

# Ambiguities in the Korean -KO ISSTA Imperfective Construction\*

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**Kim, Jong-Bok.** 2011. **Ambiguities in the Korean -KO ISSTA Imperfective Construction.** *Korean Journal of Linguistics*, 36-4, 863-885. Of the imperfective constructions in Korean, the -KO ISSTA construction is used to represent a progressive state, but the complexities arise from limited cases where the construction induces a resultant state reading. In this paper, we suggest that licensing conditions for the progressive and resultant state reading of the construction are closely related to interactions among the three perspectives of aspect: lexical, grammatical, and phrasal properties of the eventuality in question. These properties also lead us to posit different syntactic structures for each of the two possible readings. (Kyung Hee University)

**Key words:** imperfective, progressive, resultant, eventuality, lexical aspect, grammatical aspect, culmination point

## 1. Introduction

In representing a progressive imperfective aspect, the language employs the *-ko* marked main verb followed by the copula-type verb *iss-ta* (cf. Martin 1992, Sohn 1999, among others):

- (1) a. Mia-ka    uyca-ey **anc-ko**    iss-ta. (P-state)  
      Mia-NOM chair-at sit-CONN be-DECL  
      'Mia is sitting on the chair.'
- b. Mia-ka    chaky-ul **ilk-ko**    iss-ta. (P-state)  
      Mia-NOM book-ACC read-CONN be-DECL  
      'Mia is reading a book.'

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The -KO ISSTA construction in both examples here contributes to a progressive state (P-state) reading such that there is an on-going action of sitting down on the chair and reading a book. An issue arises when the -KO ISSTA construction induces a resultant state (R-state) reading as well (cf. Chung 2007, Lee 2008, Kim, M. 2010, Nam 2010, Kim, J. 2011). Consider the following:

- (2) Mia-ka    cangkap-ul    **kki-ko**    iss-ta. (P-state and R-state)  
 Mia-NOM    glove-ACC    wear-CONN    be-DECL  
 'Mia is putting on the gloves.' or 'Mia has the gloves on.'

With a verb like 'put on' here, the *-ko iss* imperfective can give us not only a progressive but also a resultant state reading. Such ambiguities do not arise with verbs like *anc-ta* 'sit' or *ilk-ta* 'read' in (1). The question is then why we have two readings in such cases and what grammatical factors licence this kind of additional reading.

In this paper, we try to show that the interpretation of the -KO ISSTA is closely related to the tight interactions among properties of lexical aspect, viewpoint aspect, and phrasal level of the eventuality in question. In doing so, we first briefly review eventuality in terms of lexical aspect, grammatical aspect, and phrasal properties. Based on these three perspectives on eventuality, we provide licensing conditions for the progressive as well as resultant state reading of the construction and sketch proper syntactic structures for each reading.

## 2. Lexical, Grammatical, Phrasal Properties of Aspect

Every language has several different ways of talking about a given situation. For example, the situation of Mia's running can be expressed by *Mia ran*, *Mia was running*, *Mia has run*, *Mia has been running*, and so forth. The difference here, indicated by the verb forms, is an aspectual one involving temporal contours of a situation (cf. Smith 1991). Aspectual types can be viewed with two different perspectives: lexical (or situation) aspect and grammatical (viewpoint) aspect. Lexical aspect, often called Aktionsart (kind of action), is about the classification of eventualities whereas grammatical aspect involves different ways of viewing the internal temporal constituency of the state of affairs

concerned (cf. Vendler 1967, Dowty 1979, Smith 1991, Levin and Rappaport 1995, Binnick 2006, among others).

Let us briefly review the main properties of lexical aspect in Korean while referring to English when needed (cf. Lee 1993, Oh 1998). Lexical aspect traditionally has to do with the classification of verbal predicates, and as in English we can first classify Korean lexical aspect into four different types (cf. Lee 1982, Kim, Y. 1990, Chung 2007, Lee, E. 2008):<sup>1</sup>

- (3) a. Mimi-ka aphu-ta (state)  
 Mimi-NOM sick-DECL  
 'Mimi is sick.'
- b. Mimi-ka talli-n-ta (activity)  
 Mimi-NOM run-PRES-DECL  
 'Mimi runs.'
- c. Mimi-ka uyca-lul mantul-ess-ta (accomplishment)  
 Mimi-NOM chair-ACC make-PST-DECL  
 'Mimi made a chair.'
- d. Mimi-ka cengsang-ey totalha-yess-ta (achievement)  
 Mimi-NOM top-LOC reach-PST-DECL  
 'Mimi reached the top (of the mountain).'

The state verb *aphu-ta* 'sick' describes a situation that continues to exist, representing a non-dynamic situation where there is no perceptible change. The remaining three eventuality types, often called 'events', express that something undergoes a change. These three event types have different internal structure. For example, achievements and accomplishments such as *mantul-ta* 'make' and *totalha-ta* 'reach', have natural endpoints (telic). Meanwhile, activities, such as *talli-ta* 'run', are homogeneous with no natural endpoint (atelic). The distinction between accomplishments and achievements is difficult to define, but the main difference comes from the property of duration. Unlike accomplishments, achievements do not mark duration, prevented from being modified by a *for* PP (cf. Lee 1982):

- (4) a. Mimi-nun han sikan-maney/\*tongan cip-ey  
 Mimi-TPC one hour-in/for house-at

1 For Japanese, see Ogihara (1998), and Shirai (2000).

- tochakha-yess-ta  
 arrive-PST-DECL  
 'Mimi arrived at home in an hour.'
- b. Mimi-nun han sikan-maney/tongan cip-ul  
 Mimi-TPC one hour-in/for house-ACC  
 ci-ess-ta  
 build-PST-DECL  
 'Mimi built the house in an hour/for an hour.'

