

Interactions among Aspectual Properties in the - A ISSTA Imperfective Construction*

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The imperfective construction -A ISSTA (also called existential construction) represents a con-sequent state, but its licensing conditions are rather complex. The three main properties that have been claimed to play key roles in licensing the construction are transitivity, unaccusativity, and telicity of the eventuality involved, but none has explained the full possible range of data in ques-tion. In this paper, we discuss the properties of this imperfective construction and argue that a more viable analysis is one that allows tight interactions among the lexical, grammatical, and phasal properties of the aspect concerned. In particular, we show that a telic, nondurative achieve-ment eventuality occurs in the construction when it reaches a culmination point and its property is attained at the consequent state.

Keywords: lexical aspect, grammatical aspect, eventuality, phasal structure, imperfective

1. Introduction

Korean employs two periphrastic constructions, formed with *-ko iss-* and *-a/e iss-* (similar to Japanese *-te aru*) in representing imperfective aspects as exemplified in (1) (cf. Lee, H. 1991, Lee, K. 1993, Sohn 1999, Nam 2010 for Korean and Shirai 2000 for Japanese):¹

- (1) a. Mia-ka uyca-ey **anc-ko** iss-ta. (P-state)
Mia-NOM chair-at sit-CONN exist-DECL
'Mia is sitting on the chair.'

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¹ The glosses we use in the paper include ACC (accusative), CONN (connective), DECL (declarative), NOM (nominative), PNE (pre-nominal ending), PST (past), TOP (topic), among others.

- b. Mia-ka uyca-ey **anc-a** iss-ta. (R-state)
 Mia-NOM chair-at sit-CONN exist-DECL
 ‘Mia is in the state of sitting on the chair.’

The only difference between the two here is the connective markers *-ko* and *-a*, but they are different in expressing imperfective aspect. That is, the former *-KO ISSTA* construction in (1a) expresses a progressive state (P-state) while the latter *-A ISSTA* construction in (1b) represents a consequent or resultant state (R-state).² That is, the former expresses the action of sitting down on the chair and its being in progress while the later represents the state of being in one’s sitting in the chair and this consequent state holds at the reference time.

This paper focuses on the *-A ISSTA* construction only. There have been three main views on the licensing conditions of the construction: transitivity, unaccusativity, and telicity views. The transitivity view assumes that the construction can be applied only for intransitive verbs (cf. Yang 2004), while the unaccusativity constraint, referring to the argument structure of the main verb, limits the construction only for unaccusative verbs (cf. Lee, E. 2006, 2008). The telicity condition, meanwhile, requires the construction to have an endpoint (cf. Lee, K. 1993). However, each of these three views is not satisfactory enough to cover the full range of the possible data in question (cf. Chung 2007 and references therein).³

In this paper, we propose that what matters in licensing the construction is tight interactions among the three main properties of eventuality: lexical aspect, grammatical aspect, and phasal structure of the event in question. In doing so, we first review the general properties of aspects. In particular, we briefly review eventuality in terms of lexical (situational) as well as grammatical (viewpoint) aspect. In addition to these two, we look into the phrasal properties of the eventuality. Based on these perspectives on eventuality, we provide licensing conditions for the *-A ISSTA* imperfective construction in the language that refers to the three main properties of the aspect involved.

² Literature (cf. Kim 2010 and references therein) has used the term ‘result-state’ for such a case, but we believe a more suitable term is ‘consequent’ state. In this paper, we sometimes use the two terms interchangeably.

³ The analysis presented here is in a sense similar to Chung’s (2007) analysis in that the telicity condition plays an important role in licensing the imperfective construction, and further in that a more emphasis is placed in the role of the verb *iss-ta* ‘exist-DECL’. However, main differences come from the interactive roles of the three properties of aspect. Space limit does not allow us to discuss this insightful analysis in detail. See Chung (2007) for details.

2. Lexical, Grammatical, Phasal Properties of Aspect

As noted in Binnick (2006) and others, aspect can be viewed with two different perspectives: lexical (or situation) aspect and grammatical (view-point) 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. Dowty 1979, Bach 1986, Levin and Rappaport 1995, among others).⁴

Let us briefly review the main properties of lexical aspect in English (cf. Vendler 1967 and Dowty 1979). Lexical aspect traditionally has to do with the classification of verbal predicates into four different types: state, activity, accomplishment, and achievement:

- (2) a. state: The lecture is boring.
- b. activity: Mimi ran.
- c. accomplishment: Mimi built a house.
- d. achievement: Mimi reached the top of the mountain.

