represents the sentence ‘Mary went to the house’ in Korean. As seen above, I assume that the projection of P is decomposed into P_{PATH} and P_{LOC}, following Svenonius (2004), among many others. I further assume that the locative postposition *-ey* is a spell-out of P_{LOC} while the directional *-(u)lo* is a spell-out of P_{PATH} (see below).²¹ The structure proposed above then accounts for the entailment fact with respect to the subject of the directed motion verb when the goal PP is present. According to (41), *Mary* is interpreted as a holder of the state denoted by the PP by virtue of being in the Spec of RP; *Mary* is a holder of the state of being in the house. Since the subject *Mary* is internal to the VP, not external,

²¹Some researchers argue that *-ey* can be a realization of either P_{LOC} or P_{PATH} depending on a context, or a spell-out of both P heads (e.g., Zubizarreta and Oh in press). One may also argue that the fact that the locative *-ey* and the directional *-(u)lo* cannot co-occur indicates that they occupy the same syntactic position, namely P_{PATH}, as argued for English path Ps, *to* and *at* (e.g., Svenonius 2004). However, I argue that *-ey* is a spell-out of P_{LOC}, rather than P_{PATH}, given that its animate counterparts *-eykey* (formal)/*hanthey* (informal) can co-occur with the directional *-(u)lo* in directed motion constructions. In fact, when the Ground DP is animate, the directional *-(u)lo* must co-occur with the animate locative *-eykey*, as illustrated below.

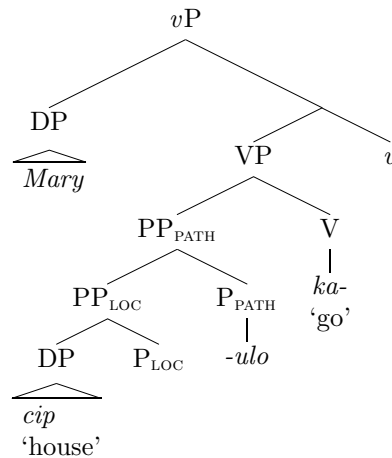
- (i) a. Ku kong-i John-*(eykey/hanthey)-lo nal-a ka-(a)ss-ta.
the ball John-LOC-DIR fly-CON go-PAST-DC
 ‘The ball flew (was thrown) towards John.’
- b. Salam-tul-i kapcaki Mary-*(eykey/hanthey)-lo moyetul-ess-ta.
person-PL-NOM suddenly Mary-LOC-DIR gather-PAST-DC
 ‘People gathered towards Mary.’

The co-occurrence of the animate locative *-eykey* and the directional *-(u)lo*, therefore, suggests that they must occupy different syntactic positions, P_{LOC} and P_{PATH} respectively, although it is not clear as to why the co-occurrence of the inanimate locative *-ey* and *-(u)lo* is blocked.

the compatibility of the verb with the aspectual auxiliary *-a/e iss-* is also explained.

Unlike the goal PP, the directional (*u*)*lo*-phrase does not form secondary predication but simply merges with V as its argument. Thus, a motion construction with the directional PP lacks an RP, as represented in (42).

(42) Directed Motion with Directional PP



Since the directional PP does not form a predicative phrase, it does not have a specifier, which forces the subject *Mary* to be generated external to VP. This explains the fact that the directional PP cannot be licensed in the aspectual *-a/e iss-* construction. The lack of RP also correlates with the lack of an entailment of a final state held by the moving subject.

It is worth noting that the locative *ey*-phrase is normally used predicatively with stative or copular verbs, as in (43), while the directional (*u*)*lo*-phrase cannot be used predicatively, as in (44).

- (43) a. *Mary-ka cip-ey iss-ta.*
Mary-NOM house-LOC be-DC
 ‘Mary is in the house.’
- b. *John-un Seoul-ey sa(l)-n-ta.*
John-NOM Seoul-LOC live-PRES-DC
 ‘John lives in Seoul.’
- c. *Inho-ka honca hakkyo-ey nam-ass-ta.*
Inho-NOM alone school-LOC remain-PAST-DC
 ‘Inho remained in the school by himself.’
- (44) a. **Mary-ka cip-ulo iss-ta.*
Mary-NOM house-DIR be-DC
 ‘Mary is towards the house.’

- b. *John-un Seoul-lo sa(1)-n-ta.
John-NOM Seoul-DIR live-PRES-DC
 ‘John lives towards Seoul.’
- c. *Inho-ka honca hakkyo-lo nam-ass-ta.
Inho-NOM alone school-DIR remain-PAST-DC
 ‘Inho remained towards the school by himself.’

The contrast between the locative *-ey* and the directional *-(u)lo* shown above, therefore, confirms the predicative vs. non-predicative nature of the goal PP and the directional PP respectively.

7. Conclusion

In this paper, I have shown that the previous analysis of the directional *(u)lo*-phrase as a modifier cannot be maintained for the following two reasons: 1) telicity, which is used as the basis of arguing that the directional PP has an adjunct status (e.g., Zubizarreta and Oh in press), cannot be used as a reliable syntactic diagnostic for constituency since it is not necessarily correlated with a syntactic property; 2) ‘do-so’ VP elision, which is known to be a diagnostic for argumenthood (e.g., Folli and Harley to appear, indicates that the directional *(u)lo*-phrase behaves in the same way as argumental PPs. Based on the ‘do-so’ VP elision test, therefore, I argued that the directional *(u)lo*-phrase is in the VP-internal position, similar to the English and Italian atelic path PPs. The atelic path PP in Korean, however, was shown to be different from its telic counterpart (i.e., the endpoint locating *ey*-phrase) and the English/Italian atelic path PPs in terms of predicativity. Based on the contrast between the directional and goal-marking PP in the result-state-denoting aspectual construction, I argued that the locative *-ey* is predicative while the directional *-(u)lo* is non-predicative. Thus, the endpoint locating PP headed by *-ey* in motion constructions forms secondary predication associated with a resultative interpretation, analogous to the predicative telic (e.g., *to*) and atelic (e.g., *toward*) path PPs in English and Italian. The atelic path PP headed by *-(u)lo*, however, merges with a verb as a non-predicative complement. The consequent structural change when the goal-marking PP is present makes the subject of motion (in intransitive motion construction) serve as the subject of the lower predication represented by RP. Thus, the position of the subject in the spec of RP explains not only the entailment of a final state held by the moving subject but also the compatibility with the result-state-denoting aspectual marker, which requires an internal argument in the subject position. The non-predicative directional PP does not involve an RP, which creates an extra slot for an argument internal to VP, and hence the subject of motion merges as an external argument. The lack of RP then explains the lack of a resultative interpretation associated with the directional *-(u)lo* and the incompatibility with the aspectual marker

associated with a result state.

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