Building a house is something we can do for a period of time while arriving we cannot. This then explains why the achievement eventuality in (4a) is compatible with the delimited PP. As such the four different types of lexical aspect are sensitive to inherent properties such as stativity, durative, and telicity features.

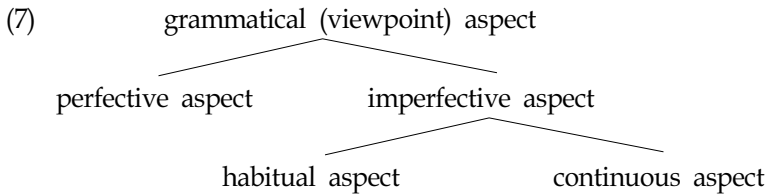
One thing to note here is that the eventuality type is determined not purely by the lexical property of the verb but also by the expression participating in the predication (VP level). The internal structure of the object NP (e.g., definiteness) or the property of its dependent (modifier or complement) can shift or coerce the type of eventuality. For example, *run* can represent either an activity or an accomplishment depending on the type of its dependent as noticed from the following:

- (5) a. Mimi-ka talli-ess-ta  
 Mimi-NOM run-PST-DECL  
 'Mimi ran.'
- b. Mimi-ka cip-kkaci han sikan-maney talli-ess-ta  
 Mimi-NOM home-to one hour-in run-PST-DECL  
 'Mimi ran to the home in an hour.'
- (6) a. Mimi-ka pyenci hanthong-ul ssu-ess-ta  
 Mimi-NOM letter one-ACC write-PST-DECL  
 'Mimi wrote a letter.'
- b. Mimi-ka pyenci-tul-ul ssu-ess-ta  
 Mimi-NOM letter-PL-ACC write-PST-DECL  
 'Mimi wrote letters.'

The example (5a) represents an activity situation but in (5b) with the addition of the PP 'in an hour', the situation involved is shifted to an accomplishment. The object property also can shift the eventuality type.

With the indefinite object NP in (6a), we have an accomplishment, but the plural object, we have an activity.<sup>2</sup>

Unlike these four-way classification of lexical aspect, grammatical (or viewpoint) aspect has two subtypes, perfective and imperfective aspect, the latter of which again includes habitual aspect and continuous aspect (cf. Binnick 2006 and references therein):



The perfective aspect represents the eventuality as a single point while the imperfective does not. As in English, in Korean the default interpretation of the simple tense represents perfective aspect. Habitual aspect, (e.g., marked by such as *-kon ha-ta* ‘used to’) denotes periodic repetition of an eventuality, while continuous aspect represents ongoing eventuality. Continuous aspect can be marked either by the progressive form or the perfect form:

- (8) a. Mimi-ka o-ko iss-ta  
 Mimi-NOM come-CONN be-DECL  
 ‘Mimi is coming.’  
 b. Mimi-ka o-ass-ess-ta  
 Mimi-NOM come-PST-PST-DECL  
 ‘Mimi has come.’

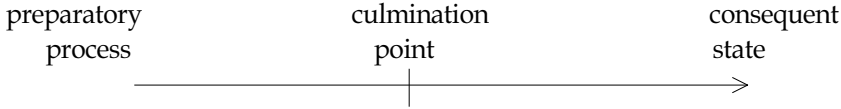
Examples like (8a) describe a progressive aspect representing a durative, unbounded, and dynamical eventuality whereas those like (8b) represent the perfect aspect. The continuative perfect represents an eventuality that started in the past has held continuously up to the present point.

One more point that we need to consider is that events may consist of different phases and show development over time. The various types of eventualities differ in what phases they contain. That is, we can consider event as having a triple set: preparatory process, culmination

<sup>2</sup> See de Swart (1998) for further discussion of the coercion in eventuality.

point, and consequent state as represented in the following (Moens and Steedman 1988, Kamp and Reyle 1993):

(9) Phrasal Structure of an Event:



Within this phrasal structure in which an event is interpreted in terms of the temporal interpretation of discourse structure, for example, activity verbs then describe just the preparatory process which may include a culmination point by another dependent expression. The event described by accomplishment verbs like *cic-ta* 'build' describes preparatory processes which can be followed by culminated processes. Note that within this view, we can differentiate two different types of achievement:

- (10) a. Mimi-ka cengsang-ey totalha-yess-ta  
 Mimi-NOM top-at reach-PST-DECL  
 'Mimi reached the top.'  
 b. Mimi-ka ttalkukcilha-yess-ta  
 Mimi-NOM hicupp-PST-DECL  
 'Mimi hiccupped.'

The sentence (10a) describes a culmination point, an event which the speaker takes as punctual and as accompanied by a transition to a new state of the world called the 'consequent state'. Meanwhile, (10b) just expresses a 'point' event whose consequences are not at issue in discourse and thus does not have a consequent state. This difference distinguishes the possibility of occurring in the imperfective -A ISSTA construction (cf. Chung 2007, Kim, J. 2011):

- (11) a. Mimi-ka cengsang-ey totalha-ye iss-ta  
 Mimi-NOM top-at reach-CONN be-DECL  
 'Mimi in the state of reaching the top.'  
 b. \*Mimi-ka ttalkukcilha-ye iss-ta  
 Mimi-NOM hicup-CONN be-DECL

‘(int.) Mimi is in the state of hiccupping.’