As seen from (2a), a state represents a non-dynamic situation where there is no perceptible change. For example, (2a) represents a statement describing a property of the lecture, not denoting any change of state. The remaining three eventuality types, often called ‘events’, express that something undergoes a change. An activity represents an open-ended process with no goal, thus has no natural endpoint (atelic). Unlike activities, accomplishment and achievement verbs are telic with a natural endpoint. For example, the object *a house* in (2c) and *the top of the mountain* (2d) here can function as a goal, indicating the action of building a house and climbing the top of the mountain has an endpoint of the event. 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:⁵

- (3) a. Mimi painted the house *for/in* an hour. (accomplishment)
- b. The ambassador arrived **for/in* an hour in Seoul. (achievement)

Painting is something we can do for a period of time while arriving we cannot. This durative difference also leads to the difference in progressive: Only

⁴ Aspectuality is a cover term representing the internal temporal structure of eventualities.

⁵ As a reviewer noted, an external property such as the plurality of the subject may change the property of eventuality. See de Swart (1998).

durative activities and accomplishments occur in the progressive.

- (4) a. John is running/pushing a cart.
 b. John is drawing a circle.
 c. *John is having a car.
 d. *John is realizing that he forgot to lock the door.

As observed here, the four different types of lexical or lexical aspect are sensitive to inherent properties such as stativity, durative, and telicity, as summarized in the following table:

(5) Semantic features of eventuality types

	stativity	durative	telic	examples
state	+	-	n/a	own, resemble, have, love,...
activities	-	+	-	run, walk, write letters,...
accomplishment	-	+	+	run a mile, write a letter, walk to the car,...
achievement	-	-	+	recognize, reach, win, start,...

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 change 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 contrast between *run for hours*/**in an hour* and *run to the store in an hour*/**for hours*. A similar effect can be seen from the uses of the verb *write*. It can be used either as telic or atelic depending on the definiteness of the object as observed from the contrast between *write letters for an hour*/**in an hour* and *write a letter in an hour*/**for hours*.⁶

Korean is not significantly different from English in the classification of eventuality types. Consider the four-way distinction of eventuality in the following (Kim, Y. 1990, Chung 2007, Lee, E. 2008):⁷

- (6) a. Mimi-ka aphu-ta (state)
 Mimi-NOM sick-DECL
 'Mimi is sick.'

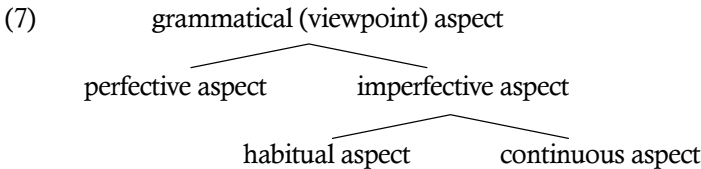
⁶ See de Swart (1998) for further discussion of the coercion in eventuality.

⁷ For Japanese, see Ogihara (1998), and Shirai (2000).

- 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. As in English, state eventual-ity describes a stative situation lacking dynamicity and thus does not have a transition point. Activity verbs like *talli-ta* ‘run’ denote a dynamic and durative action with no clear endpoint (atelic). The accomplishment predicate *mantul-ta* ‘make’ represents a dynamic and durative situation but with a natural endpoint. The achievement eventuality in (6d) also has an endpoint, but happens instantaneously and punctually. This endpoint is simultaneous with the initial endpoint and a change of state.

Unlike these four-way classification of lexical aspect, grammatical 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. In English, the default interpretation of the simple tense represents perfective aspect. Habitual aspect, (e.g., marked by such as *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 is sleeping.
 b. Mimi has swum across the pool.

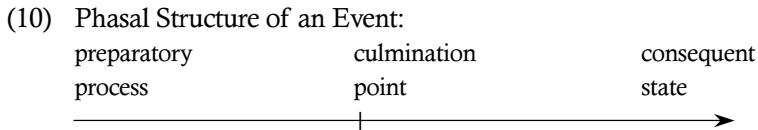
Examples like (8a) include the progress aspect representing a durative, un-

bounded, and dynamical eventuality whereas those like (8b) represent the perfect aspect which in turn has four principle uses (cf. Smith 1991):

- (9) a. Resultative: Mother has gone to the store (and is still there).
 b. Experiential: Have you seen the current exhibit at the museum?
 c. Continuative: The children has been outside all morning.
 d. Perfect of recent past: The council has just voted to raise taxes.

As observed from the examples, the resultative perfect represents a present state of affairs resulting from a past event while the experiential one indicates that an eventuality has occurred at least once in the past. The continuative perfect represents an eventuality that started in the past has held continuously up to the present point. Finally, the perfect of recent past reports an event which is presupposed to have happened recently.