The (11b) is unacceptable since the state of hiccupping cannot be attained at the consequent stage but (11a) is legitimate since the state of reaching the top can be held at the consequent stage too. The phrasal properties thus play an important role in looking into the deeper properties of eventuality.

The main point this paper tries to show is that the realizations and interrelations of these three different properties of the eventualities are key to the syntactic and semantic structures of the -KO ISSTA imperfective construction. In what follows, we will discuss how the language induces a progressive as well as a resultant reading in the -KO ISSTA construction and what kind of interactive constraints are introduced.

### 3. Imperfective -KO ISSTA Construction

#### 3.1 As a Progressive State

Similar to English, the progressive aspect in Korean can appear with an activity or accomplishment, but not with a state eventuality:

- (12) a. \*Mimi-nun phikonha-ko iss-ta (state)  
           Mimi-TPC tired-CONN be-DECL  
       b. Mimi-ka ttwi-ko iss-ta (activity)  
           Mimi-NOM run-CONN be-DECL  
           ‘Mimi is running.’  
       c. Mimi-ka tali-lul kenne-ko iss-ta (accomplishment)  
           Mimi-NOM bridge-ACC cross-CONN be-DECL  
           ‘Mimi is crossing the bridge.’

How about achievement verbs? One thing to note here is a language difference from English. In English, achievement verbs in general do not occur in the progressive form unless it denotes a preliminary stage meaning:

- (13) a. \*John is knowing the answer.  
       b. \*John is finding her house for some time.  
       c. \*John is arriving at Seoul.

d. \*John is discovering the machine.

Observing such English data, one can block achievement in the -KO ISSTA construction (cf. Lee 2008). However, simple corpus search yields considerable instances where the achievement verb is used in the -KO ISSTA construction:

- (14) a. wuli nala-ka hanul-ul nan-un catongcha-lul  
 we country-NOM sky-ACC fly-MOD car-ACC  
 palmyengha-ko iss-e  
 invent-CONN be-DECL  
 'Our country is inventing a car flying in the sky.'
- b. cim-ul cengliha-mynese onkac kes-ul  
 package-ACC clean-while all thing-ACC  
 palkyenha-ko iss-e  
 discover-CONN be-DECL  
 'While cleaning up the stuff, I am discovering all kinds of stuff.'

These are possible since the action of inventing or discovering something can be repeated or culminated processes. These examples all involve action in progress. In fact, it is not difficult to construct progress-in action with achievement verbs:

- (15) a. kicha-ka playphom-ey tochakha-ko iss-ess-ta  
 train-NOM platform-at arrive-CONN be-DECL  
 'The train was arriving at the platform.'
- b. tongsayng-i kyokwase-lul chac-ko iss-ess-ta  
 brother-NOM textbook-ACC search-CONN be-PST-DECL  
 'Brother was searching the textbook.'

These examples do not express that the action of reaching the platform or searching the textbook is completed or reached: the action can be culminated processes until it is terminated.

What we can observe here is that as long as the eventuality denotes an event, nonstative one, we can have the -KO ISSTA construction and express its culminate processes. The licensing condition for the progressive -KO ISSTA construction can thus be stated as following:



## (16) Licensing Conditions for the Progressive State

The -KO ISSTA construction selects a nonstative event (activity, accomplishment, and achievement) that includes a culmination process.

All the eventualities, except state, can reach a culmination point or undergo a culminated process. As for the accomplishment (e.g., *cic-ta* 'build'), there will be a culminated process which can be in most naturally way turned into a progressive state at the consequent stage. As for the activities (e.g., *talli-ta* 'run') the event can reach either a culmination point or can include a culminated process. As for the achievement eventuality (e.g., *totalha-ta* 'reach'), it basically represents a telic, non-durative event, but when it reaches an endpoint or culmination point, it can be coerced into a process as evidenced from the possibility of being paraphrased as *mak X-halyeko* 'be about to'. This is why the achievement in the language can occur in the -KO ISSTA construction to represent a progressive state.

Note that the -KO ISSTA construction is natural even with unaccusative verbs too as long as the eventuality expresses a culminated process. One could assume, as argued by Lee (2008), the -KO ISSTA selects transitive and unergative verbs with an external argument. However, note that there are many examples where the subject of the construction is an internal argument, bearing a theme role:

- (17) a. *elem-i nok-ko iss-ta*  
 ice-NOM melt-CONN be-DECL  
 'The ice is melting.'
- b. *taynamwu-ka malla cwuk-ko iss-ta*  
 bamboo-NOM dry die-CONN be-DECL  
 '(lit.) The bamboo is dying of being dry.'

The subject in these sentences does not play as an actor since an external factor causes the happening of each event here. Similar facts can be observed from cases with a passive or experience-subject:

- (18) a. *umakhoy-ka yel-li-ko iss-ta*  
 concert-NOM open-PASS-CONN be-DECL  
 'The concert is being held.'

- b. ku-nun pinan-ul pat-ko iss-ta  
 he-TPC criticism-ACC receive-CONN be-DECL  
 '(lit.) He is receiving criticism.'

In these examples, the subject does not have an actor role, but we have a progressive reading.