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



As such, we can interpret an event in terms of the temporal interpretation of discourse structure. Within this phasal structure, for example, the event described by accomplishment verbs like *build* denote preparatory processes followed by culminated processes whereas achievement verbs like *reach* describe the culmination point alone. Activity verbs then describe just the preparatory process which may have a culmination point by another dependent expression (*John ran* vs. *John ran three miles*). Within this phasal perspective, a coercion occurs too. For example, in a sentence like *Tom was running a mile*, the progressive is combines with a culminated process which is coerced into a point and is iterated. To better understand the notion of culmination and consequent state, consider the following:

- (11) a. Mimi reached the top.
 b. Mimi hiccupped.

The sentence (11a) describes a culmination, 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, (11b) just expresses a ‘point’ event whose consequences are not at issue in discourse and thus does not have a consequent state.

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 grammar of the Korean imperfective constructions including the -A ISSTA construction. An interactive property can be easily observed in English too. For example, the grammatical aspect takes an eventuality, focuses on one portion of it, thus turning the eventuality into another type of eventuality. A verb like *build* inherently represents accomplishment but when used with the progressive aspect as in *John is building a kayak*, the eventuality turns into a simple process. Korean imperfective constructions show us more tight interactions. Consider the two imperfective constructions in Korean again:

- (12) a. Mimi-ka uyca-ey anc-a iss-ta
 Mimi-NOM chair-at sit-CONN exist-DECL
 ‘Mimi sits on the chair.’
- b. Mimi-ka cip-ul cic-ko iss-ta
 Mimi-NOM house-ACC build-CONN exist-DECL
 ‘Mimi is building a house.’

The -A ISSTA construction in (12a) combines with the eventuality denoting a nondurative telic achievement aspect. The action of sitting on the chair is a culmination point, and this action then lasts for a certain interval in the consequent state. Meanwhile -KO ISSTA in (12b) includes a durative/telic eventuality that is in progress at a preparatory phase and reaches but does not include the culmination point.⁸

Both of the -A ISSTA and -KO ISSTA imperfective constructions are sensitive to the three properties of the eventuality, even though we will focus on the former in this paper. In particular, we show that this -A ISSTA construction basically demands a culmination, predicating that the associated consequent state holds. In what follows, we will discuss the tight interactions among

⁸ Note that the -KO ISSTA can also be interpreted as a result state:

- (i) inhyeng-i os-ul ip-ko iss-ta
 doll-NOM clothes-ACC wear-CONN exist-DECL
 ‘The doll is wearing a clothes’

The action of wearing a cloth can be in a preparatory phase but can reach the culmination point. In this case, this situation can last as a result state. For an eventuality to be qualified as a result state, the eventuality thus needs to have a clear culmination point, after which the result state is attained. The detailed discussion of this reading is beyond the scope of this paper. See Han (1999), Kim, M. (2010), Lee (2006), Chung (2007), and others for further discussion.

these three properties of aspects and see how they contribute to the grammar of the -A ISSTA imperfective construction in question.

3. Transitivity, Telicity, and Unaccusativity Conditions

The -A ISSTA construction in general combines with an ‘intransitive’ verb projecting a telic event. This telicity condition may explain the following contrast:

- (13) a. *nayngcangko-ka pi-e iss-ta*
 refrigerator- NOM empty-CONN exist-DECL
 ‘The refrigerator is empty.’
- b. *kkoch-i phi-e iss-ta*
 flower- NOM bloom-CONN exist-DECL
 ‘Flowers bloom.’
- (14) a. **Mimi-ka wus-e iss-ta*
 Mimi- NOM smile- CONN exist- DECL
- b. **Mimi-ka ttwi-e iss-ta*
 Mimi-NOM run- CONN exist- DECL

The difference here is that verbs like *pi-ta* ‘be empty’ or *phi-ta* ‘bloom’ denote a telic event, while those like *wus-ta* ‘laugh’ or *ttwi-ta* ‘run’ do not.

Seeing these intransitive examples, one may resort to the ‘transitivity’ condition such that only an intransitive verb can appear in the -A ISSTA imperfective. Note, however, that there are examples where this transitive condition is violated:

- (15) a. *Ku tosi-nun Seoul-ul cepha-ye iss-ta*
 the city- TOP Seoul- ACC border-CONN exist- DECL
 ‘The city is in the state of bordering Seoul.’
- b. *Mimi-nun Seoul-ul ttena-a iss-ta*
 Mimi-TOP Seoul-ACC leave- CONN exist-DECL
 ‘Mimi is in the state of leaving Seoul.’

As Yang (2004) suggests, these examples may not be true transitive since the object can have a non-accusative case, like a locative one:

- (16) a. Ku tosi-nun **Seoul-ey** cepha-ye iss-ta
 the city-TOP Seoul-at border-CONN exist-DECL
 'The city is in the state of bordering Seoul.'
- b. Mimi-nun **Seoul-lopwuthe** ttena-a iss-ta
 Mimi-TOP Seoul-from leave-CONN exist-DECL
 'Mimi is in the state of leaving Seoul.'