These indicate that the subject property alone is not a determining factor in licensing the -KO ISSTA construction. Even though achievement takes place momentarily, it can be repeated processes. This is why it can occur in the -KO ISSTA construction.

### 3.2 As a Resultant State

As we have seen earlier, the -KO ISSTA imperfective is most natural with non-stative eventualities in representing a progressive aspect. However, note that there are cases where the construction occurs with a stative predicate. In particular, this is true with cognition, perception or emotion predicates:<sup>3</sup>

- (19) a. Mimi-ka ku tap-ul al-ko iss-ta  
 Mimi-NOM the answer-ACC know-CONN be-DECL  
 'Mimi is in the state of knowing the answer.'  
 b. Mimi-ka Minho-lul salangha-ko iss-ta  
 Mimi-NOM Minho-ACC love-CONN be-DECL  
 'Mimi is in the state of loving Minho.'

The canonical -KO ISSTA construction represents a progressive state, but these examples describe a resultant state, as indicated in the English glosses. In particular, each of these sentences rather denotes an event in which the property it has at the culmination point is continuously attained at the consequent state. For example, (19a) expresses a starting event of recognizing the answer and this event is attained at the consequent stage (cf. Lee 2008).

This 'inchoative' condition explains why not all stative predicates can occur in the -KO ISSTA construction. For example, noninchoative statives

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<sup>3</sup> The -A ISSTA construction also induces a resultant state reading. For detailed discussion, see Kim, J. (2011) and references therein.

cannot occur with the -KO ISSTA construction:

- (20) a. \*nalssi-ka chwup-ko iss-ta  
 weather-NOM cold-CONN be-DECL  
 '(lit.) The weather is getting cold.'  
 b. \*Mimi-ka chakha-ko iss-ta  
 Mimi-NOM honest-CONN be-DECL  
 'Mimi is being honest.'

The auxiliary *ci-ta* is known as expressing an inchoative state. The addition of this auxiliary verb to the sentences in (20) changes the grammaticality:

- (21) a. nalssi-ka chwup-e ci-ko iss-ta  
 weather-NOM cold-CONN become-CONN be-DECL  
 'The weather is getting cold.'  
 b. Mimi-ka chakha-ye ci-ko iss-ta  
 Mimi-NOM honest-CONN become-CONN be-DECL  
 'Mimi is getting honest.'

This indicates that the resultant state reading of the -KO ISSTA construction is attained only when the eventuality reaches a culmination point serving as a starting point and this state is attained at the consequent stage, as given in the following:

(22) Licensing Conditions for the Resultant State:

The -KO ISSTA construction can induce a resultant state reading when the eventuality reaches a culmination point and this property holds at the consequent stage too.

What this means is that to obtain a resultant state reading, we need to have two conditions satisfied. The eventuality needs to reach a culmination point, and then this state of affairs is attained at the consequent stage. As we have seen so far, cognition and emotive predicates can be taken to carry an inchoative property. For example, the verb *al-ta* 'know' can start a new stage of acknowledging a new fact. But this does not mean that there is a progressive state. Rather, these indicate a resultant state.

### 3.3 Ambiguities

As noted in the beginning, with the interpretation of imperfectives, the puzzle comes from the possibility of having a resultant state in the -KO ISSTA construction:

- (23) a. Mimi-ka os-ul ip-ko iss-ta (P-state & R-state)  
 Mimi-NOM clothes-ACC wear-CONN be-DECL  
 'Mimi is putting on clothes or Mimi is wearing clothes.'  
 b. Mimi-ka sinpal-ul sin-ko iss-ta (P-state & R-state)  
 Mimi-NOM shoes-ACC wear-CONN be-DECL  
 'Mimi is putting on shoes or Mimi is wearing shoes.'

These examples not only express a progressive (P-state) but also denote a resultant reading (R-state). One generalization that has been noted is that 'reflexive' verbs as given in (24) can induce such an ambiguity (cf. Lee 1993, Han 1999, Yang 2004 for further discussion):

- (24) *ip-ta* 'wear (clothes)', *sin-ta* 'wear (shoes)', *ssu-ta* 'wear (a hat)',  
*kki-ka* 'wear (a glove)', etc

The reflexive verb is a verb whose agent performs an action that is directed at itself and characteristically takes a reflexive pronoun as its object. This 'reflexive' condition may explain why non-reflexive verbs like *mek-ta* 'eat' or *kuli-ta* 'draw' do not induce ambiguous readings. They induce only a progress reading:

- (25) a. Mimi-ka sakwa-lul mek-ko iss-ta (P-state)  
 Mimi-NOM apple-ACC eat-CONN be-DECL  
 'Mimi is eating an apple.'  
 b. Mimi-ka kulim-ul kuli-ko iss-ta (P-state)  
 Mimi-NOM picture-ACC draw be-DECL  
 'Mimi is drawing a picture.'

However, as noted by Kim, M. (2010), there are nonreflexive verbs that also allow both a progress and a resultant state reading:

- (26) a. Mimi-ka kapang-ul tul-ko iss-ta (P-state & R-state)

- Mimi-NOM bag-ACC lift-CONN be-DECL  
 ‘Mimi is lifting a bag or Mimi is holding a bag.’
- b. Mimi-ka mwun-ul camku-ko iss-ta (P-state & R-state)  
 Mimi-NOM door-ACC lock-CONN be-DECL  
 ‘Mimi is locking the door or Mimi has the door locked.’
- c. Mimi-ka pwul-ul phiwu-ko iss-ta (P-state & R-state)  
 Mimi-NOM fire-ACC set-CONN be-DECL  
 ‘Mimi is setting a fire or Mimi has the fire set.’

As seen here, verbs like *lift*, *lock* or *set a fire* can hardly be taken to be reflexive verbs whose action is directed to the subject. Observing this, Kim, M. (2010) posits two different entries for the marker *ko* and *iss*, and suggests a constraint such that, the object in the construction must “stay in the state described by the culmination of the VP without changing its physical form”. However, we can observe that this condition is not the whole story. Above all, intransitive examples with no object also induce ambiguities:

- (27) a. yelcha-ka cengciha-ko iss-ta (P-state & R-state)  
 train-NOM stop-CONN be-DECL  
 ‘The train is stopping or the train has stopped.’
- b. Mimi-ka pyek-ey kitay-ko iss-ta (P-state & R-state)  
 Mimi-NOM wall-at lean-CONN be-DECL  
 ‘Mimi is leaning against the wall or Mimi has leaned against the wall.’

These two examples licence both a progress and a resultant reading. In addition, consider the following in which the object does not undergo any change in its physical form but have different possibilities in aspectual reading:

- (28) a. Mimi-ka ipwul-ul tep-ko iss-ta (P-state & R-state)  
 Mimi-NOM blanket-ACC cover-CONN be-DECL  
 ‘Mimi is covering herself with a blanket or Mimi is in state of having covered the blanket.’
- b. inhyong-i ipwul-ul tep-ko iss-ta (R-state)  
 doll-NOM blanket-ACC cover-CONN be-DECL  
 ‘The doll is in the state of covering the blanket.’

- c. Mimi-ka ipwul-ul chac-ko iss-ta (P-state)  
 Mimi-NOM blank-ACC search-CONN be-DECL  
 'Mimi is searching a blank.'

In all these examples, the object does not undergo any change in its physical form, both (28b) and (28c) do not induce ambiguities. The sentence (28b) induces only a resultant reading possibility due to the property of the subject. Meanwhile, (28c) has only a progressive reading.

As we have seen in the licensing conditions in (22), the resultant state reading of the -KO ISS-TA construction is attained when the eventuality reaches a culmination point and this state is attained at the consequent stage.

- (29) a. Mimi-ka pwul-ul phiwu-ko iss-ta (P-state & R-state)  
 Mimi-NOM fire-ACC turn.on-CONN be-DECL  
 'Mimi is trying to set a fire or Mimi has set a fire on.'  
 b. Mimi-ka namwu-lul thaywu-ko iss-ta (P-state)  
 Mimi-NOM tree-ACC burn-CONN be-DECL  
 'Mimi is burning trees.'

Observe the difference between the two in the progress. In (29a) the action of Mimi's setting a fire can be a progressive one or the action can reach a culmination point. That is, the action of setting a fire can be successful and this state can be attained at the consequent stage, yielding a resultant state. However, this is not possible for (29b) where no such entailment relationship holds. Once Mimi burned the tree, it is not possible for the action of burning a tree to be held at the consequent stage.<sup>4</sup>

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4 As a reviewer points out, a resultant state reading is possible when there is an entailment relationship between the event at the culmination point and the one at the consequent state. We leave out a formal definition, but can see that this entailment relationship is related to the so called 'imperfective paradox'. Consider the following:

- (i) a. Mimi-ka kyongki-lul iki-ko iss-ta (P-state)  
 Mimi-NOM game-ACC win-CONN be-DECL  
 'Mimi is winning the game.'  
 b. Mimi-ka moca-ul ssu-ko iss-ta (P-state & R-state)  
 Mimi-NOM hat-ACC wear-CONN be-DECL  
 'Mimi is wearing a hat or Mimi has a hat on.'

### 3.4 Implications

The licensing conditions for the progressive reading in (16) and for the resultant state reading in (22) refer not only to an expression within a sentence (e.g. object or subject), but the whole eventuality. From these, as expected, we have three different aspectualities with the -KO ISSTA construction:

- (30) Three different aspect readings for the -KO ISSTA construction
- a. Progress reading only: *talli-ta* 'run' class verbs
  - b. Resultant state reading only: *al-ta* 'know' class cognition or stative verbs
  - c. Ambiguous reading only: *ip-ta* 'wear' class or inchoative achievement verbs

Let us see how these licensing conditions can account for these three cases. Consider cases with the progressive reading only. Given the present analysis, accomplishment and activity eventualities do not give us ambiguous readings:

- (31) a. Mimi-ka cip-ul cis-ko iss-ta (P-state)  
 Mimi-NOM house-ACC build-CONN be-DECL  
 'Mimi is building a house.'
- b. Mimi-ka kong-ul cha-ko iss-ta (P-state)  
 Mimi-NOM ball-ACC kick-CONN be-DECL  
 'Mimi is kicking a ball.'

Both examples involve culminated processes, indicating that they do not reach a culminated point. The accomplishment can reach an endpoint,

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These two have an entailment difference:

- (ii) a. (ia) Not entail: Mimi has won the game.  
 b. (ib) Entail: Mimi has worn the hat.

The paradox is resolved by the fact that as a resultant of coercion, it is not asserted by (ia) that the resulting state may be attained at the consequent stage. The difference thus emerges with respect to the entailment relationship between the two states, culmination stage and consequent stage. That is, depending on the fact that the resultant state is attained or not, we can have a resultant state.

but the issue is that after the endpoint, the event of building a house is no longer attained. That is why this cannot have a resultant state reading.