However, issues arise from examples that assign only accusative to the object:⁹

- (17) a. Mimi-nun emma-lul/*ey/*lopwuthe/*wa
 Mimi-TOP mom-ACC/*at/*from/*with
 ppay talm-a iss-ta
 very resemble-CONN exist-DECL
 'Mimi is in the state of resembling mom a lot.'
- b. Mimi-nun san-ul/*ey/*lopwuthe/*wa
 Mimi-TOP mountain-ACC /*at/*from/*with
 nemeka iss-ta
 cross.over-CONN exist-DECL

These examples indicate that the simple transitivity condition also is not enough to predict the possible predicate in the construction.

When considering more data, we can also observe that the telicity or boundedness of the event in question is not enough. As given in the following, even though both achievement and accomplishment verbs represent a telic event denoting an endpoint, only achievement verbs are natural with the -A ISSTA construction:¹⁰

- (18) a. *Mimi-ka talli-e iss-ta (activity)
 Mimi-NOM run-CONN exist-DECL

⁹ A reviewer suggested the object in (17a) may be marked with the comitative case *wa*. However, it seems to us that the case value is allowed only without the copular verb *iss-ta*.

(i) Mimi-nun emma-wa/lul talm-ass-ta
 Mimi-TOP mom-with/ACC resemble-PST-DECL
 'Mimi resembled her mom.'

Though the reason for the case assignment differences is unknown to us at this point, it seems to us that the verb *talm-ta* is a true transitive verb.

¹⁰ As noted by a reviewer too, examples like (19) and (20) become grammatical when occurring in the syntactic passive verb *ci-ta* 'become'. See section 5 for the discussion.

- b. *Mimi-ka ket-e iss-ta
Mimi-NOM walk-CONN exist-DECL
- (19) a. *pang-i etwup-e iss-ta (state)
room-NOM dark-CONN exist-DECL
- b. *hanul-i nop-a iss-ta
sky-NOM high-CONN exist-DECL
- (20) a. *haksayng-tul-i cip-ul cic-e iss-ta
student-PL-NOM house-ACC build-CONN exist-DECL
(accomplishment)
- b. *ai-ka tongkulami-lul kuli-e iss-ta
child-NOM circle-ACC draw-CONN exist-DECL
- (21) a. ton-i nam-a iss-ta (achievement)
money-OM remain-CONN exist-DECL
'There are some money left.'
- b. namwu-ka cwuek-e iss-ta
tree-NOM die-CONN exist-DECL
'Tree is in the state of being dead.'

Seeing that even the telic accomplishment does not license the -A ISSTA construction, we need to refer to something other than the telicity of an event.

One possibility, as suggested by Lee (2008), is to refer to the unaccusativity property. That is, we may claim that the -A ISSTA construction selects only unaccusative and passive verbs with an internal theme argument. This reliance on the argument structure, at first glance, seems to capture most of the examples including the ones in (21). The subject in (21) is not an agent but a theme element. However, note that this 'unaccusativity' hypothesis can be easily falsified by data like the following.¹¹

- (22) a. Mimi-ka honca ilese-e iss-ta
Mimi- NOM alone stand.up- CONN exist-DECL
'Mimi is in the state of standing up alone.'
- b. Mimi-ka uyca-ey anc-a iss-ta
Mimi- NOM chair-at sit- CONN exist-DECL
'Mimi is in the state of sitting on the chair.'

¹¹ As a reviewer questioned, change of location verbs like *appear*, *come*, and others are taken to be unaccusative verbs, but not the verbs given here since they can occur in imperatives as well as with intentional adverbs as illustrated in (23) and (24).

- c. Mimi-ka cip-ey ka-a iss-ta
 Mimi- NOM house-at go- CONN exist-DECL
 'Mimi is in the state of going at home.'
- d. Mimi-ka cip-ul ttena iss-ta
 Mimi- NOM home-ACC leave be-DECL
 'Mimi is in the state of leaving home.'

The verbs here are clearly action verbs (locomotion or posture verbs) since they have agent subjects, as witnessed from the possibility of occurring in imperatives (cf. Kim, Y. 1990):

- (23) a. motwu ilese-la!
 all stand.up-IMP
 'Everybody, stand up!
- b. motwu ppali ttenala!
 all quickly leave-IMP
 'Everybody, leave quickly!'