We have seen that unlike English, even the cognition verbs, as well as perceptive verbs, can be in the progressive form, but only with a resultant state:

- (32) a. Mimi-ka tap-ul al-ko iss-ta (R-state)  
 Mimi-NOM answer-ACC know-CONN be-DECL  
 'Mimi is in the state of knowing the answer.'  
 b. Mimi-ka hyonsil-ul kkaytat-ko iss-ta (R-state)  
 Mimi-NOM current.situation-ACC realize-CONN be-DECL  
 'Mimi is in the state of realizing the current situation.'

As seen from the English translation, these two do not mean that the subject is in the process of performing the action denoted by the eventuality. The verb *know* is in a sense inchoative, implying the inception of a continuous state at the consequent stage. That is, the 'knowing' and 'recognizing' state of affairs is attained at the consequent stage, yielding a resultant state.

Let's us then see ambiguous cases that can induce either a progressive or a resultant reading:

- (33) a. Mimi-ka kotong-ul cham-ko iss-ta  
 Mimi-NOM pain-ACC bear-CONN be-DECL  
 'Mimi is bearing the pain or Mimi is in the state of bearing the pain.'  
 b. Mimi-ka meli-lul kam-ko iss-ta  
 Mimi-NOM hairACC wash-CONN be-DECL  
 'Mimi is washing her hair or Mimi is in the state of having her hair washed.'

As given in the English glosses, both examples induce ambiguities depending on the placement of focus on the eventuality. When we place focus on the progressive, these will express events in progress with a culminated process. Meanwhile, when the focus is on the events at the consequent stage with the truthfulness of the event, we attain a resultant reading. Once again, we can notice that when an entailment relationship



holds, we have a resultant state too in addition to the progress state.

We have seen that the interpretation of the eventuality in question refers to both lexical aspect and grammatical aspect, together with the phrasal location of the event in question. Such a move can be clearly observed from examples like the following:

- (34) a. Mimi-ka chinkwu-uy meli-lul kkak-ko iss-ta (P-state)  
 Mimi-NOM friend-GEN hair-ACC cut-CONN be-DECL  
 'Mimi is cutting her friend's hair.'
- b. inhyong-i meli-lul kkak-ko iss-ta (R-state)  
 doll-NOM hair-ACC cut-CONN be-DECL  
 'The doll has its hair cut.'
- c. Mimi-ka meli-lul kkak-ko iss-ta (P-state & R-state)  
 Mimi-NOM hair-ACC cut-CONN be-DECL  
 'Mimi is cutting hair or Mimi has her hair cut.'

The verb as well as connective marker is the same in these three examples, but each has different aspect possibilities. The action of cutting the hair of Mimi's friend can be only progressive while the doll's being in the state of having the hair cut can be at the consequent state too. In each case, the focus of the event is different. Meanwhile, (34c) is ambiguous: the culminated process of cutting her hair can be repeated or the state of having her hair cut can be attained at the consequent stage too.

One thing to note at this point is that context may change the possible aspect reading. The two important properties of the accomplishment are telic and durative. Note that when the eventuality is coerced into an atelic event, we then have only a progressive reading:

- (35) a. Mimi-ka kotong-ul kyesokhayse cham-ko iss-ta  
 Mimi-NOM pain-ACC continuously bear-CONN be-DECL  
 'Mimi is continuously bearing the pain.'
- b. Mimi-ka meli-lul kam-ko coyonghi iss-ta  
 Mimi-NOM hair-ACC wash-CONN calmly be-DECL  
 'Mimi is in the calm state of having her hair washed.'

Note that the object's physical form does not undergo any change, but (35a) has only a progressive meaning. The adverb 'continuously' here

does not entail a culmination point — it rather implies culmination processes. Meanwhile, the adverb ‘calmly’ describes the state of affairs at the consequent stage, giving us a resultant reading.

In a similar fashion, we can observe that given with the help of proper context or additional elements, most of the accomplishment or activity predicates can express a resultant state reading with the -KO ISSTA construction:

- (36) a. Mimi-ka sakwa-lul mek-ko kamanhi iss-ta  
 Mimi-NOM apple-ACC eat-CONN quietly be-DECL  
 ‘Mimi is in the state of being quiet after eating an apple.’  
 b. Mimi-ka cip-ul cic-ko honca issta  
 Mimi-NOM house-ACC build-CONN alone be-DECL  
 ‘Mimi is in the state of being alone after building a house.’

Without the help of the adverb here, the most natural interpretation is the action-in-progress. However, the presence of adverbs like ‘quietly’ or ‘alone’ places a focus on the resultant state on the verb *iss-ta* and thus brings us a resultant state.

As such, in determining the type of aspect, we cannot rely on only the argument structure of the main verb involved, or only on the major grammatical functions of subject or object. We need to consider various properties of the eventuality involved.