These verbs can also appear with the purposive adverb like *ilpwule* 'intentionally' which clearly re-quires a subject performing the action in question too:¹²

- (24) a. Mimi-ka ilpwule anc-ci
 Mimi- NOM intentionally sit-CONN

 anh-ko ilese-ss-ta
 not- CONN stand.up-PST-DECL
 'Mimi intentionally stood up, instead of sitting down.'
- b. Mimi-ka ilpwule ppali ttena-ss-ta
 Mimi- NOM intentionally quickly leave-PST-DECL
 'Mimi intentionally left quickly.'

Of course, one can assign a different status to the subject of such locomotion verbs (as in fact done by Lee 2008). However, issues further arise from the fact that not all unaccusative verbs can appear in this construction. Consider the following examples:

- (25) a. *hanul-i nop-a iss-ta
 sky-NOM high-CONN exist-DECL

¹² Lee (2008) assumes that the locomotion or posture verbs here are not 'agentive' verbs.

- b. *nalssi-ka chwup-e iss-ta
 weather-NOM cold-CONN exist-DECL
- c. *pang-i etwup-e iss-ta
 room-NOM dark-CONN exist-DECL

These predicates cannot appear in imperatives or cannot be used in the progressive form either. Given that the predicates in (24) and (25) all select an internal argument as its subject, there is no reason not to occur in the -A ISSTA construction. As claimed by Lee (2008), one may exclude such stative expressions from the discussion simply because they are just ‘adjectives’ and not ‘verbs’ and the eventuality is concerned only with verbs. It is then required why adjectives and verbs are alike in every respect except the stativity property in the language. We believe that both adjectival and verbal predicates are sensitive to eventuality as well as aspectual properties in the language.

Also consider the following passive and cognitive verbs:

- (26) a. *tap-i po-i-e iss-ta
 answer-NOM see-PASS-CONN exist-DECL
- b. *palcakwuk soli-ka tul-li-e iss-ta
 foot.step sound-NOM hear-CONN exist-DECL
- c. *Mimi-ka tap-ul al-a iss-ta
 Mimi-NOM answer-ACC know-CONN exist-DECL

The passive verb *po-i-ta* ‘see-PASS-DECL’ and *tul-li-ta* ‘hear-PASS-DECL’ select an internal subject as its subject, but cannot occur in the -A ISSTA construction. The cognition verb *al-ta* ‘know’, whose subject is an experiencer, cannot occur here either. All these seem not to select an external argument: they all cannot be used in imperatives either and cannot appear in the context where an actor is controlling the eventuality in question.

4. Achievement and Licensing Conditions

These observations we have seen so far thus tell us that neither telicity nor unaccusativity are determining factors in licensing the construction. As hinted earlier, we look for the answer from the properties of eventuality involved. As we have discussed so far, the verbs occurring in the -A ISSTA construction are only achievement verbs. As noted in the previous section, the difference between achievement and accomplishment verbs are durative. The

durative of an eventuality can be checked with *maney* ‘in’ and *tongan* ‘for’, similar to English *for* PP and *in* PP’:

- (27) a. namwu-ka halwu-maney cwuk-ess-ta
 tree-NOM one.day-in die-PST-DECL
 ‘The tree died in a day.’
- b. *namwu-ka halwu-tongan cwuk-ess-ta
 tree-NOM one.day-for die-PST-DECL
 ‘*The tree died for a day.’

The contrast here indicates that the achievement verb *cwuk-ta* ‘die’ can serve as denoting a nondurative eventuality which reaches a culmination point. This contrast carries over to the -A ISSTA construction:

- (28) a. namwu-ka halwu-maney cwuk-e iss-ta
 tree-NOM one.day-in die-CONN exist-DECL
 ‘The tree is in the state of dying in one day.’
- b. *namwu-ka halwu-tongan cwuk-e iss-ta
 tree-NOM one.day-for die-CONN exist-DECL

(28a) expresses a state of affairs where the tree reached the culmination point of dying and this state of affairs lasts at the consequent stage. (28b) is weird since the durative expression *tongan* blocks the event to reach an endpoint. The function of *-a iss* is thus to ensure the endpointed eventuality lasts at the consequent state.

Note that the accomplishment or activity verbs with a goal point cannot appear in the -A ISSTA construction:

- (29) a. *Mimi-nun Seoul-kkaci ket-e iss-ta
 Mimi-TOP Seoul-to walk-CONN exist-DECL
- b. *Mimi-nun Seoul-kkaci ttwi-e iss-ta
 Mimi-TOP Seoul-to run-CONN exist-DECL

The action of walking to Seoul or running to Seoul can be processes at the preparatory stage, but it reaches culminated processes, not a culminated point. That explains why they cannot be in the -A ISSTA construction.

This does not mean that any achievement verb can appear in the -A ISSTA construction. Note the following:

- (30) a. *Mimi-ka kyengki-lul iki-e iss-ta
 Mimi-NOM game-ACC win-CONN exist-DECL
- b. *Mimi-ka mwunceycem-ul kkaytat-a iss-ta
 Mimi-NOM problem-ACC realize-CONN exist-DECL

The verb *iki-ta* ‘win’ as well as the verb *kkaytat-ta* ‘recognize’ is achievement verbs but cannot be in the -A ISSTA construction. The point is that the state of winning a game or realizing the problem is terminated at the culminated point, and cannot last at the consequent stage.

This means that the -A ISSTA construction requires the achievement state to be retained at the consequent stage, leading us to assume the following conjunctive licensing condition for the -A ISSTA construction:

(31) Licensing conditions for the -A ISSTA construction

The -A ISSTA construction is licensed iff

- i. The event involved represents an achievement eventuality which denotes a telic, nondura-tive situation with a culmination point, and
- ii. after reaching the culmination point, the event property must be attained at the consequent state.

The licensing conditions in (31) thus refer to the three main properties of aspect: lexical, grammatical, and phasal properties. This licensing conditions also imply that there is in a sense a change in the eventuality from an achievement to a result state. The subject of the construction needs to undergo a change of state. Note that the pure transitive verbs select an actor as its subject which does not undergo any change as its status while the subject of an unaccusative verbs canonically undergoes a change of state. This explains why most of the verbs in the -A ISSTA construction is either unaccusative or passive. Of course, as we have seen, this does not mean that only unaccusative verbs can be in the construction. Many unergative verbs can also participate in the construction, as long as they observe the licensing conditions in (31), whose data we repeat here:

- (32) a. Mimi-ka honca ilese-e iss-ta
 Mimi-NOM alone tand.up-CONN exist-DECL
 ‘Mimi is in the state of standing up alone.’
- b. Mimi-ka cip-ey ka-a iss-ta
 Mimi-NOM house-at go-CONN exist-DECL
 ‘Mimi is in the state of going at home.’

As seen here, the eventuality of standing up and going to the house here reaches a culmination point and its status is attained at the consequent state.

Note, as noted earlier, that no cognition or perceptive verbs can appear in the -A ISSTA construction:

- (33) a. *Mimi-nun tap-ul al-a iss-ta
 Mimi-TOP answer-ACC know-CONN exist-DECL
 'Mimi knows the answer.'
- b. *Mimi-nun san-ul po-a iss-ta
 Mimi-TOP mountain-ACC see-CONN exist-DECL

Just like English verbs *see*, *feel*, *love* expressing state, Korean verbs like *see*, *know* denote state, which cannot be expressed in terms of the phasal properties, thus cannot reach a culmination point.¹³

The transitive verbs in the -A ISSTA construction also have a certain goal, evidenced by the possibility of changing the accusative NP into a locative PP. We also observe that verbs like *sal-ta* 'live' also can appear in the construction (cf. Kim and Sells 2010):¹⁴

- (34) a. ku namwu-ka acik sal-a iss-ta
 the tree-NOM still live-CONN exist-DECL
 'The tree is still alive.'
- b. ku namwu-ka acik nam-a iss-ta
 the tree-NOM still remain-CONN exist-DECL
 'The tree still remains (there).'

¹³ Such verbs can be in the progressive form *-ko iss-ta*, representing the result state of a progress aspect, though. State verbs like *know* can be in the -A ISSTA construction when it occurs with the inchoative verb:

- (i) tap-i al-li-e ci-e iss-ta
 answer-NOM know-PASS-CONN become-CONN exist-DECL
 'The answer is in the state of being known.'

The inchoative verb *ci-ta* ensures the inception of a continuous event, making this possible. This is one main difference between agentive verbs like *sal-ta* 'live' and cognition state verbs like *al-ta* 'know' in the language.

¹⁴ A reviewer questioned the present analysis with examples like the following:

- (i) a. ku yengwung-un cwuk-ess-ciman, censel-un sal-a iss-ta
 the hero-TOP die-PST-though, legend-TOP live-CONN exist-DECL
 'Even though the hero died, the legend still is alive.'
- b. umakhoe-nun kkuthna-ss-ciman, yewun-un nam-a iss-ta
 concert-TOP finish-PST-though aftereffect-TOP remain-CONN exist-DECL
 'Even though the performance was over, the music was lingering on in my mind.'

The issue here is that the legend and the aftereffect do not begin from the preparatory process. It just enters the inception stage immediately the hero dies or the concert is over. The events indicate the inception of a continuous state and this state is attained at the consequent stage. This is why such examples are possible in the -A ISSTA construction.