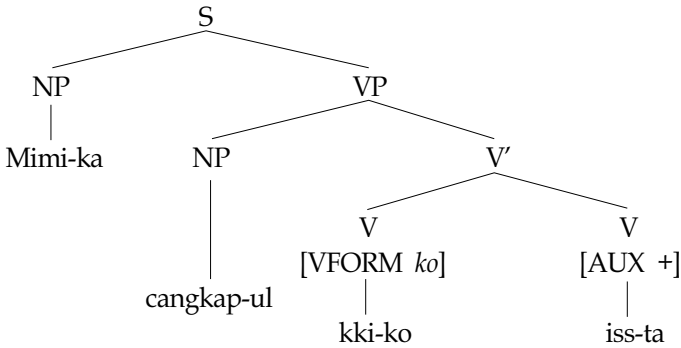
#### 4. Notes on the Syntactic Structures

The discussion we have made so far tells us that the -KO ISSTA construction induces two different interpretations: progressive and resultant state readings. The progressive reading emphasizes the situation represented by the projection of the main verb while the copula verb *iss-ta* just contributes to the marking of the progressive aspect. The situation for the resultant reading is different in the sense that in representing the resultant state, the verb *iss-ta* functions as a main verb, contributing to the main semantic content. These differences can be represented with two different syntactic structures for the sentence (2):<sup>5</sup>

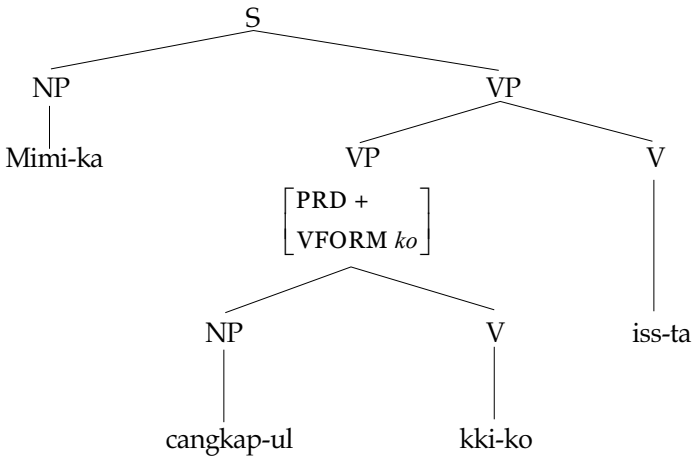
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5 As questioned by a reviewer, it might be more economical if we can assume one

(37) a. Progressive State: *iss-ta* as an auxiliary verb



b. Resultant State: *iss-ta* as a main verb



The structure in (37a) here shows us that when the verb *iss-ta* is an auxiliary verb, it first combines with the main verb, forming a complex predicate. The main function of the auxiliary verb is thus marking the viewpoint aspect of the situation of Mimi's wearing the gloves.<sup>6</sup> In such

uniform lexical entry for both readings. However, empirical evidence indicates that it is rather unavoidable to posit two different lexical entries for the verb *iss-ta*. The main verb analysis for the resultant state reading may run into an issue of scrambling.

6 Unlike Kim, M. (2010) and others, we do not assume there are two different types of the suffix marker *ko*. We take the marker to function as just a VFORM value. See Kim, J. (2004) for further discussion of the VFORM value in the language.

cases, the most natural property of subject is performing an action, but the subject can be even an internal argument as long as the eventuality denotes culmination processes. Meanwhile, in (37b), the verb *iss-ta* is a main verb selecting two arguments: a subject and a predicative VP expression. The verb contributes to the core meaning of the sentence, describing the resultant state of Mimi's wearing the gloves. This is why the subject canonically represents a theme argument. However, once again, as we have seen, the thematic role linked to the embedded predicate can be an agentive one.

The dual life of the verb *iss-ta*, both as a main and an auxiliary verb, can be seen from several syntactic differences. For example, as we have hinted in the previous section, nothing blocks us from having an intervening expression before the main verb while this is not possible for the auxiliary verb (cf. Kim, J. 2010):

- (38) a. Mia-ka      cangkap-ul      kki-ko      coyonghi  
 Mia-NOM    glove-ACC    wear-CONN    calmly  
 iss-ta.    (only R-state)  
 be-DECL  
 'Mia is in the calm state, putting the gloves on.'
- b. Mimi-ka    os-ul            ip-ko      coyonghi  
 Mimi-NOM    clothes-ACC    wear-CONN    calmly  
 iss-ta (only R-state)  
 be-DECL  
 'Mimi is in the calm state, putting shows on.'

These two sentences can, without the intervening adverb *coyonghi* 'calmly', have either a progressive or a resultant reading. However, the presence of the adverb removes the progressive reading, inducing only the resultant reading. This means the verb *iss-ta* with a progressive reading cannot be linked to a main-verb sensitive phenomenon. For example, the progressive *iss-ta* cannot be *wh*-questioned since it is just an auxiliary verb with no core semantic content as illustrated in the following:

- (39) a. A: Mimi-ka    wuntongcang-ul    talli-ko  
 Mimi-NOM    ground-ACC      run-CONN  
 iss-ta (only P-state)

- be-DECL  
 'Mimi is running at the ground.'
- b. #B: Mimi-ka wuntongcang-ul talli-ko ettehkey  
 Mimi-NOM ground-ACC run-CONN how  
 ha-yess-e?  
 do-PST-QUE  
 'What did Mimi do after running at the ground?'

B's reply can be legitimate only when we question an action denoted by a main verb.

Seeing these, it seems to be reasonable to differentiate the verb *iss-ta* with a progressive reading from the one with a resultant reading. This then naturally accounts for the fact that in the former it is not the auxiliary *iss-ta* but the main verb that contributes to the core meaning of the eventuality whereas in the latter it is the verb *iss-ta* that expresses the consequent state of the eventuality in question.