In the phase of the eventuality denoted here, being alive or being existent can be interpreted as reaching a culmination point, and this point can be attained or last at the consequent stage. This is why such examples are licensed in the construction. However, these two verbs *live* and *remain* are different in the sense that the former can have progress aspect (with the -KO ISSTA construction) while the latter cannot. This has to do with the fact that the state of remaining there cannot be realized as culminated processes alike the state of being alive for an interval.

The importance of reaching a culmination point and keeping that state of affairs, in addition to the property of lexical and grammatical aspect, can be seen from the following contrast too:¹⁵

- (35) a. Mimi-ka cip-ey ka-a iss-ta
 Mimi-NOM home-at go-CONN exist-DECL
- b. *Mimi-nun ka-a iss-ta (Acceptable with an implicit goal)
 Mimi-TOP go-CONN exist-DECL

The difference is the presence of the goal argument *cip-ey* in (35a) which helps the event to reach a culmination point. With no goal PP, the event may reach culminated processes, but not a terminal point. The -A ISSTA construction, when this culmination point is reached, allows the event to be attained at the consequent or result level.

5. Further Consequences

As we have seen, the -A ISSTA construction denotes a consequent state which either is the result of a change or can be viewed as if there could be a change away from that state, after reaching the culmination point. Consider the following problematic case:

- (36) Ku tosi-nun Seoul-ul/ey cepha-ye iss-ta
 the city-TOP Seoul-ACC/at border-CONN exist-DECL
 ‘The city is in the state of bordering Seoul.’

¹⁵ As a reviewer points out, examples like (i) seem to be better than the one in (35b):

(i) Mimi-nun wa-a iss-ta
 Mimi-TOP come-CONN exist-DECL
 ‘Mimi is in state of coming.’

The main difference, we assume, is that the verb *come* accompanies the implicit goal *here* more clearly. That is, the action of going does not give us the goal clearly if context does not provide us, while the action of coming obviously tells us its goal – ‘here’.

At first glance, the eventuality involved here seems not to be telic. The subject *ku tosi* ‘the city’ has not moved. There is no telic event that led up to the two cities bordering each other. Rather, there is a state which holds, namely that the cities border each other, and it could have been different (they might not have bordered each other). However, we can take the eventuality denoted by *cepha-ta* ‘border’ to involve a telic event in cognitive terms. Consider a case where we see that the main verb *cepha-ta* is used more similar to the verb *meet*.¹⁶

- (37) Mimi-ka tola.onta-nun sosik-ul
 Mimi-NOM return-MOD news-ACC

han tal-maney cepha-yess-ta
 one month-in meet-PST-DECL

‘(lit.) We met the news in a month that Mimi is returning.’

The NP *sosik* ‘news’ here functions as a type of goal here, making the eventuality as a telic one. The telicity of the event is further evidenced by its occurrence with the *in*-PP. We thus can interpret (36) as such that two cities meet or border each other (e.g., by map drawing), and this situation is kept on. There is thus a kind of metaphorical transition of the city to an actor, and this city then reaches the culmination point and then keeps the state at the consequent stage. This observes the licensing condition in (31).

Now, consider the following contrast:

- (38) a. Mimi-ka emma-lul/*eykey ttala.ka-a iss-ta.
 Mimi-NOM mom-ACC/DAT follow.go-CONN exist-DECL
 ‘Mimi is in the state of following her.’

- b. *Mimi-ka emma-lul ttala.tani-a iss-ta
 Mimi-NOM mom-ACC follow.go-CONN exist-DECL

The complex verb *ttala.ka* is a transitive verb, not assigning any other case to its object, but it can appear in the -A ISSTA construction. The sentence (38a) means that Mimi followed her mom and is now in whatever location her mother is. The situation is different with a similar verb *ttala.tani-ta*. The telicity here is determined by the second part of the complex verb *ka-ta* and *tani-ta*. Consider the following contrast with the *in*-PP and *for*-PP test:

¹⁶ As a reviewer questioned, the verb *cepha-in* (36) may be different from the one in (37). However, the two clearly have the meaning of two individuals being in contact with each other. Even though the exact uses of this verb are different in these two cases, we believe they are cognitively the same verb.

- (39) a. Mimi-ka *han sikan-tongan/han sikan-maney
 Mimi-NOM one hour-for/one hour-in
 hakkyo-ey ka-ass-ta
 school-to go-PST-DECL
 ‘Mimi went to the school in an hour.’
- b. Mimi-ka il nyen-tongan/*il nyen-maney
 Mimi-NOM one year-for/one year-in
 hakkyo-lul tani-ess-ta
 school-ACC attend-PST-DECL
 ‘Mimi attended the school for a year.’

As illustrated here, the verb *ka* can naturally occur with the *in*-PP but not the *for*-PP, implying that it is an achievement verb. Meanwhile, the situation is different with *tani-ta*, which can naturally occur with the durative PP, indicating its accomplishment status. The same restriction holds in the complex verbs:

- (40) a. Mimi-ka John-ul han sikan-tongan/
 Mimi-NOM John-ACC one hour-for/
 han sikan-maney ttala.ka-ss-ta
 one hour.in follow.along-PST-DECL
 ‘Mimi followed John for an hour/in an hour.’
- b. Mimi-ka John-ul han sikan-tongan/
 Mimi-NOM John-ACC one hour-for/
 *han sikan-maney ttala.tani-ess-ta
 one hour-in follow.around-PST-DECL
 ‘Mimi followed her around for a hour.’

As in (40b), the verb *ttala.tani* can occur with the *for* PP but not with the *in* PP, indicating that it is a durative one.¹⁷ This then predicts that in the present analysis, only the verb *ttala.ka-ta* can be in the -A ISSTA construction.

¹⁷ As expected, unlike the verb *ka-ta*, the durative one *tani-ta* cannot appear with the -A ISSTA construction:

- (i) a. Mimi-ka Seoul-ul/ey ka-a iss-ta
 Mimi-NOM Seoul-ACC/at go-CONN exist-DECL
 ‘Mimi is in the state of having gone to Seoul.’
- b. *Mimi-ka John-ul tani-e iss-ta
 Mimi-NOM John-ACC walk.around-CONN exist-DECL

Now consider the adjectival expressions. As noted by Chung (2007), there are at least three different types of adjectives in terms of meaning:

- (41) a. open-scale gradable adjectives: *kil-ta* ‘long’ *cha-ta* ‘cool’, ...
 b. closed-scale gradable adjectives: *pi-ta* ‘empty’, *katuk.cha-ta* ‘full’, *maluta* ‘dry’, ...
 c. binary non-gradable adjectives: *sal-ta* ‘live’, *cwuk-ta* ‘dead’, *olh-ta* ‘right’, *thulli-ta* ‘wrong’

The open scale-adjectives cannot reach a culmination point unlike the closed-scale adjectives. We then expect only closed ones can appear in the -A ISSTA. This prediction is born out.

- (42) a. **kang-i* *kil-e* *iss-ta*
 river-NOM long-CONN exist-DECL
 b. *mwulthong-i* *pi-e* *iss-ta*
 water.bottle.NOM empty-CONN exist-DECL
 ‘The water bottle is in the state of being empty.’

As for the binary, the situation is a little bit different. As we have seen, only adjectives like *sal-ta* ‘live’ can appear in the -A ISSTA construction. Just like *al-ta* ‘know’, adjectives like *olh-ta* cannot appear in the -A ISSTA construction:

- (43) a. **Mimi-ka* *olh-a* *iss-ta*
 Mimi-NOM right-CONN exist-DECL
 b. **Mimi-ka* *halu-tongan/halu-man-ey olh-ta*
 Mimi-NOM one-during/one.day-at right-CONN exist-DECL

Note that this kind of non-gradable adjective is atelic, and event functions as true adjectival state.

As noted earlier in section 3, state eventuality does not participate in the construction. However, when with the help of the expression *ci-ta* ‘become’, a state verb is turned into one denoting a terminal point and thus transformed into an achievement verb, we expect it can appear in the -A ISSTA construction as seen from the following:

- (44) a. *pang-i* *etwup-e* *ci-e* *iss-ta*
 room-NOM dark-CONN become-CONN be-DECL
 ‘The room is in state of being dark.’

- b. Mimi-ka yoceum yeppu-ci-e issta
 Mimi-NOM nowadays pretty-become-CONN be-DECL
 'Mimi is in the state of being pretty nowadays.'

The inchoative verb *ci-ta* indicates the inception of a continuous state and being in the -A ISSTA allows us to interpret that this state is attained at the consequent state. This is why both of these examples are possible.

6. Conclusion

We have seen that there have been three different views for the analysis of the -A ISSTA construction, depending on what the licensing conditions of the construction refer to: transitivity, unaccusativity, and telicity. Each of these suffers from accounting for the data in question.

The basic idea of the present analysis is that in the -A ISSTA construction, the main event needs to reach a culmination point and that this state of affairs is kept on in the consequent stage, which is expressed by the verb *iss-ta*. Unless this culmination point is reached, the event cannot be 'placed' in a state with the property being hold in a sense.

The analysis presented here thus tells us the tight relationship between form and function, inter-acting with the three perspectives of eventualities: lexical aspect, grammatical aspect, and phasal state of the event. This view can give us answers to many puzzling facts in the syntax and semantics of the -A ISSTA imperfective construction.

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