## 5. Conclusion

We have seen that the -KO ISSTA imperfective construction in the language canonically represents a progressive reading, but in a limited environment it can also represent a resultant reading. The progressive reading is possible as long as the eventuality involved reaches a culminating point (e.g. all event situations) whereas the resultant state reading is obtained when the eventuality reaches a culminating point and then its status is kept on in the consequent stage too. This difference also has to do with the function of the verb *iss-ta* 'be'.

The analysis presented here thus shows us the tight relationship between form and function, interacting with the three perspectives of eventualities: situation, viewpoint, and phase. This view can give us answers to many puzzling facts in the syntax and semantics of Korean imperfective constructions.

## References

- Bach, Emmon. 1986. The algebra of events. *Linguistics and Philosophy* 9: 5-15.

- Binnick, Robert I. 2006. Aspect and Aspectuality. In Bas Aarts & April McMahon (eds). *The Handbook of English Linguistics*, 244-268. Blackwell Publishing.
- Chung, Taegoo. 2007. An Event Structure Approach to the Korean Existential Construction. *Korean Journal of Linguistics*, 32.4: 779-801.
- de Swart, Henriette, 1998. Aspect shift and coercion. *Natural Language and Linguistic Theory* 16, 347-385.
- Dowty, David. 1979. *Word meaning and Montague grammar*. Dordrecht: Reidel.
- Han, Dong-wan. 1999. On the ambiguities of Korean aspectual construction -ko iss. *Korean Semantics* 5: 215-248.
- Kamp, Hans and Uwe Rylee. 1993. *From discourse to logic: Introduction to model theoretic semantics of natural language, formal logic and discourse representation*. Kluwer.
- Kim, Jong-Bok. 2004. *Korean Phrase Structure Grammar*. Hankook Publishing.
- Kim, Jong-Bok. 2011. Interactions among Aspectual Properties in the -A ISSTA Imperfective Construction. *Language Research*, 47.
- Kim, Jong-Bok and Peter Sells. 2010. On the Role of the Eventuality in Case Assignment on Adjuncts. *Language and Linguistics* 11.3: 625-652.
- Kim, Min-Joo. 2010. A fresh look at the ambiguity puzzle of KO ISS Imperfective in Korean. In *Proceedings of the 2nd International Conference on East Asian Linguistics Conference*.
- Kim, Young Joo. 1990. *The syntax and semantics of Korean case: The interaction between lexical and syntactic level of representation*. PhD dissertation, Harvard University.
- Kim, Jong-Bok. 2011. Interactions among Aspectual Properties in the -A ISSTA Imperfective Construction. *Language Research*, 47.
- Landman, Fred, 1992. The progressive. *Natural Language Semantics* 1, 1-32.
- Lee, Chungmin. 1982. Aspects of Aspect in Korean. *Journal of Korean Linguistics* 7.2: 570-582.
- Lee, Keedong. 1993. *A Korean grammar on semantic-pragmatic principles*. Seoul: Hankwuk Mwonhwasa.
- Lee, EunHee. 2006. Stative progressives in Korean and English. *Journal of Pragmatics* 38: 695-717.
- Lee, EunHee. 2008. Argument structure and event structure: the case of Korean imperfective constructions. *Journal of East Asian Linguistics*. 17: 117-139.
- Levin, Beth and Rappaport, Hovav Malka. 1995. *Unaccusativity: At the Syntax-Lexical Semantic Interface*. The MIT Press, Cambridge, MA.
- Lee, Hyo Sang, 1991. *Tense, aspect and modality: a discourse-pragmatic analysis of verbal suffixes in Korean from a typological perspective*. Unpublished doctoral dissertation, UCLA.
- Lee, Keedong, 1993. *A Korean Grammar on Semantic-Pragmatic Principles*. Hankwuk Mwonhwasa, Seoul.
- Martin, Samuel. 1992. *A reference grammar of Korean*. Tokyo: Charles E. Tuttle Company.

- Moens, Marc and Mark Steedman. 1988. Temporal Ontology and Temporal Reference. *Computational Linguistics* 14, 15-28.
- Nam, Seungho. 2010. Semantics and Pragmatics of *e.iss* and *ko.iss* in Korean. Paper presented at the 9th workshop on Inferential Mechanisms and their Linguistic Manifestation, Dec 11-12, 2010, Kyoto University.
- Oh, Yoonja. 1998. The General Imperfective Viewpoint -ko iss in Korean. *New English Language and Linguistics*, 11: 311-331.
- Ogihara, Toshiyuki. 1998. The ambiguity of the -te iru form in Japanese. *Journal of East Asian Linguistics* 7: 87-120.
- Parsons, Terence. 1989. The progressive in English: Events, states and processes. *Linguistics and Philosophy*, 12: 213-291.
- Rothstein, Susan, 2004. *Structuring Events*. Blackwell Publishing, Maiden, MA.
- Shirai, Yasuhiro. 2000. The semantics of the Japanese imperfective -teiru: An integrative approach. *Journal of Pragmatics* 32: 327-361.
- Smith, Carlota. 1991. *The Parameter of Aspect*. Dordrecht: Kluwer.
- Sohn, Ho Min. 1999. *The Korean language*. Cambridge: The University of Cambridge Press.
- Vendler, Z. 1967. Verbs and Times. *Linguistics in Philosophy* 66, 153-160. Ithaca: Cornell University.
- Yang, Jeong-seok. 2004. Against the complementarity of 'go iss' and 'eo iss'. *Hangul*, 266: 105-113.

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